

Online Supplement for “Feeling it in your bones: A retrospective claims analysis of the association between rainfall and diagnoses of joint or back pain”

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eTable 1—ICD-9 Diagnosis Codes for Joint Pain

Condition	ICD-9 Codes
Rheumatoid arthritis and related disease	7140, 7141, 7142, 71430, 71431, 71432, 71433, 7144, 71481, 71489, 7149, 7200
Osteoarthritis	71500, 71504, 71509, 71510, 71511, 71512, 71513, 71514, 71515, 71516, 71517, 71518, 71520, 71521, 71522, 71523, 71524, 71525, 71526, 71527, 71528, 71530, 71531, 71532, 71533, 71534, 71535, 71536, 71537, 71538, 71580, 71589, 71590, 71591, 71592, 71593, 71594, 71595, 71596, 71597, 71598, V134
Other non-traumatic joint disorders	7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 71600, 71601, 71602, 71603, 71604, 71605, 71606, 71607, 71608, 71609, 71620, 71621, 71622, 71623, 71624, 71625, 71626, 71627, 71628, 71629, 71630, 71631, 71632, 71633, 71634, 71635, 71636, 71637, 71638, 71639, 71640, 71641, 71642, 71643, 71644, 71645, 71646, 71647, 71648, 71649, 71650, 71651, 71652, 71653, 71654, 71655, 71656, 71657, 71658, 71659, 71660, 71661, 71662, 71663, 71664, 71665, 71666, 71667, 71668, 71680, 71681, 71682, 71683, 71684, 71685, 71686, 71687, 71688, 71689, 71690, 71691, 71692, 71693, 71694, 71695, 71696, 71697, 71698, 71699, 71810, 71811, 71812, 71813, 71814, 71815, 71817, 71818, 71819, 71820, 71821, 71822, 71823, 71824, 71825, 71826, 71827, 71828, 71829, 71850, 71851, 71852, 71853, 71854, 71855, 71856, 71857, 71858, 71859, 71860, 71865, 71870, 71871, 71872, 71873, 71874, 71875, 71876, 71877, 71878, 71879, 71880, 71881, 71882, 71883, 71884, 71885, 71886, 71887, 71888, 71889, 71890, 71891, 71892, 71893, 71894, 71895, 71897, 71898, 71899, 71900, 71901, 71902, 71903, 71904, 71905, 71906, 71907, 71908, 71909, 71910, 71911, 71912, 71913, 71914, 71915, 71916, 71917, 71918, 71919, 71920, 71921, 71922, 71923, 71924, 71925, 71926, 71927, 71928, 71929, 71930, 71931, 71932, 71933, 71934, 71935, 71936, 71937, 71938, 71939, 71940, 71941, 71942, 71943, 71944, 71945, 71946, 71947, 71948, 71949, 71950, 71951, 71952, 71953, 71954, 71955, 71956, 71957, 71958, 71959, 71960, 71961, 71962, 71963, 71964, 71965, 71966, 71967, 71968, 71969, 7197, 71970, 71975, 71976, 71977, 71978, 71979, 71980, 71981, 71982, 71983, 71984, 71985, 71986, 71987, 71988, 71989, 71990, 71991, 71992, 71993, 71994, 71995, 71996, 71997, 71998, 71999

eTable 2—Regression coefficients from visit-level multivariable linear probability model of joint/back pain visits as a function of daily rainfall (binary variable) and other model covariates

Variable	Coefficient from linear probability model	95% CI (lower)	95% CI (upper)	p-value
Rain (yes vs no)	-0.00039	-0.00079	6.02E-06	0.054
Age (each 1 year increment)	0.000257	0.000205	0.000309	0
Female (yes vs no)	0.01362	0.012941	0.014299	0
White (yes vs no)	-0.0063	-0.00838	-0.00422	0
Chronic condition indicator variables				
Coronary artery disease (yes vs no)	0.003596	0.002916	0.004277	0
Dementia (yes vs no)	-0.00147	-0.00241	-0.00054	0.002
Atrial Fibrillation (yes vs no)	-0.01743	-0.01835	-0.0165	0
Chronic Kidney Disease (yes vs no)	-0.00515	-0.00593	-0.00437	0
Chronic Obstructive Pulmonary Disease (yes vs no)	-0.00138	-0.00222	-0.00055	0.001
Diabetes (yes vs no)	-0.01124	-0.01193	-0.01055	0
Congestive Heart Failure (yes vs no)	-0.00237	-0.00314	-0.0016	0
Hyperlipidemia (yes vs no)	-0.00551	-0.0064	-0.00461	0
Hypertension (yes vs no)	-0.01767	-0.01875	-0.0166	0
Prior Stroke or Transient Ischemic Attack (yes vs no)	-0.0026	-0.00331	-0.00189	0
Cancer (yes vs no)	-0.00467	-0.00539	-0.00396	0

Notes: Regression coefficients in a linear probability model reflect the percentage point change in the probability of the outcome variable (in this case, the probability that a primary care visit involved joint/back pain) as a function of 0/1 change in binary variables (e.g., yes/no presence of rain on a given day) or a unit change in continuous variables (e.g., age).