

TIGER C19

Timely Integration of User
Generated Responses to C19

Introduction and Approach

WHAT: “TIGER C19” is an ongoing collaboration between the University of Melbourne and Burnet Institute that combines big data analytics of social media postings with qualitative research methods.

WHY: TIGER C19 can inform public health and health information responses by examining local COVID-related issues of current interest as both a supplement and complement to other research (notably the longitudinal “Optimise” study). The focus is on Melbourne and Victoria, though the emerging themes have broader resonance and application to other jurisdictions in Australia and overseas.

HOW: Using a sophisticated data analytics tool, TIGER C19 extracts posts containing selected key words and themes from two social media platforms – Reddit and Twitter – that are then subjected to thematic analyses.

Summary of results

Table 1 below summarises findings for the key words, focusing on the top 20 URLs and the most popular upvoted (Reddit) or retweeted (Twitter) posts.

Table 1: Summary of Reddit and Twitter ‘captures’ by key words

Hits	Trends	Top 20 URLs	Most popular Upvoted/Retweeted
Theme Border			
Reddit(R): 5,679 hits	Increase towards December 2020	Border restrictions; permits; public health directives/powers; Victorian permits; border passes.	Protectionism; concerns re spillage across borders.
Twitter(T): 1,551 hits	Peak in Jan 2021	Statistics for Sydney and Melbourne; Melbourne and Sydney clusters, restrictions and explanations; border transgressions; clusters and regulations; testing sites; outbreak testing sites.	Confusion, chaos, uncertainty; increased travel costs; support: caution, necessity.

*University of Melbourne

Hits	Trends	Top 20 URLs	Most popular Upvoted/Retweeted
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Theme | Economy

R: 4,348 hits	Peak in Feb 2021	Swedish economy and coronavirus; global economy and health.	Impact on emerging job market and career opportunities; focus on economy to detriment of public health; benefits to economy of lockdown; Federal economic interests conflicting with public health agendas of States.
T: 78 hits	Peak in Feb 2021	House prices in Adelaide, Melbourne and Sydney; airflight prices; concerns of returning to work; rethinking CBD model for cities; broad economic impacts of coronavirus	Economy in free fall; Bitcoin sales; oil and broader economy

Theme | Long COVID

R: 1,295 hits	Peak in July-Sept and then in Dec 2020	Long- term symptoms; health risks; long-term effects; effects on the brain; effects on the heart.	Personal accounts of Long Covid; importance of focus on morbidity over mortality; “Long COVID” as economic morbidity.
T: 46 hits	Peak first four days of January 2021	England entering toughest coronavirus lockdown since March	Vaccination will not be the solution; other mid-term unrecognised dangers of “Long COVID” e.g. driving long distances due to border closures.

Theme | Mutation

R: 146 hits	Consistent debate	Expert commentary and academic journals: CSIRO, ABC, The Atlantic.	Difference between mutations and strains; impacts on policy and responses.
T: 3 hits	Peak in first week of January 2021	T: No results	Mobility and transfer of coronavirus mutation.

Theme | Sewage

R: 235 hits	Peak around October 2020	Townsville sewage; sewage testing; pandemic origins; plague; SARS virus 2003; Asian flu; Hong Kong flu; conspiracy theories.	Sewage sampling; pool testing in China; wastewater testing in various parts of Victoria.
T: 26	Consistent debate	Coronavirus clusters; restrictions.	Sewage surveillance program; Coronavirus fragments at treatment plants.

For **Table 2** we analysed the most popular posts (and repost trails) to determine emerging key themes (with annotated links to the respective trails).

Table 2: Emerging Themes

Key Word	Emerging Theme	Link
Border	Self-interest of individual States and protectionism.	1, 2,
	Support for border closure.	3, 4, 5,
	Lockdowns and border closure as a necessary sacrifice.	6, 7,
	Importance of being proactive rather than reactive.	8,
	Policy/practice reaction leading to confusion and inconsistency.	9, 10,
Economy	Impact on future careers and employment prospects.	11, 12,
	Putting economic imperatives before health.	13,
	Complex relationship between economy and lockdown measures.	14, 15,
	Conflict between Federal and State governments on balance between health and economy.	16,
	Centralised economy in major cities needs reassessing.	17, 18, 19,
	Confident and positive health response beneficial to economy.	20,
	Personal accounts of financial/economic suffering.	21,
Long COVID	Health impacts.	22,
	Non-health impacts of longevity of the pandemic and after-effects.	23,
	Importance of morbidity as well as mortality as a measure.	24, 25,
	Fatigue and life-style consequences of Long Covid.	26, 27, 28,
Mutation	Consequences and outcomes from mutations.	29, 30, 31,
	Debate around immunity and vaccination.	32, 33, 34,
Sewage	Emergence and examples of sewage testing.	35, 36,
	Value of sewage testing.	37.