

S1 Table: Comparison of key demographic, clinical, symptom and educational variables for SIS-1 and CoMMinS, and result of harmonization of these variables for analysis.

Type of data	CoMMinS				SIS				Harmonised									
	Description of informing survey variable(s)	Name(s) of informing survey variable(s)	Type of informing survey variable(s)	Time of data collection for informing survey variable(s)	Available categories for analysis across all informing survey variables	Description of informing survey variable(s)	Name(s) of informing survey variable(s)	Type of informing survey variable(s)	Time of data collection for informing survey variable(s)	Available categories for analysis across all informing survey variables	Name of analysis variable	Type of analysis variable	Categories of analysis variable					
Demographic	Gender	gender_id	N	B	Female	Gender	enrol_gender	S	B	Female Male Other Prefer not to say	gender	C	Female Male Other					
		gender_other	F	B	Other													
	Age	Week of birth	WoB	N	B	<Age in weeks>	Date of birth	enrol_dob	S	B	<Age in weeks>	age	N	<Age in years>				
		Month of birth	MoB	N	B													
		Year of birth	YoB	N	B													
	Ethnicity	Ethnicity	ethnicity_cat1	N	B	African Caribbean	Ethnicity	enrol_ethnic_asia	S	B	Black / African / Caribbean / Black British - African	ethnicity	C	Black / African / Caribbean / Black British Asian / Asian British White Other ethnic group Mixed / Multiple ethnic groups				
			ethnicity_cat2	N	B	Any other Black / African / Caribbean background									enrol_ethnic_blk	S	B	Black / African / Caribbean / Black British - Caribbean
			ethnicity_cat2_other	F	B	Bangladeshi Chinese Indian Pakistani Any other Asian background									enrol_ethnic_main	S	B	Black / African / Caribbean / Black British - Any other Black / African / Caribbean
						English / Welsh / Scottish / Northern Irish / British									enrol_ethnic_mix	S	B	Asian / Asian British - Bangladeshi
						Irish									enrol_ethnic_other	S	B	Asian / Asian British - Chinese
					Gypsy or Irish traveller	enrol_ethnic_other_spec									S	B	Asian / Asian British - Indian	
				enrol_ethnic_wht	S	B	Asian / Asian British - Pakistani											
									Asian / Asian British - Any other Asian background									

					Any other White background Arab White and Asian White and Black African White and Black Caribbean Any other mixed / multiple ethnic group Any other ethnic group Prefer not to say					White - English / Welsh / Scottish / Northern Irish / British White - Irish White - Gypsy or Irish Traveller White - Any other White background Other ethnic group - Arab Mixed / Multiple ethnic groups - White and Asian Mixed / Multiple ethnic groups - White and Black African Mixed / Multiple ethnic groups - White and Black Caribbean Any other mixed / multiple ethnic background Other ethnic group - Any other ethnic group			
	Socio-economic deprivation	Index of Multiple Deprivation 2019 (deciles)	lsoa11cd	T B	1 (most deprived) 2 3 4 5 6 7 8 9 10 (least deprived)	Index of Multiple Deprivation 2019 (deciles)	enrol_postcode	S B	1 (most deprived) 2 3 4 5 6 7 8 9 10 (least deprived)		Index of Multiple Deprivation 2019 (deciles)	C	1 (most deprived) 2 3 4 5 6 7 8 9 10 (least deprived)
	School	School type	school_type	T B	Primary Secondary Sixth Form	School type	enrol_schl_year enrol_schl_year_in fo	S B S B	Primary Secondary Sixth Form		school_type	C	Primary Secondary Sixth Form
	Clinical	Long term medical condition	Has long term medical condition	health_status health_change_descriptio long_term_medical_conditio medical_condition_1 medical_condition_2 medical_condition_3 medical_condition_4 medical_condition_5 medical_condition_6 medical_condition_7 medical_condition_8 medical_condition_9 medical_condition_10 medical_condition_11 other_medical_conditio n	N F F F N B N B N B N B N B N B N B N B N B N B N B N B N B N B F B	Has a long term medical condition Does not have a long term medical condition Has asthma Has chronic lung disease Has heart disease Has high blood pressure Has diabetes Has depression Has anxiety Has immunodeficiency Has kidney disease Has cancer Has other long term medical condition	Has long term medical condition	ext_child_illness ext_child_illness_what ext_child_illness_heart ext_child_illness_oth	S B S B S B S B	Has a long term medical condition Does not have a long term medical condition Do not know if have a long term medical condition Prefer not to say if have a long term medical condition Has diabetes Has asthma Has heart condition Has other long term medical condition	long_term_conditio asthma diabetes heart_conditio n	Bi Bi Bi Bi	Has a long term medical condition Does not have a long term medical condition Has asthma Does not have asthma Has diabetes Does not have diabetes Has heart condition Does not have heart condition

COVID-19 symptoms	Acute COVID-19 symptoms	No symptoms	no_symptoms	N	BF	Had no symptoms in last 30 days	Symptom +/- 7 days of sampling	ext_SYMPTOM / fw_SYMPTOM	S	B	Had shortness of breath / difficulty breathing in 7 days before / after sampling Had headaches in 7 days before / after sampling Had muscle ache (myalgia) in 7 days before / after sampling Had tiredness / fatigue in 7 days before / after sampling Had nausea / vomiting in 7 days before / after sampling Had abdominal pain in 7 days before / after sampling Had diarrhoea in 7 days before / after sampling Had loss or change to their sense of smell or taste in 7 days before / after sampling	recent_symptoms	Bi	Recent symptoms No recent symptoms	
		Symptom in last 30 days	fever_1	N	BF	Had fever in last 30 days	Date of onset	ext_SYMPTOM_date / fw_SYMPTOM_date	S	B		recent_fever	Bi	Recent fever and / or shivers No recent fever and / or shivers	
			shivers_chills_1	N	BF	Has shivers / chills in last 30 days	Duration	ext_SYMPTOM_duration / fw_SYMPTOM_duration	S	B	F		recent_cough	Bi	Recent cough No recent cough
			cough_1	N	BF	Had cough in last 30 days									
			runny_nose_1	N	BF	Had runny nose in last 30 days							recent_sore_throat	Bi	Recent sore throat No recent sore throat
			sneezing_1	N	BF	Had sneezing in last 30 days							recent_breathlessness	Bi	Recent shortness of breath / difficulty breathing No recent shortness of breath / difficulty breathing
			sore_throat_1	N	BF	Had sore throat in last 30 days							recent_headache	Bi	Recent headaches No recent headaches
			short_breath_diff_1	N	BF	Had shortness of breath or difficulty breathing in last 30 days							recent_muscle_ache	Bi	Recent muscle ache No recent muscle ache
			headache_1	N	BF	Had headache in last 30 days							recent_fatigue	Bi	Recent fatigue No recent fatigue
			muscle_joint_aches_1	N	BF	Had general muscle / joint aches / pains in last 30 days							recent_sickness	Bi	Recent nausea and / or vomiting No recent nausea and / or vomiting
			tiredness_fatigue_1	N	BF	Has unusual tiredness fatigue / exhaustion in last 30 days							recent_abdominal_pain	Bi	Recent abdominal pain No recent abdominal pain
			nausea_vomiting_1	N	BF	Had nausea in last 30 days							recent_diarrhoea	Bi	Recent diarrhoea No recent diarrhoea
			vomiting_1	N	BF	Had vomiting in last 30 days							recent_taste_smell_loss	Bi	Recent loss of taste / smell No recent loss of taste / smell
			abdominal_tummy_cramps_1	N	BF	Has abdominal cramps in last 30 days									
			diarrhoea_1	N	BF	Had diarrhoea in last 30 days									
			rash_on_toes_or_feet_1	N	BF	Had rash on toes or feet in last 30 days									
			rash_elsewhere_desc_1	N	BF	Had rash elsewhere in last 30 days									
			loss_of_smell_1	N	BF	Had loss of smell in last 30 days									
			loss_of_taste_1	N	BF	Had loss of taste in last 30 days									
			other_symptoms_1	N	BF	Other symptoms									
	other_rash_location	N	BF	Other rash location											
Long-COVID symptoms	N/A	Had symptoms ongoing >4 weeks	end_ongoing_symptoms	S	F	Had persistent COVID-19-related symptoms >4 weeks Had ongoing symptomatic COVID-19 Had post-COVID-19 syndrome	long_covid	Bi	Persistent COVID-19-related symptoms >4 weeks No persistent COVID-19-related symptoms >4 weeks						
		Duration	end_symptoms_duration	S	F	Had persistent fever Had persistent headache	ongoing_symptomatic_covid	Bi	Ongoing symptomatic COVID-19 No ongoing symptomatic COVID-19						
		Symptom ongoing >4 weeks	end_symptoms_SYMPTOM	S	F	Had persistent muscle ache Had persistent weakness / tiredness Had persistent nausea / vomiting Had persistent abdominal pain Had persistent diarrhoea Had persistent loss of appetite Had persistent loss of taste	post_covid_syndrome	Bi	Post-COVID-19 syndrome No post-COVID-19 syndrome						
							persistent_fever	Bi	Persistent fever No persistent fever						

		<p>Had persistent loss of smell</p> <p>Had persistent sore throat</p> <p>Had persistent cough</p> <p>Had persistent shortness of breath</p> <p>Had persistent chest pain</p> <p>Had persistent palpitations</p> <p>Had persistent vertigo / dizziness</p> <p>Had persistent worry / anxiety</p> <p>Had persistent low mood / not enjoying anything</p> <p>Had persistent trouble sleeping</p> <p>Had persistent memory loss or confusion</p> <p>Had persistent difficulty concentrating</p> <p>Had persistent sensations in skin, such as prickling, tingling or burning</p> <p>Had other persistent symptom</p>	<p>persistent_headache</p> <p>Bi</p> <p>Persistent headache</p> <p>No persistent headache</p> <p>persistent_muscle_ache</p> <p>Bi</p> <p>Persistent muscle ache</p> <p>No persistent muscle ache</p> <p>persistent_fatigue</p> <p>Bi</p> <p>Persistent weakness / tiredness</p> <p>No persistent weakness / tiredness</p> <p>persistent_sickness</p> <p>Bi</p> <p>Persistent nausea / vomiting</p> <p>No persistent nausea / vomiting</p> <p>persistent_abdominal_pain</p> <p>Bi</p> <p>Persistent abdominal pain</p> <p>No persistent abdominal pain</p> <p>persistent_appetite_loss</p> <p>Bi</p> <p>Persistent loss of appetite</p> <p>No persistent loss of appetite</p> <p>persistent_diarrhoea</p> <p>Bi</p> <p>Persistent diarrhoea</p> <p>No persistent diarrhoea</p> <p>persistent_taste_loss</p> <p>Bi</p> <p>Persistent loss of taste</p> <p>No persistent loss of taste</p> <p>persistent_smell_loss</p> <p>Bi</p> <p>Persistent loss of smell</p> <p>No persistent loss of smell</p> <p>persistent_sore_throat</p> <p>Bi</p> <p>Persistent sore throat</p> <p>No persistent sore throat</p> <p>persistent_cough</p> <p>Bi</p> <p>Persistent cough</p> <p>No persistent cough</p> <p>persistent_shortness_of_breath</p> <p>Bi</p> <p>Persistent shortness of breath</p> <p>No persistent shortness of breath</p> <p>persistent_chest_pain</p> <p>Bi</p> <p>Persistent chest pain</p> <p>No persistent chest pain</p> <p>persistent_palpitations</p> <p>Bi</p> <p>Persistent palpitations</p> <p>No persistent palpitations</p> <p>persistent_anxiety</p> <p>Bi</p> <p>Persistent worry / anxiety</p> <p>No persistent worry / anxiety</p> <p>persistent_dizziness</p> <p>Bi</p> <p>Persistent vertigo / dizziness</p> <p>No persistent vertigo / dizziness</p> <p>persistent_depression</p> <p>Bi</p> <p>Persistent low mood / not enjoying anything</p> <p>No persistent low mood / not enjoying anything</p> <p>persistent_insomnia</p> <p>Bi</p> <p>Persistent trouble sleeping</p> <p>No persistent trouble sleeping</p> <p>persistent_memory_loss</p> <p>Bi</p> <p>Persistent memory loss or confusion</p> <p>No persistent memory loss or confusion</p> <p>persistent_difficulty_concentrating</p> <p>Bi</p> <p>Persistent difficulty concentrating</p> <p>No persistent difficulty concentrating</p> <p>persistent_skin_sensations</p> <p>Bi</p> <p>Persistent sensations in skin, such as prickling, tingling or burning</p> <p>No persistent sensations in skin, such as prickling, tingling or burning</p> <p>persistent_other</p> <p>Bi</p> <p>Persistent other symptom</p> <p>No persistent other symptom</p>
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Educational	School absences	No. days off school due to non-COVID-19 illness in past 30 days	symp_no_absnt_30_days	N	BF	Off school due to COVID-19-related reason in past 30 days Off school due to illness not related to COVID-19 in past 30 days No. days off school due to medically diagnosed COVID-19 (confirmed by a	Absent in past 4 weeks for any reason	fw_absnt	S	F	Off school due to COVID-19-related illness in past 28 days Off school due to illness not related to COVID-19 in past 28 days No. days off school due to any illness in past 28 days if all absences due to illness	off_school_illness	Bi	Off school due to either COVID-19 or non-COVID-19 illness in past month Not off school due to either COVID-19 or non-COVID-19 illness in past month	
		No. days off school due to COVID-19 illness in past 30 days	symp_no_covid_absnt_30_days	N	BF	doctor) in past 30 days No. days off school due to suspected COVID-19 (not medically confirmed) in past 30 days No. days off school because of other illness not related to COVID-19 in past 30 days	No. days off school missed in past 4 weeks for any reason	fw_absnt_no	S	F		no_days_off_school_illness	N	No. days off school due to COVID-19 or non-COVID-19 illness in past month	
		No. days off school due to confirmed COVID-19 in past 30 days	symp_no_covid_absnt_confirmed_by_dr	N	BF		Any absences COVID-19 related	fw_absnt_reason	S	F					
		No. days off school due to unconfirmed COVID-19 in past 30 days	symp_no_suspected_covid_absnt_30_days	N	BF		COVID-19 related reason(s)	fw_absnt_not_covid	S	F					
		No. days off school due to non-COVID-19 illness in past 30 days	symp_no_other_absnt_30_days	N	BF		Non-COVID-19 related reason(s)	fw_absnt_covid	S	F					

N – number; T – free text; S – string; D – datetime; Bi – binary; C – categorical; B – baseline; F – follow up; BF – baseline and follow up.

