University of Manchester

Data Dictionary: Cloudy with a Chance of Pain

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I. Basic Demographics

Colum header	Data type	Description	How it was entered	Which form/question it was derived from?
userId	INTEGER	Unique Participant identifier	Unique number derived from Cloudy with a Chance of Pain study only	
sex	STRING	Patient's gender	Female/Male	From Baseline questionnaire: Are you Male or Female?
yearofbirth	STRING	Year of birth	Free text field without any validity checks	Question in baseline questionnaire: What is your year of birth?
yob	INTEGER	Year of birth	Only including numerical values; YYYY(Need validity checks)	Derived from yearofbirth field, only including numerical values
age	INTEGER	Age derived from yob field;	Numerical, except: a = year of birth reported such that participant is >116 years (age of oldest woman alive); return NA b= year of birth reported such that age is <0; return NA; c=year of birth not reported in a readable format, return NA	
post.code	STRING	First part of participants' postcode	Free text; Limited to maximum 4 characters, March to prevent full post-code entry	Please enter the first part of your postcode
latitude	FLOAT	Derived from postcode	One of the two components of a geolocation; Keep 5 decimal place	
longitude	FLOAT	Derived from postcode	One of the two components of a geolocation ; Keep 5 decimal place	
site.head	INTEGER	Headpain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.face	INTEGER	Facepain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that

				apply)"
site.mouth.jaws	INTEGER	Mouth/jaw pain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.neck.or.shoulder.pain	INTEGER	Neck/shoulder pain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.back.pain	INTEGER	Backpain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.stomach.or.abdominal.pain	INTEGER	Stomach/abs	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.hip.pain	INTEGER	Hippain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.knee.pain	INTEGER	Kneepain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.hands	INTEGER	Handpain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.feet	INTEGER	Feetpain	0= no, 1=yes	Question in the app: "Where is your pain? (please tick all that apply)"
site.multi.num	INTEGER	Number of pain sites in total	INTEGER from 0 to 10; indicate the number of pain sites the patient has	Question in the app: "Where is your pain? (please tick all that apply)"
cond.oa	INTEGER	Osteoarthritis	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.ra	INTEGER	Rheumatoid arthritis	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.spa	INTEGER	Spondylo arthropathy /	0= no, 1=yes	Question in the app: "Has your doctor ever

		ankylosing spondylitis		told you that you have any of the following conditions? (please tick all that apply)
cond.gou	INTEGER	Gout or other crystal arthritis (e.g. pseudogout)	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.artr.unsp	INTEGER	Arthritis (type not specified)	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.cwpfm	INTEGER	Fibromyalgia/chronic widespread pain	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.mig	INTEGER	Chronic headache	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.np	INTEGER	Neuropathic pain	0= no, 1=yes	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.other	STRING	Other condition leading to chronic pain (please list)	FREE TEXT FIELD	Question in the app: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.none	INTEGER	Do not have any conditions	0= no, 1=yes	Derived from Question: "Has your doctor ever told you that you have any of the following conditions? (please tick all that apply)
cond.total.num	INTEGER	Number of conditions	INTEGER from 0 to 8; indicate the number of pain sites the patient has	Derived from Question: "Has your doctor ever told you that you have any of

				the following conditions? (please tick all that apply)
drug.pcmol	INTEGER	Paracetamol	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
drug.nsaids	INTEGER	NSAIDs (tablets or creams/ gels) e.g. ibuprofen, diclofenac, naproxen, indomethacin, meloxicam, ketoprofen, celecoxib, etoricoxib, etodolac	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
drug.simple.anal	INTEGER	Other simple analgesics e.g. cocodamol, codydramol	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
drug.weak.opiates	INTEGER	Weak opiates e.g. codeine, dihydrocodeine, tramadol	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
drug.strong.opiates	INTEGER	Strong opiates e.g. buprenorphine, fentanyl, morphine, oxycodone	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
drug.for.np	INTEGER	Drugs for neuropathic pain e.g. gabapentin, pregabalin, duloxetine	0= no, 1=yes	Question in the app: "What types of medication are you currently using?"
Drug.other	STRING	Other (please list)	Free text to field	Question in the app: "What types of medication are you currently using?"
drug.total.num	INTEGER	Total number of medications used	INTEGER from 0 to 7	Derived from medication section
belief.damp.rain	INTEGER	Damp/Rain	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that

				apply)
belief.cold	INTEGER	Cold	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that apply)
belief.hot	INTEGER	Hot	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that apply)
belief.dbp	INTEGER	Change in barometric pressure	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that apply)
belief.dt	INTEGER	Change in temperature	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that apply)
belief.other	INTEGER	Other	0= no, 1=yes	Question:If you think there is a possible association, which weather condition(s) affects your pain most? (please tick all that apply)
belief.other.detail	STRING	Detailed other weather conditions	Free text to field	
belief	INTEGER	Score of belief	0-10 (10 point scale anchored at 0 "not at all likely" and 10 "extremely likely")	Question in the app: "How likely do you think it is that the weather is associated with pain?"

II. Time varying data: Daily symptom

Colum header	Data type	Description	How it was entered	Which from/question it was derived from?
userId	INTEGER	Unique Participant identifier	Key for linking to other individual participant data	
date	DATE	Denotes the date/time when the record was created in the app	Expressed in UTC timestamp (= coordinated universal time) dd/mm/yyyy	From Cloudy app
week	DATE	Derived from Date	Week days (Mon, Tue, Wed, Thu, Fri, Sat, Sun)	
month	DATE	Derived from Date	Month of the date	
first	DATE	The first entry; Delivered from Date	Expressed in UTC timestamp (= coordinated universal time) dd/mm/yyyy	
last	DATE	The last entry; Derived from Date	Expressed in UTC timestamp (= coordinated universal time) dd/mm/yyyy	
daysinstudy	INTEGER	Total days spent in the study	Derived from first and last	
nentry	INTEGER	Total entry times in study		
nth_day	INTEGER	The nth_day since the first entry	Derived from first	
prev.entry_date		The nth_day since the first entry of the previous entry	Derived from first	
Pain severity	INTEGER	Daily score record of Pain severity	0=No entry; 1=No pain; 2=Mild pain; 3=Moderate pain; 4=Severe pain; 5=Very severe pain	How severe was your pain today?
Fatigue	INTEGER	Daily score record of Fatigue	0=No entry; 1=No fatigue; 2=Mild fatigue; 3=fatigue; 4=Severe fatigue;	How severe was your fatigue today?

			5=Very severe fatigue	
Morning stiffness	INTEGER	Daily score record of Morning stiffness	0=No entry; 1=No stiffness; 2=A little stiff; 3=Moderately stiff; 4=Severely stiff; 5=Very severely stiff	How stiff did you feel on waking this morning?
Pain impact	INTEGER	Daily score record of Pain impact	0=No entry; 1=Not at all; 2=A little bit; 3=Somewhat; 4=Quite a bit; 5=Very much	Has your pain interfered with your activities today?
Sleep quality	INTEGER	Daily score record of Sleep quality	0=No entry; 1=Very poor; 2=Poor; 3=Fair; 4=Good; 5=Very good	How was your sleep quality last night?
Time spent outside	INTEGER	Daily score record of Time spent outside	0=No entry; 1=None of the day; 2=Some of the day; 3=Half of the day; 4=Most of the day; 5=All of the day	How much time have you spent outside today?
Waking up feeling tired	INTEGER	Daily score record of Waking up feeling tired	0=No entry; 1=Not at all tired; 2=A little bit tired; 3=Moderately tired; 4=Quite a bit tired; 5=Extremely tired	How did you feel when you woke this morning?
Exercise	INTEGER	Daily score record of Physical activity	0=No entry; 1=No exercise; 2=Less than 30 minutes of light activity; 3=30+ minutes of light activity; 4=Less than 30 minutes of strenuous activity; 5=30+ minutes of strenuous activity	How long have you exercised today?
Mood	INTEGER	Daily score record of Mood	0=No entry; 1=Depressed; 2=Feeling low; 3=Not very happy; 4=Quite happy; 5=Very happy	How has your mood been today?
Patient wellbeing	INTEGER	Daily score record of	0=No entry; 1=Very unwell;	How well did you feel today?

		Patient wellbeing	2=Quite unwell; 3=Unwell; 4=Well; 5=Very swell	

III. Time varying data: Daily weather data

Colum header	Data type	Description	How it was entered	Which from/question it was derived from?
userId	INTEGER	Unique Participant identifier	Key for linking to other individual participant data	From App
day	DATE	Denotes the date/time when the record was created in the app	Expressed in UTC timestamp (= coordinated universal time) dd/mm/yyyy	From App
month	DATE	Derived from date	Month in date	
locationid	INTEGER	{3002, ... , 99214}	Unique weather station identifier	From App
locationlat	NUMERICAL	Location latitude	Latitude for weather station geolocation	From App
locationlng	NUMERICAL	Location longitude	Longitude for weather station geolocation	From App
locationname	STRING	Categorical; text field	Weather station name	From App
locationelevation			Weather station's elevation level in meters above sea level	From App
locationcountry	STRING	Country in which the weather station is located	1=channel islands 2=England 3=Ireland 4=Isle of man 5=Northern Ireland 6=Scotland 7=Wales	From App
meanWindspeed	NUMERICAL	Average wind speed	Wind speed in m/s	
meanTemp	NUMERICAL	Average temperature	Temperature in degrees Celsius	
meanDewpt	NUMERICAL	Average dew point	Temperature in degrees Celsius at which the air, when cooled, will become saturated.	
meanPressure	NUMERICAL	Average pressure	Barometric pressure in hPa	

meanRHX	NUMERICAL	Average relative humidity	Measure of how close the air is to being saturated, i.e. how much water vapour there is in the air compared to how much there could be at that temperature. Expressed as %.	
maxWindspeed	NUMERICAL	Maximum wind speed in m/s over the previous hour	Numerical; Missing wind gust values may imply two things 1. That wind gust was not present; 2. That the station in question cannot provide wind gust.	
maxTemp	NUMERICAL	Maximum temperature	Temperature in degrees Celsius	
maxDewpt	NUMERICAL	Maximum dew point	Temperature in degrees Celsius at which the air, when cooled, will become saturated.	
maxPressure	NUMERICAL	Maximum pressure	Barometric pressure in hPa	
maxnRHX	NUMERICAL	Maximum relative humidity	Measure of how close the air is to being saturated, i.e. how much water vapour there is in the air compared to how much there could be at that temperature. Expressed as %.	
minWindspeed	NUMERICAL	Minimum wind speed in m/s over the previous hour	Numerical; Missing wind gust values may imply two things 1. That wind gust was not present; 2. That the station in question cannot provide wind gust.	
minTemp	NUMERICAL	Minimum temperature	Temperature in degrees Celsius	
minDewpt	NUMERICAL	Minimum dew point	Temperature in degrees Celsius at which the air, when cooled, will become saturated.	
minPressure	NUMERICAL	Minimum	Barometric pressure in	

		pressure	hPa	
minnRHX	NUMERICAL	Minimum relative humidity	Measure of how close the air is to being saturated, i.e. how much water vapour there is in the air compared to how much there could be at that temperature. Expressed as %.	