

Vaccine Hesitancy

PHE: Slough & Surrey

Slough

Problem



NHS England has identified a low immunisation uptake across a range of vaccines, including Flu, MMR, and HPV – with causation attributed to cultural reasons and the prevalence of vaccine myths. The Community Champions network was established in September 2020 and by the end of the year 600 champions had been recruited, under the transformed name “Vaccine Champions.” A number of practical actions have been completed, including the provision of information, training sessions, and tailored social media.

Detailed research has been carried out by Dr Jennifer Cole, Royal Holloway, concluding:

- The primary concerns in the area are vaccine safety, lack of information, and inducement of infertility.
- Loss of earnings through positive test or illness.
- Lack of trust in authority / government.

Solutions and proposals are centred on a number of stock themes and ideas, including community outreach, posters and leaflets, social media from official accounts, and fact checks.

There is limited understanding of Eastern European communities.

Analysis

In the larger, national Eastern European groups focused on those living in the UK, the aforementioned distrust in authority and state intentions is well displayed with the most popular articles relating to preventing the [implementation of vaccine passports](#) across the UK and Europe. This is deeply tied to existing pro-life and anti-eu narratives and accompanied by nationalist imagery, such as this logo on the [Polacy w UK](#) page.

One of the most commonly spread nationalist tropes is the anti-Semitic narrative that “The Jews” are trying to “take over the world” by spreading mutations of the virus through vaccines and introducing microchips to monitor individuals and control behaviour.

Insecurity around Brexit, changes to immigration and settled status, and fears of anti-European rhetoric and racism are also fuelling distrust – in particular in UK state authority bodies.



Analysis



The most frequently read and repeated stories across the Eastern European UK news networks, in the context of COVID, relate to the [safety of the Astra Zeneca vaccine](#) following the discovery of the link between the vaccine and thrombosis.

Combined with discussions of “vaccine nationalism” and a spat between EU countries and the UK, the sentiment surrounding vaccines and specifically the approach of the UK is an area of negative sentiment and exceptionally low trust.

These factors are combining to create a perfect storm of distrust in vaccines and vaccine delivery.

In addition, in particular with the Polish community, the Catholic Church is highly influential and the recent Polish Bishop’s Conference finished with a declaration the [AstraZeneca and Johnson and Johnson vaccines were morally questionable](#). This has been exaggerated by prominent and influential figures claiming the vaccines were built upon the cells of an aborted foetus in the Netherlands.

Analysis



Across Eastern Europe, where disinformation is more broadly accepted as a part of daily life and fact checks are more focused and referred to, the [common themes](#) are:

- The causal link between vaccines and thrombosis being true.
- Vaccines containing aborted foetal cells being false.
- Mutations emerging from the vaccines directly being false.
- The coronavirus test being a medical experiment being false.
- The vaccines being used to sterilise communities being false.

With anti-vaxx already a significant in these communities, and additional historical factors such as [forced sterilisations](#) being only fairly recent, there is little surprise there are uptake issues (and that those issues are hard to identify locally.)

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Analysis



The data collected via the Tactical Analysis was transferred into the Emotics AI tool (CSV accompanies this report). However, as highlighted in the Tactical Analysis, the data centring on Covid-19 in the Slough area with this audience was extremely limited. With this in mind, the following screengrabs highlight some of the data channelled through the Emotics analysis engine. In the first slide below, we can see that 3905 comments were fed into the EA analysis engine, which produced 96 different themes in the thematic analysis. When removing themes that were not Covid related this left 24% of comments to analyse for emotions.

Insights Scorecard for Slough Expanded Collection - COVID filtered



3 Decision Ready Insights

As shown in the 3 highlights, we should turn Covid Cases, Daily Averages, general COVID area discussions.

- 1 Threat to Be Addressed: Covid Case**
Covid Case is driving 1% of the conversation and has 23% more Anger than the overall dataset. **Threat**
- 2 Growing Problem: Day Avg**
Day Avg is driving 1% of the conversation and has 23% more Anger than the overall dataset. **Threat**
- 3 Needs to Be Addressed: East Covid**
East Covid is driving 1% of the conversation and has 23% more Anger than the overall dataset. **Threat**

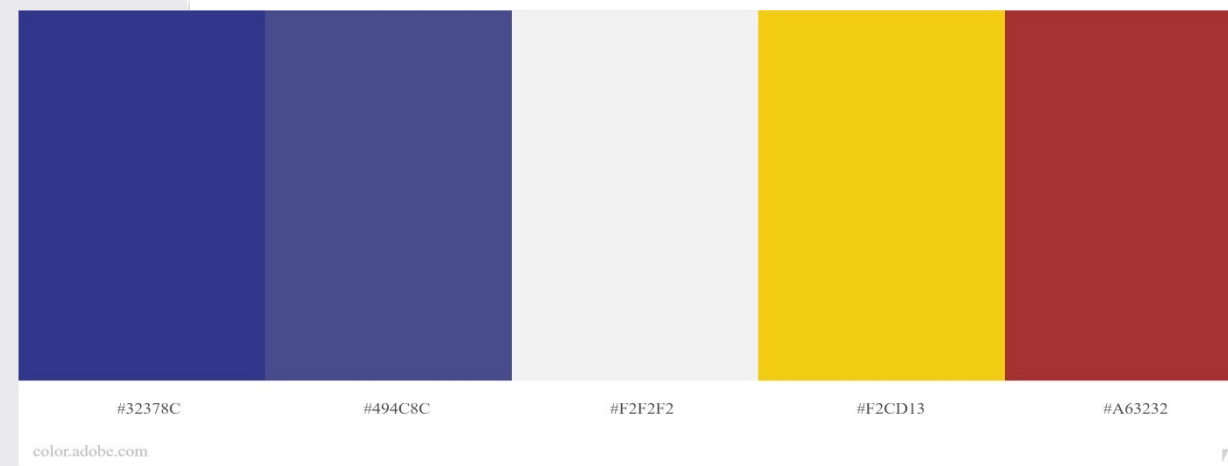
Analysis



We analysed a sub-dataset of Eastern Europe's 1174 most influential accounts in order to extract a functional information layout and colour scheme best suited for enhancing PHE Slough's ability to reach and engage with the audiences in order to have some impact in reducing vaccine hesitancy by improving the flow of and interaction with information on the COVID vaccination programme.

From these accounts, which cover national and regional subsets, we extracted the most influential posts created between March 28th 2021 and April 24th 2021. In total, 5279 posts were returned and had generated a total of 10,264,398 interactions (reactions, comments, shares). The top performing post generated 43,221 interactions alone and the top 10 posts accounted for 3% of the total interactions (285,699).

These ten hyperfunctional posts were used to create a core information structure and colour scheme for use with the target audience. 183 of the posts mentioned the term "COVID" and had generated 444,484 interactions (4% of the total).



Avoid



These audiences are not connected to themes which may function behaviourally across the rest of the population: easing the burden on the NHS, etc. “Do it for us” will not work with this audience.

Do not present fact checks to this audience as they will interpret this as something being hidden by vested interests and they will actively seek the alternative point (the disinformation itself.)

Avoid any and all discussions about vaccine efficacy and problems with vaccines. It is imperative that there is no connection between the message and any of the vaccine brands to prevent cross association of negative stories.

Creatives



Concept One

A recognisable state authority figure in casual clothing

Tan Dhesi, MP for Slough, would be an ideal authority figure to support the campaign and is sometimes pictured in the media in the casual dress suggested by the tactical assessment.

For the purposes of this document, we have mocked up what this might look like if we could secure his involvement, but with images and footage of the fictional 'Paul Smith'.

Strong, clipped language is considered best with this audience and so we have used 'Over 40? Get Protected Now'.

Please note: all translations are for illustrative purposes only. Messages should all be in both English and target language versions.



Creatives



Concept Two

Doctor explaining that quick vaccine jab is the only way to keep their families safe from COVID

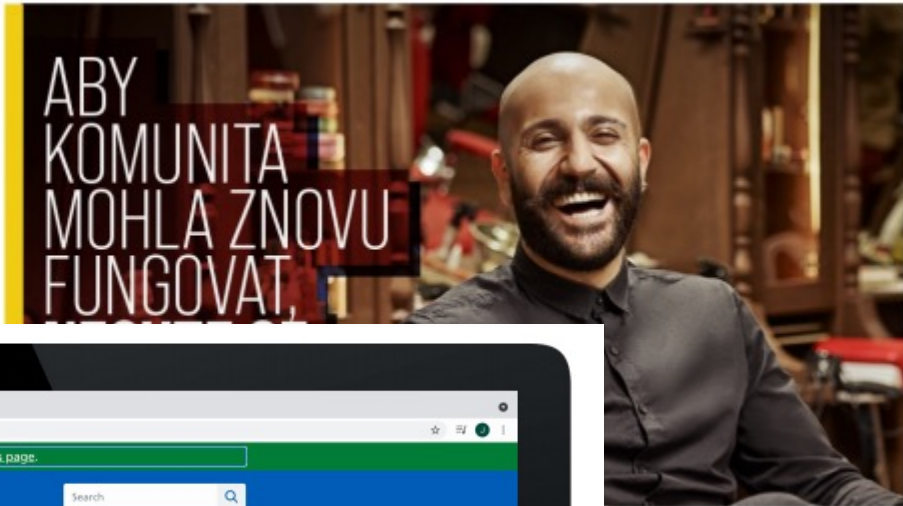
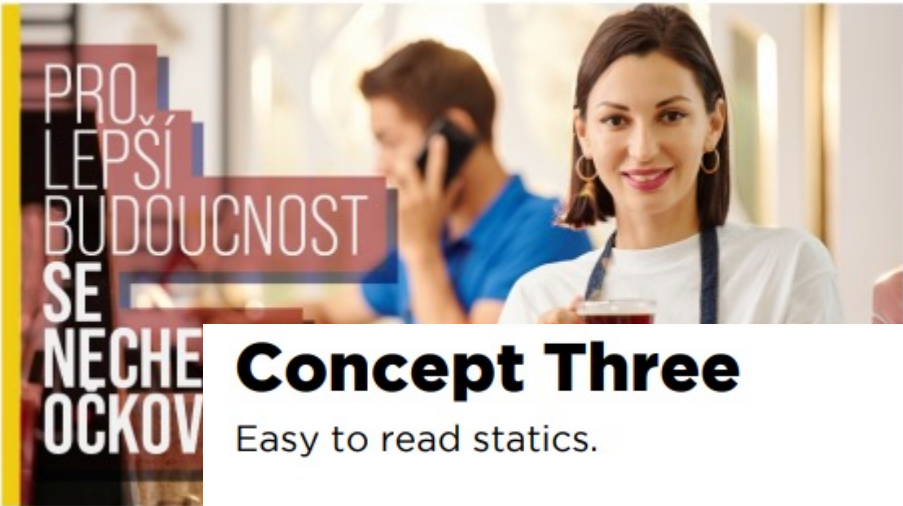
This version of the creative responds to insight that the target audience responds particularly well to trusted professions, for example doctors in white coats. The audience does not respond well to informational content and prefers emotive content, hence the focus on family in the messaging.

The 'book now' button could be used on Facebook statics to secure 'click throughs' and would allow success to be monitored, while the video would support this with a storytelling approach.

As with the previous concept, please note the palette as set out in the tactical assessment.

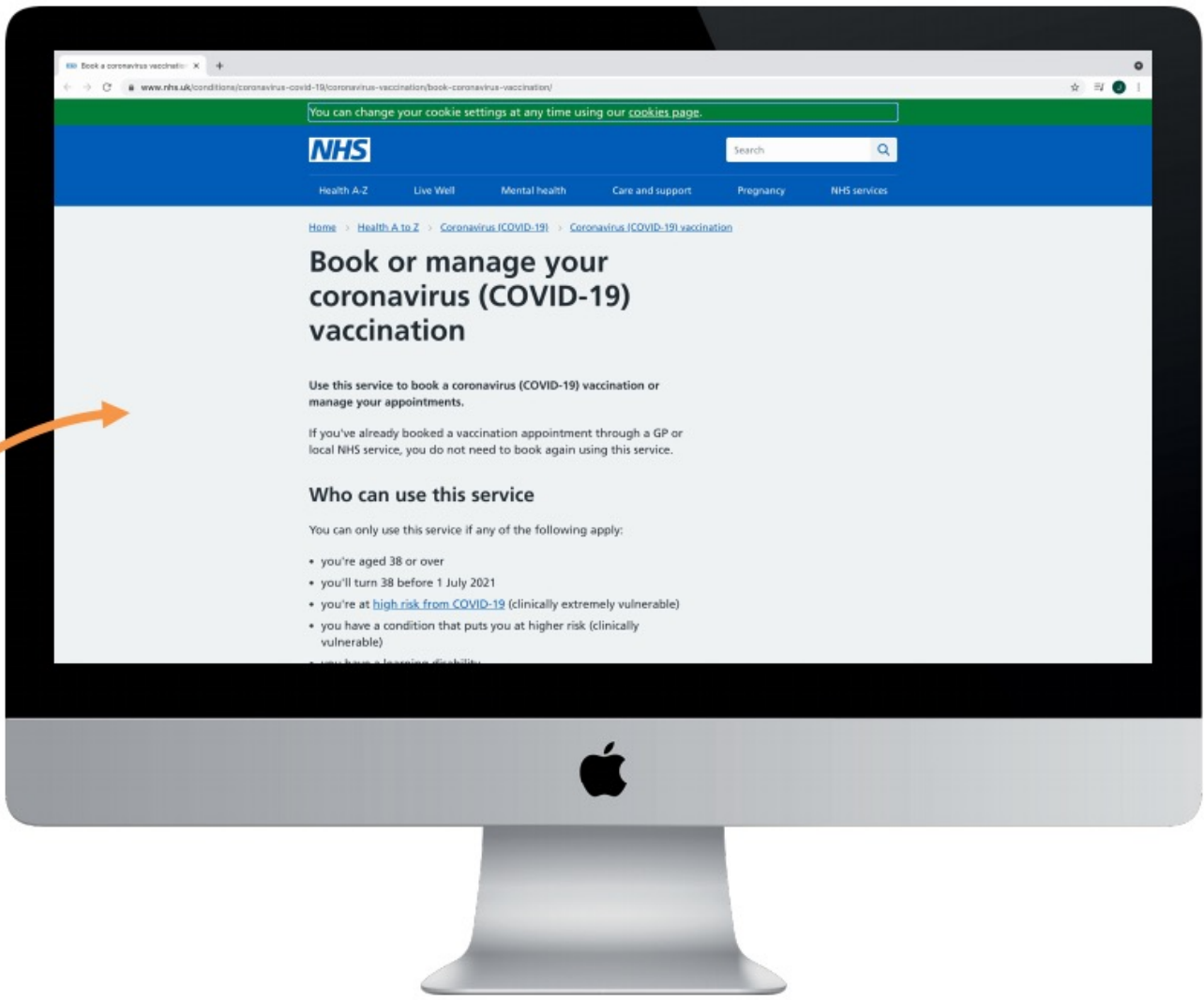


Creatives



Concept Three

Easy to read statics.



Conclusion



This is a complex audience with challenging psychology, however there are clear options to achieve messaging cut-through and avoid negative consequences.

There is a substantial opportunity to reach this audience through social media, Facebook in particular, and this should produce effective results in a relatively short space of time. There are also opportunities for organic as well as paid placements.

Data-gathering and monitoring facilities have been set up specifically for this project which will adapt as the project progresses. There are clear opportunities to enhance understanding of these communities for future reference.

There is clear path to emotional engagement with this audience segment and a clear rationale for deploying this style of campaign.

Surrey

Problem



NHS England has identified a low immunisation uptake across a range of vaccines, including Flu, MMR, and HPV – with causation attributed to cultural reasons and the prevalence of vaccine myths.

The Surrey COVID Vaccination Summary report of June 3 2021 showed that 706,850 doses had been administered between December 8 2020 and May 23 2021, with 55% of individuals in the area receiving first doses, in line with the regional (54%) and English national (51%) averages.

The report highlighted the lowest uptake in high deprivation Black Caribbean, Any other Ethnic and Chinese demographic groups, reduced uptake in deprived Black/Black British demographics, and geographical reductions in Any Other White Background demographics in Elmbridge, Guildford, Spelthorne, Runneymede, and Woking. In care homes, the lowest uptake was among agency staff (59% vaccination and 38% second). In the mapped detail, the report additionally identifies lower uptake in the age cohorts 50-69.

Analysis



The Surrey area hosts a range of communities made up of a broad spectrum of demographics.

To understand and operationalise the area and its societal construction, ARCGIS was deployed to map the geography, breaking it down into LSOAs (Lower Super Output Areas). Core demography sets were created across the LSOAs using IMD (Index of Multiple Deprivation) data.

Given the known-knowns in the Surrey vaccination report, the mapped data was filtered to focus on communities in Surrey in or below the 5th decile, greatly reducing signal interference and allowing for greater focus on demographics and specific geographies. To guide future campaign targeting, postcode features were also joined to the map layer.

Enriched 2019 population data was added to the constrained layers, adding population age, relationship status, and key indicative spending information to help behavioural segmentation. As a visual aide for targeted campaign purposes, a 1.2km buffer area was added to each target zone, to show how much overspill coverage is likely to be achieved with subsequent activity. Shading was applied, with lower IMD decile areas show in a darker shade for ease of reference.

Analysis



Analysing the extracted data on the 111 target zones, the first focus was on exploration of the IMD categories to identify contributory patterns and draw out priority targets or other information useful to determining behaviour. The IMD does identify some areas with limited or nil population and these were purged from the underlying dataset prior to analysis, reducing the target zone quantity to 98.

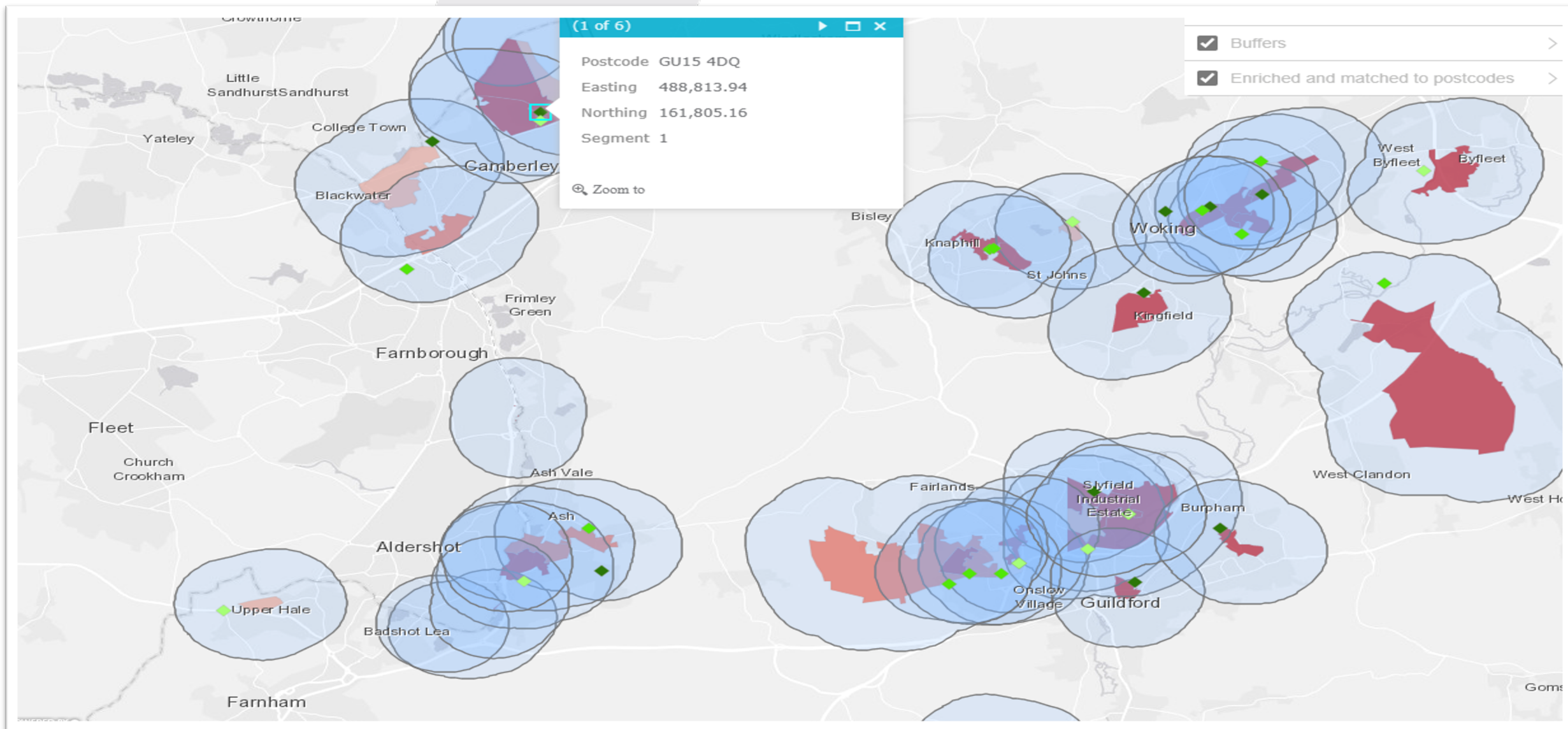
The population across these unbuffered areas is 151,770. While overall deprivation was constrained to the 1-5 centiles, there were clear patterns of income and employment exceeding the overall centile refinement. The crime, living environment, and health deprivation categories featured similar patterns, showing significant reductions in deprivation depending on each area.

Surrey is an area of contrast, but approaching the analysis seeking deviations from the common patterns identified two key categories highlighting deprivation: Education and Barriers To Housing. These proxy categories are effective proxies for general societal behaviour and engagement with accepted societal norms and mechanisms of control and regulation. (e.g. not being able to buy a house or rent a nicer home reduces overall trust in and engagement with societal systems, causing feelings of frustration, fear, and creating a constant struggle which leads people to feel left behind or forgotten, in turn breeding distrust in governance.)

Analysis



To create a structure of prioritisation, a priority score was attached to each of these two categories reflecting the deprivation – the lower the score, the higher the priority. Each area was additionally assigned a priority score from 1-98 by its population size – again the lower the number, the higher the priority. The total priority score was calculated and used to create a simple ranking system, ordering the areas into three groups for segment creation.



Analysis



A sample of 1,236,700 Twitter posts, generated over the last four weeks, in the UK was examined using automated information segmentation and natural language processing. The search term was “vaccine.”

Public digital discourse moves rapidly so extended the search beyond four weeks was discounted for the purposes of this dynamic operational research and no large dataset has been retained to avoid any onerous requirements around the storage of PII. This approach allows the analysis to be replicated rapidly as the conversation shifts without creating unnecessary, historic signal distortion which can have a negative impact on campaign agility and message adjustment through an operational life-cycle.

Of the content generated, 795,500 posts (61%) were shares and 242,000 were replies (20%). This indicates a moderate level of active participation in discussion but a clear lean towards pure information distribution rather than challenge. In real terms this means compliance with a message-driven approach remains high (and in line with the norms of the British population’s online activity).

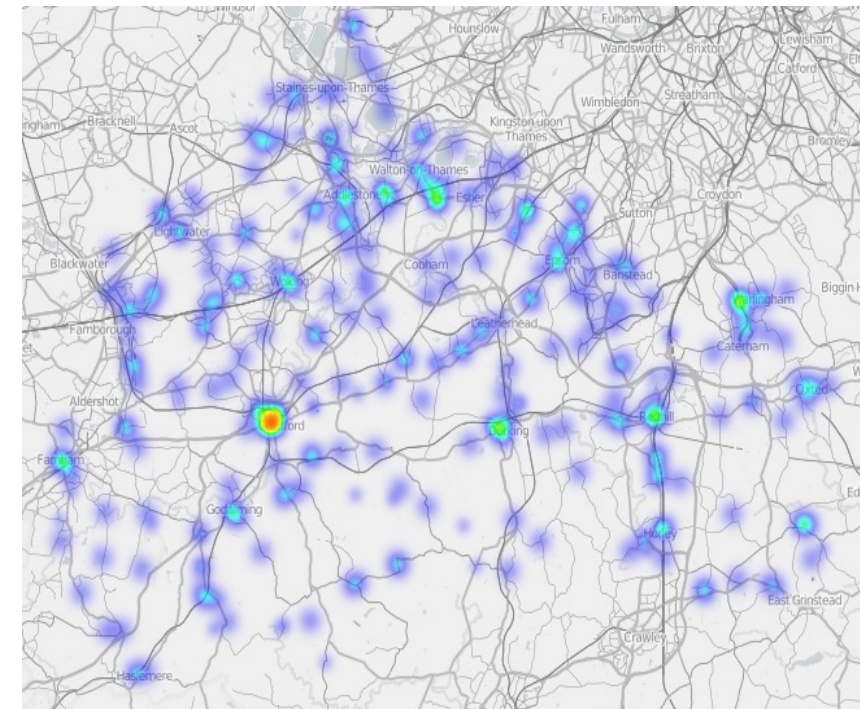
Content appears to be male dominated, with 63% of posts generated by men, while 37% are generated by women.

Analysis



Within the national vaccine conversation, posts geolocated in Surrey total 8,000 or 0.64% of the total. The content is mostly official messaging about the vaccine rollout, mainstream journalists who are pro-vaccination, and politicians. The broader Surrey conversation during the same 4 week period comprised 3,239,800 posts, with a significantly reduced sharing volume (36% or 1,168,400 shares) and a significantly higher reply rate (33% or 1,070,600 comments), though the distribution across genders saw a reduction in female posts (30% of posts by women, 70% of posts by men).

The conversation centres around Guildford, though the proportion of English language content drops to 92%, with Japanese, Spanish, and Korean accounting for another full 1% each and other languages making up the rest in volumes too small to be specified. The community is music and creative focused (using #nowplaying and #amwriting hashtags most frequently, though the #euro2020 tag is also prominent). Brexit remains one of the most used words in Surrey's social media discourse. Searches for demographic specific terms such as Gypsy, Roma, Traveller and GRT returned an insignificant number of results and generated very little data.



Analysis



While it is clear that some healthcare efforts have been aimed at the GRT community, they appear to have gathered little attention. One resource with some apparent collaborative potential is the volunteer run Surrey Gypsy Traveller Communities Forum with a postal address in Epsom, which can be contacted by email: enquiries@sgtcf.uk. The operating presumption of this analysis is that Surrey has already established links into the community, given extensive outreach programmes dating back several. Due to societal stigma and hate crime, the GRT community tend to avoid public declarations of heritage or association and subsequently do not have overt, well-established local Facebook groups and pages as is the case with other community groups. The community is, however, accessible through national entities such as [Friends, Families, and Travellers](#) (10,183 page likes) and [Traveller's Times](#) (20,721 page likes).

At present, trust in state action among this community has fallen significantly due to proposed laws which would mean people who live on roadside camps could face time in prison, a £2500 fine or their home being taken from them. As is clear in any number of [studies](#), this particular community is also influenced directly by personal experience and the sharing of those experiences – with a specific focus on their treatment within the health and social care system. Trust capital is crucial – it is hard won but easily lost and is non-transferrable, meaning it is tied to individuals and their actions, not organisations or uniforms.

Analysis



The Roma community is particularly impacted by additional historical factors, such as [forced sterilisations](#) being only fairly recent, so there is little surprise there are uptake issues (and that those issues are hard to identify locally). The recent visit of Hungary's Viktor Orban has done little to increase trust in the British state and public systems - Orban has been openly anti-Roma, implementing segregation policies and inflaming community tensions with dangerous rhetoric, causing controversy across the world. Subsequently, even perceived hospitality by the UK government will have been significantly damaging to community confidence.

More broadly, the impact of Britain's tonal change over the years since the Brexit referendum cannot be understated. There has been a substantial amount of negative rhetoric aimed at non-English, non-white communities and this has driven a substantial trust wedge into British society. Combined with the advent of mass access to information through digital platforms, race and identity issues travel from one nation to another in a heartbeat and often collide. A current example is the ongoing US effort in Republican states to ban the teaching of Critical Race Theory, which has occurred in parallel with a British schools discussion on "white privilege" and a subsequent drive for pupil participation in a celebration of "One Britain, One Nation" day, causing concern over song lyrics children will be expected to repeat. Taken together, there is significant reduction in minority community trust and confidence - being exacerbated by over-exposure to information and often badly planned public announcements which fan certain media narratives (e.g. "Culture Wars").

Analysis



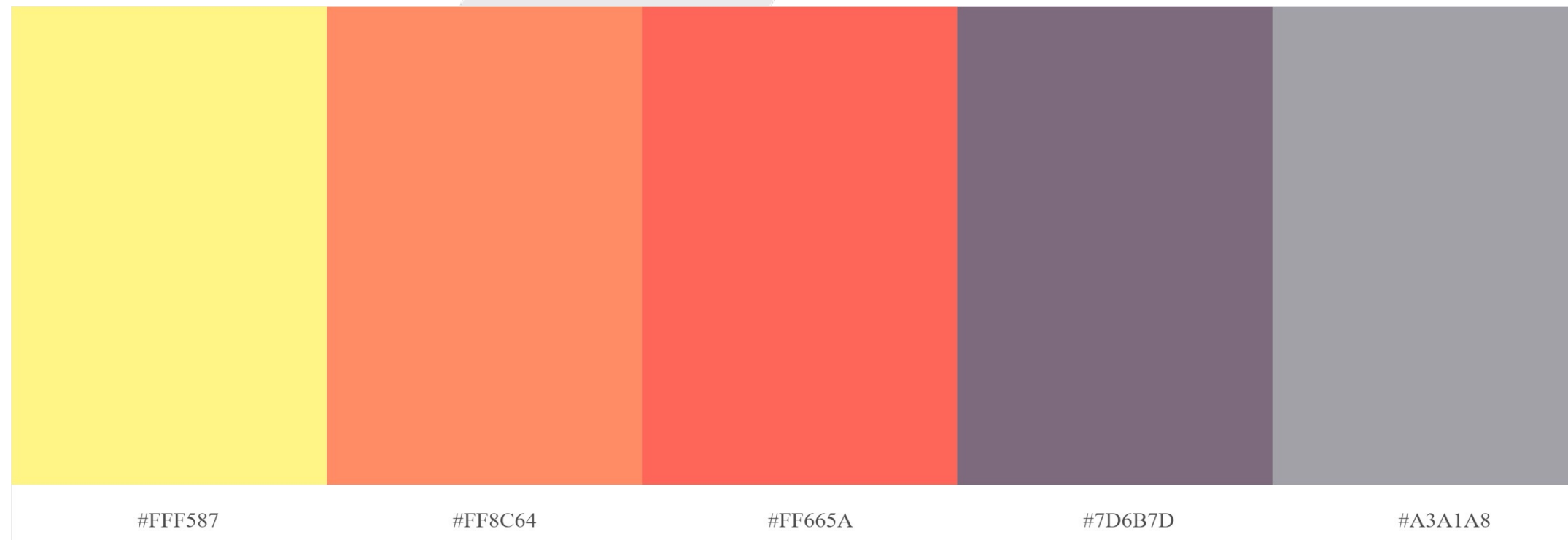
We cross-referenced the performance of Surrey's public health Facebook accounts against our commercial dataset which includes political parties, activism groups, and other actors. While Surrey does perform well for the sector, the interaction levels are well below those of the others in the dataset. Surrey's general patterns of discourse follow established national norms and this was further tested by exploring localised Facebook pages which produce consistently truthful reflections of communities at large. One such page is Spotted: Sussex and Surrey, with 45,791 page likes. It mainly contains jokes, local history, and local posts by or in support of local businesses.

We additionally searched a range of platforms, including TikTok, AnonUp, and Mumsnet, searching for relevant Surrey content. Very little of use was returned, though Mumsnet was informative as to general attitudes to vaccination being positive, with questions mainly relating to locations and rollout dates for younger age categories. The main negative of note relating to vaccination queue-jumping facilitated in several areas nationally by the "Swiftqueue" website which appears to have allowed non-qualifying patients to book early vaccinations, though the explanation for this is unclear. An additional API request was made through the Twitter premium API, requesting 5,000 tweets featuring the terms Surrey or Guildford over the last thirty days, for input into the emotional analysis system. This search returned just over 2,200 results of which 32 featured COVID or Vaccine as terms.

Analysis



The types of articles being read and shared, and the popular social media posts being sent and read, provide a functional, bespoke colour scheme for use in Surrey which should work across demographics, age ranges (younger to older equates to left to right), and can be blended to create differential content across genders.



General infographic content with this audience will work best with 4-5 topic positioned to the top right, a call to action of three words at the mid-bottom right, and instructional information of 5-10 words beneath the call to action. Canvas space should be maximised to amplify the simplicity and simple but bold visuals should traverse the left of the graphic (which can include an image of an individual). All video content should be limited to 16 seconds to ensure digestion and retention while reducing scroll-past.

Creatives



Videography

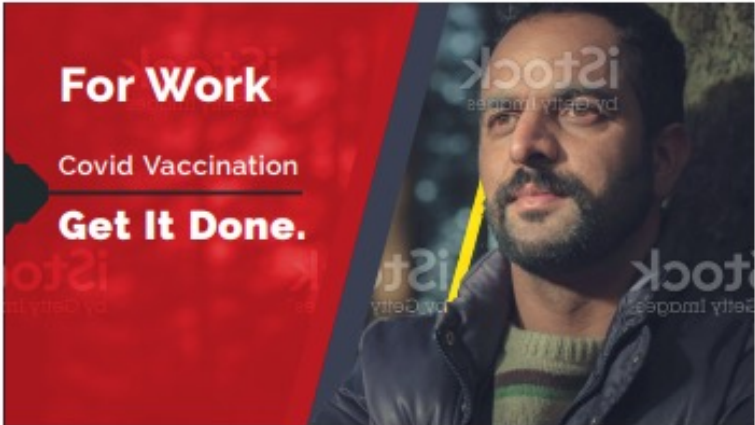


Creatives



Statics Facebook Ads

Static Layout Concepts (could be gifs)



Creatives



Statics Facebook Ads

Static Typographic Concepts

"I trust this vaccine. I'm safe, my family is safe, and now our community can get back to normal."

Covid Vaccination. Get It Done.

Walk-in session
Fitznells Practice, 2 Chessington Road, Epsom
Wednesday 30 June, 5-8pm // Thursday 01 July, 5-8pm

For Family

Covid Vaccination

Get It Done.

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Conclusion



The segmented audience in Surrey is non-complex and compatible with tested geographical targeting. There are complexities with vaccine-hesitant communities, however the issues are societal-structural rather than health specific, which presents both a challenge and an opportunity. In more general terms, data-gaps are present in Surrey not because of a deviation or unusual behaviour but because of tight entwinement with national and societal norms arising from the large population size and the relative affluence of the county.

- Three functional priority segments over 98 constrained geographical areas within Surrey have been identified for targeting.
- The key themes across identifiable minority communities are trust in the vaccine, trust in the state, and the personal experience of dealing with state systems. Trust and confidence is being impacted by broader societal changes.
- Local digital media is well-managed and well-conceived but will benefit from implementation of certain conventions and audience specific behavioural adjustments.
- Content should be simple, consistent, and split between static and optimised video. There is no necessity to feature experts, uniforms, or influencers.

Organisational Learning

- In future, having more detailed access to geographical vaccination and case rate data will be useful as it can be interwoven with demography and social media to create hypertargeted insights.
- Discourse is currently complex as discussions around vaccine are dominated by either official channels or by competing scientific communities and some deeply divisive journalism. The upshot of this is a reduction in genuine public discourse and an acquiescence to whatever can be deciphered as factual in a rapidly shifting moment.
- Due to some of the privacy constraints with Facebook which arose post Cambridge Analytica, when we carry out future tactical assessments it would be useful to be able to access the relevant public authority channels during the research phase. (We can easily view metrics but could accelerate sentiment research around individual posts more easily and better assess any issues with current ad targeting.)
- Across platforms, a much harder line is now being taken with disputed or reported content. As a result, a lot of genuine public discourse – in particular among anti-vaxx and anti-mask communities – is being concealed or driven offline and into encrypted chat apps such as signal. (The same thing happened in the US post January 6.)

Analysis



- Maintaining the flexible approach to analysis which allows us to shift between methods and data sources has been really useful – this is captured quite well in the different approaches taken between Slough and Surrey, driven by the brief and the make up of the area.
- If we were to carry out a broader piece of work on a national scale, we would create national demographic segments for stock use.
- A larger piece of profiling work would be particularly useful to capture the issues around cultural divides and trust in authority – in particular in the wake of Euro2020 which has put the issues around “culture wars” and the effects of that narrative under a more powerful microscope.
- It would be really useful to be able to design and deliver core training on the principles of disinformation, emotioneering, and collective common sense at a national scale as this would pay dividends across public health communication and shorten the transition from tactical assessment to delivery.

Metrics



- We have not been able to move from assessment to delivery in either of these cases, so metric measurement has not reached the set up or implementation stage. With a faster future process in place and better access to data (in this case around local vaccine centre attendance before and after, for example) we would also be able to make detailed assessment on campaigns and optimisation protocols as they progress.

Behaviour



- We have taken away from these projects a strong integration plan to translate the work done into additional (and perhaps more familiar) formats – this piece of work is ongoing.

External



- Vaccine Hesitancy and Infection Control Compliance are tightly linked out in the general public. Maintaining clear messaging and defined norms is crucial to keeping up support.
- To be brutal, this has been significantly if not irreparably damaged by the easing of all control measures against the advice of collective scientists and in a way which has demonstrably stepped in the opposite direction to public opinion.
- The upshot of this will be an increase in distrust across societal segments and it will make all COVID messaging either significantly harder or impossible to successfully deliver for the foreseeable future.
- In addition, those driving factors among minority communities stemming from culture wars, Brexit, and trust in governance have all been pushed to extremes in recent weeks.
- This is going to create brand toxicity for PHE as case rates and hospitalisations begin to increase – with negative signs already clearly visible following the super-spread events of the football (which were national and not stadium restricted). This means that future messaging is going to need to diverge almost entirely from government branding/narrative and will need to take on a more grass-roots feel in order for it work effectively with the population as it now is.

Questions...