

# Exploration

```
library(plyr)
```

Income data is from <http://www.psc.isr.umich.edu/dis/census/Features/tract2zip/>

```
nyopth <- read.csv("~/cunyMsda2015/nyopth.csv")
load(file = "incomes.data")
incomes$Median <- as.numeric(incomes$Median)
incomes$Mean <- as.numeric(incomes$Mean)
incomes$Pop <- as.numeric(incomes$Pop)
```

We first look at the top hcpcs codes

```
sort(table(nyopth$hcpcs_code),decreasing = TRUE)
```

```
##
## 92014 92012 92083 92004 92133 92250 92225 92134 92226 92020 66984 76514
## 1467 1435 1203 1186 992 921 828 825 794 793 729 555
## 99213 66821 76519 99204 92136 99214 66982 92235 99212 76512 67028 67820
## 541 532 451 444 418 358 333 319 301 272 259 240
## 92002 J3590 92285 92286 68761 65855 99203 66761 92025 67228 67210 J2778
## 232 206 175 175 162 159 153 151 132 131 125 114
## Q2046 92060 99215 99205 92082 92132 67840 68840 92081 99308 99309 68810
## 94 91 85 77 66 63 52 48 46 43 40 39
## 99305 65210 92240 68801 76513 67042 99211 92140 15823 92100 66170 66711
## 39 35 35 34 34 31 30 28 27 25 24 24
## 92071 67917 J3490 65222 67145 83861 65756 66250 67041 67904 99306 J3300
## 24 23 22 21 21 21 20 20 20 20 20 20
## 66180 99304 J9035 65205 65805 68815 99307 67036 67810 67961 67255 67108
## 19 19 18 17 17 16 16 15 15 15 14 13
## 99202 99222 64612 66172 J3301 14060 66762 67113 67800 67924 67966 J0585
## 13 13 12 12 12 11 11 11 11 11 11 11
## 15260 67040 68720 95060 67105 67221 67515 99223 J3396 31231 65757 67220
## 10 10 10 10 9 9 9 9 9 7 7 7
## 67700 67900 68440 99221 99232 0192T 15732 65430 65772 67950 68200 76510
## 7 7 7 7 7 6 6 6 6 6 6 6
## 76516 92260 92283 95930 J7312 J9190 11440 14061 31200 36415 65875 66710
## 6 6 6 6 6 6 5 5 5 5 5 5
## 67031 67875 69210 76511 15004 31575 65755 65860 66225 67801 67882 68530
## 5 5 5 5 4 4 4 4 4 4 4 4
## 88305 92275 99201 99283 30130 65400 67825 67908 67938 67973 68326 92287
## 4 4 4 4 3 3 3 3 3 3 3 3
## 99284 G0436 11441 11900 15845 31237 65420 65435 65800 65815 65870 66825
## 3 3 2 2 2 2 2 2 2 2 2 2
## 66986 67043 67218 67500 67715 67805 67903 67911 68325 68700 68760 85025
## 2 2 2 2 2 2 2 2 2 2 2 2
## 88300 88304 92557 93880 99326 99406 J1100 10040 11901 14040 15576 15770
## 2 2 2 2 2 2 2 1 1 1 1 1
## 21015 30300 30930 31239 65450 65710 65778 65780 65850 65865 66020 66030
## 1 1 1 1 1 1 1 1 1 1 1 1
```

```
## 66500 66625 66680 66682 66700 66820 66850 66985 66990 67039 67141 67208
##      1      1      1      1      1      1      1      1      1      1      1      1
## 67225 67311 67331 67332 67400 67412 67915 67916 67923 67971 67974 68040
##      1      1      1      1      1      1      1      1      1      1      1      1
## 68110 68320 68362 68525 80048 80053 81001 81003 85651 87809 88108 88313
##      1      1      1      1      1      1      1      1      1      1      1      1
## 92018 92230 92265 92284 92313 92499 92540 92543 92546 92548 92567 92570
##      1      1      1      1      1      1      1      1      1      1      1      1
## 92587 93000 99231 99233 99234 99310 99325 99327 99335 G0268 J0588 J1040
##      1      1      1      1      1      1      1      1      1      1      1      1
## J2503
##      1
```

```
nyopth.92014 <- nyopth[nyopth$hcpes_code==92014,]
```

```
nyopth.92014.city <- ddply(nyopth.92014,~nppes_provider_city,summarise,mean=mean(average_medicare_paymen
sorted.city <- nyopth.92014.city[order(-nyopth.92014.city$mean),]
sorted.city
```

```
##      nppes_provider_city      mean
## 131      OLD WESTBURY 109.52900
## 114      MT. VERNON 108.08800
## 147 PORT JEFFERSON STATION 107.34500
## 39      EASTCHESTER 106.90300
## 140      PEARL RIVER 105.57850
## 101      LONG BEACH 104.78055
## 129      OAKLAND GARDENS 104.61700
## 95      LAWRENCE 104.49700
## 67      GREAT NECK 103.03014
## 91      KEW GARDENS 102.99800
## 55      FRANKLIN SQUARE 102.97800
## 96      LEVITTOWN 102.86480
## 192      WANTAGH 102.36827
## 183      TARRYTOWN 102.34267
## 144      PLEASANTVILLE 102.30900
## 188      VALHALLA 102.04000
## 205      WILLISTON PARK 101.96800
## 108      MERRICK 101.90600
## 180      SUNNYSIDE 101.52600
## 52      FLORAL PARK 101.30327
## 82 HUNTINGTON STATION LI 101.17100
## 203      WHITESTONE 101.16020
## 49      FARMINGDALE 100.76700
## 208      WOODMERE 100.66900
## 128      NY 100.41110
## 160      ROCKAWAY PARK 100.40900
## 174      SOUTHAMPTON 100.35210
## 110      MINEOLA 100.33540
## 29      COMMACK 100.22183
## 75      HOLBROOK 100.15905
## 112      MOUNT VERNON 100.08689
## 102      LYNBROOK 99.99205
## 54      FOREST HILLS 99.88097
## 41      EAST PATCHOGUE 99.87757
```

## 149	PORT WASHINGTON	99.60785
## 145	POMONA	99.58952
## 135	ORANGEBURG	99.55790
## 169	SHIRLEY	99.50370
## 106	MASSAPEQUA	99.46805
## 105	MANHASSET	99.46383
## 62	GLENDALE	99.46040
## 63	GLEN OAKS	99.37010
## 16	BRENTWOOD	99.33218
## 3	AMITYVILLE	99.31470
## 175	SOUTHOLD	99.26470
## 74	HICKSVILLE	99.21540
## 199	WEST HEMPSTEAD	99.06290
## 146	PORT JEFFERSON	99.00133
## 12	BETHPAGE	98.97771
## 117	NEW CITY	98.93753
## 137	OSSINING	98.92990
## 73	HEWLETT	98.76460
## 154	QUEENS VILLAGE	98.65480
## 207	WOODBURY	98.48703
## 181	SYOSSET	98.41230
## 59	GARNERVILLE	98.38668
## 163	RYE	98.26377
## 211	YORKTOWN HEIGHTS	98.11073
## 120	NEW ROCHELLE	98.03819
## 119	NEW HYDE PARK	98.00197
## 42	EAST SETAUKET	97.99532
## 10	BAY SHORE	97.89893
## 202	WHITE PLAINS	97.89175
## 7	BABYLON	97.78003
## 15	BOHEMIA	97.64450
## 58	GARDEN CITY	97.61352
## 80	HUNTINGTON	97.58596
## 176	SOUTH RICHMOND HILL	97.58213
## 194	WARWICK	97.52440
## 177	STATEN ISLAND	97.47196
## 157	RIDGEWOOD	97.44850
## 72	HEMPSTEAD	97.28178
## 161	ROCKVILLE CENTRE	97.21103
## 19	BRONXVILLE	97.17673
## 158	RIVERHEAD	97.15970
## 5	ASTORIA	96.85270
## 71	HAWTHORNE	96.79543
## 210	YONKERS	96.78579
## 179	SUFFERN	96.75480
## 200	WEST ISLIP	96.68813
## 35	CROTON ON HUDSON	96.56530
## 111	MOUNT KISCO	96.43089
## 166	SCARSDALE	96.39986
## 8	BARDONIA	96.34180
## 173	SOMERS	96.23430
## 184	THORNWOOD	96.18890
## 40	EAST MEADOW	96.15790
## 20	BROOKLYN	95.95713

## 190	VALLEY STREAM	95.90804
## 61	GLEN COVE	95.67205
## 198	WESTBURY	95.66635
## 113	MT KISCO	95.19360
## 86	JAMAICA	95.15192
## 53	FLUSHING	95.11463
## 81	HUNTINGTON STATION	95.05230
## 85	JACKSON HEIGHTS	94.99257
## 70	HARTSDALE	94.86370
## 171	SMITHTOWN	94.46075
## 122	NEW YORK	94.41583
## 139	PATCHOGUE	94.09460
## 189	VALLEY COTTAGE	94.05050
## 152	PURCHASE	94.01740
## 78	HOWARD BEACH	93.97055
## 97	LIBERTY	93.45150
## 178	STONY BROOK	93.37795
## 98	LITTLE NECK	93.15847
## 14	BKLYN	92.99875
## 116	NEWBURGH	92.51147
## 142	PLAINVIEW	92.32028
## 69	HARRISON	92.19690
## 18	BRONX	92.15273
## 79	HUDSON	91.96920
## 50	FAR ROCKAWAY	91.86633
## 209	WOODSIDE	91.41545
## 44	ELMHURST	91.14750
## 155	REGO PARK	90.36835
## 109	MIDDLETOWN	90.00192
## 25	CARMEL	89.79670
## 123	NEW YORK CITY	89.68960
## 87	JAMESTOWN	89.61350
## 156	RICHMOND HILL	89.50050
## 93	LAKE KATRINE	88.99440
## 11	BAYSIDE	88.67904
## 66	GOSHEN	88.53097
## 26	CEDARHURST	88.34320
## 32	CORNWALL	88.16390
## 51	FISHKILL	87.59866
## 22	CAMBRIA HEIGHTS	87.40237
## 56	FREEPORT	86.97343
## 57	FRESH MEADOWS	86.58253
## 92	KINGSTON	85.59612
## 148	PORT JERVIS	84.75900
## 206	WILTON	84.60040
## 103	MAHOPAC	84.32920
## 151	POUGHKEEPSIE	83.79224
## 191	VESTAL	82.91475
## 170	SLINGERLANDS	82.88843
## 141	PITTSFORD	82.65767
## 133	ONEIDA	82.51940
## 121	NEW WINDSOR	82.24550
## 118	NEW HARTFORD	81.42813
## 21	BUFFALO	81.03017

## 27	CHEEKTOWAGA	80.70147
## 168	SHERRILL	80.66000
## 94	LATHAM	80.55882
## 164	SARANAC LAKE	80.54510
## 83	IRVING	80.48840
## 24	CANANDAIGUA	80.41963
## 48	FAIRPORT	80.40240
## 197	WELLSVILLE	80.22800
## 4	AMSTERDAM	80.15270
## 76	HORNELL	79.91460
## 99	LIVERPOOL	79.81850
## 60	GENEVA	79.45665
## 1	ALBANY	79.39589
## 193	WARSAW	79.36254
## 204	WILLIAMSVILLE	79.11666
## 33	CORTLAND	78.81220
## 138	OSWEGO	78.76690
## 187	UTICA	78.29830
## 165	SARATOGA SPRINGS	78.17182
## 132	OLEAN	78.06160
## 77	HORSEHEADS	78.03280
## 36	DOBBS FERRY	77.91845
## 196	WEBSTER	77.91820
## 185	TONAWANDA	77.87067
## 186	TROY	77.84478
## 2	AMHERST	77.79870
## 45	ELMIRA	77.68440
## 38	EAST AMHERST	77.62320
## 17	BROCKPORT	77.56455
## 23	CAMILLUS	77.52880
## 68	HAMBURG	77.38630
## 13	BINGHAMTON	77.35477
## 126	NORWICH	77.12120
## 37	DUNKIRK	77.03240
## 172	SNYDER	76.89510
## 31	CORNING	76.82363
## 167	SCHENECTADY	76.81967
## 115	NEWARK	76.43870
## 153	QUEENSBURY	76.31825
## 125	NORTH SYRACUSE	76.29690
## 65	GLOVERSVILLE	76.23405
## 28	CLIFTON PARK	76.15490
## 130	OGDENSBURG	76.03750
## 182	SYRACUSE	75.95006
## 136	ORCHARD PARK	75.94365
## 88	JOHNSON CITY	75.77365
## 201	WEST SENECA	75.66190
## 104	MALONE	75.63870
## 162	ROME	75.26990
## 46	ENDICOTT	74.92950
## 195	WATERTOWN	74.70593
## 47	ENDWELL	74.60400
## 100	LOCKPORT	74.32037
## 89	JOHNSTOWN	74.14300

```
## 107          MEDINA  73.97180
## 84          ITHACA  73.88875
## 64          GLENS FALLS  73.56465
## 6          AUBURN  73.21035
## 9          BATAVIA  73.06230
## 134         ONEONTA  72.72670
## 127         N TONAWANDA  72.64010
## 143         PLATTSBURGH  71.42225
## 159         ROCHESTER  71.35616
## 43          EAST SYRACUSE  71.17438
## 150         POTSDAM  67.71837
## 90          KENMORE  67.27373
## 30          COOPERSTOWN  62.82547
## 34          CORTLANDT MANOR  51.94900
## 124         NIAGARA FALLS  50.64850
```

```
nyoprh.corezip <- nyopth.92014
func <- function(x){
  substr(x,1,5)
}
nyoprh.corezip$nppes_provider_zip <- lapply(nyoprh.corezip$nppes_provider_zip,FUN = func)
nyoprh.corezip$nppes_provider_zip <- as.numeric(nyoprh.corezip$nppes_provider_zip)
nyopth.92014.zip <- ddply(nyoprh.corezip,~nppes_provider_zip,summarise,mean=mean(average_medicare_paymen
sorted.zip <- nyopth.92014.zip[order(-nyopth.92014.zip$mean),]

sorted.zip.income <- merge(sorted.zip,incomes,by.x = "nppes_provider_zip",by.y = "Zip")
sorted.zip.income <- sorted.zip.income[order(-sorted.zip.income$mean),]
sorted.zip.income
```

##	nppes_provider_zip	mean	Median	Mean	Pop
## 94	11024	110.49000	676	2287	14036
## 166	11568	109.52900	1240	3291	9893
## 2	10007	107.80000	953	2549	8853
## 189	11776	107.34500	21810	23359	5020
## 20	10034	107.11700	6401	7264	9450
## 73	10709	106.90300	22884	1693	14550
## 152	11434	106.68700	14158	14090	11780
## 93	11023	106.01800	22706	1794	14391
## 85	10965	105.57850	150	1407	2109
## 30	10305	105.34500	17133	20057	9274
## 38	10462	105.08300	11193	9743	13459
## 66	10603	104.79500	21968	623	2463
## 163	11561	104.78055	22077	400	9839
## 135	11364	104.61700	19063	20491	8145
## 162	11559	104.49700	454	1978	14102
## 117	11220	104.16600	5929	9146	14753
## 147	11418	104.12800	16488	17445	9172
## 106	11205	103.95300	9323	13271	8945
## 119	11224	103.72300	4875	6525	11406
## 146	11415	102.99800	16033	18614	4003
## 91	11010	102.97800	21809	23214	5571
## 186	11756	102.86480	22609	300	10592
## 52	10550	102.62023	9265	11994	9481
## 194	11793	102.36827	232	1266	8195

## 61	10591	102.34267	22202	1008	4758
## 56	10570	102.30900	821	2233	1226
## 70	10704	102.29700	18382	19803	7654
## 92	11021	102.28372	9	1960	3298
## 122	11229	102.22264	13275	16272	14063
## 18	10031	102.07000	3428	9803	12515
## 63	10595	102.04000	22377	557	13760
## 4	10010	102.03260	22738	1712	6701
## 170	11596	101.96800	359	1641	256
## 165	11566	101.90600	650	1702	8939
## 105	11204	101.80697	9235	14045	13667
## 101	11104	101.52600	13804	15125	7318
## 126	11238	101.41412	17926	20837	11349
## 89	11001	101.30327	22894	811	6489
## 36	10459	101.25200	1517	3102	9673
## 130	11357	101.16020	20684	22475	9842
## 125	11235	100.90667	10425	14825	13993
## 102	11106	100.84400	10006	12745	10100
## 182	11735	100.76700	22399	298	8161
## 171	11598	100.66900	804	2231	1513
## 173	11694	100.40900	20843	22464	3955
## 71	10705	100.40010	5437	8099	6664
## 202	11968	100.35210	20746	2013	876
## 153	11501	100.33540	21339	22672	4019
## 28	10301	100.30782	16360	19949	9630
## 116	11219	100.29801	4882	9412	14387
## 180	11725	100.22183	319	1391	7370
## 183	11741	100.15905	22825	242	7008
## 110	11212	100.14028	2320	3794	14361
## 109	11210	100.08200	15653	18321	13180
## 164	11563	99.99205	22331	23509	5365
## 195	11794	99.94540	17523	9896	8073
## 141	11375	99.88097	19866	22483	13390
## 32	10312	99.83715	22022	23476	12179
## 17	10030	99.65260	2473	9700	6289
## 113	11215	99.63083	21686	710	12502
## 98	11050	99.60785	521	2106	7118
## 86	10970	99.58952	22454	578	14815
## 84	10962	99.55790	601	1667	11857
## 201	11967	99.50370	21815	22031	5821
## 187	11758	99.46805	297	1191	12213
## 95	11030	99.46383	1099	2499	3105
## 90	11004	99.37010	20868	21737	1605
## 118	11223	99.36509	7238	11345	13702
## 179	11717	99.33218	20012	20802	11696
## 174	11701	99.31470	19098	21174	6159
## 24	10040	99.28607	5977	7987	10990
## 203	11971	99.26470	20155	23099	12159
## 198	11801	99.21540	22188	279	9793
## 128	11354	99.14068	13329	15970	11986
## 159	11552	99.06290	22700	757	5412
## 150	11429	99.01900	20453	21384	6846
## 190	11777	99.00133	75	1580	14640
## 177	11714	98.97771	22338	591	5258

## 83	10956	98.93753	520	1736	8081
## 54	10562	98.92990	22025	538	7769
## 123	11230	98.92034	11986	16521	14529
## 33	10314	98.76570	21335	22594	14353
## 161	11557	98.76460	486	2005	14073
## 68	10605	98.72633	495	1858	3227
## 112	11214	98.61943	5368	8385	13969
## 22	10037	98.54000	7631	10738	3087
## 197	11797	98.48703	893	2285	14677
## 193	11791	98.41230	859	2232	5851
## 96	11040	98.39845	23013	1066	9862
## 78	10923	98.38668	21558	23122	14198
## 149	11428	98.29060	20186	21920	4554
## 58	10580	98.26377	1055	2626	2904
## 69	10701	98.22792	10232	12682	12656
## 76	10804	98.14550	1037	2432	2002
## 143	11385	98.11913	11974	13461	14910
## 185	11746	98.11165	214	1503	12858
## 64	10598	98.11073	333	1569	7305
## 75	10801	98.02030	17063	21045	9109
## 181	11733	97.99532	728	1989	3472
## 176	11706	97.89893	20804	22353	12566
## 97	11042	97.88869	939	2428	11638
## 175	11702	97.78003	22836	1040	2341
## 131	11358	97.77450	19193	21014	9278
## 178	11716	97.64450	22859	536	227
## 156	11530	97.61352	756	2265	6502
## 184	11743	97.58596	631	2088	10262
## 188	11772	97.56438	19306	20127	10280
## 88	10990	97.52440	22623	551	3951
## 27	10128	97.48466	220	2228	12513
## 124	11234	97.46271	19557	20433	14104
## 158	11550	97.28178	16606	18367	12463
## 99	11102	97.28017	12470	15156	9018
## 21	10035	97.27820	1562	3660	7815
## 167	11570	97.21103	444	1847	6695
## 72	10708	97.17673	760	2338	4727
## 200	11901	97.15970	17000	19631	5095
## 65	10601	97.01971	16542	20825	14791
## 13	10024	96.96977	418	2292	12698
## 127	11239	96.94470	1767	3141	2139
## 15	10028	96.84706	228	2300	10086
## 49	10532	96.79543	22598	894	12462
## 67	10604	96.79083	22263	1587	381
## 77	10901	96.75480	22237	931	4985
## 29	10304	96.70977	11284	17053	9191
## 196	11795	96.68813	23073	1164	6620
## 45	10520	96.56530	22828	1334	1168
## 107	11206	96.42500	2025	3980	13332
## 59	10583	96.39986	1140	2569	9564
## 82	10954	96.34180	22711	537	4941
## 39	10463	96.29866	14463	16803	12785
## 129	11355	96.29516	6798	9219	13686
## 51	10549	96.27622	306	2048	2556



## 60	10589	96.23430	22902	1331	13660
## 62	10594	96.18890	395	1749	11527
## 160	11554	96.15790	22308	23457	9377
## 34	10451	96.09665	1529	2794	9405
## 168	11581	95.90804	22713	358	4286
## 5	10011	95.80201	22668	2080	10879
## 100	11103	95.79796	14549	17338	10705
## 108	11209	95.70549	16414	20708	13347
## 14	10025	95.70117	18877	847	14967
## 157	11542	95.67205	21228	196	6661
## 19	10032	95.67190	2754	4668	12046
## 169	11590	95.66635	22344	107	10358
## 35	10457	95.66360	1860	3246	13269
## 1	10003	95.24643	22501	1755	11899
## 42	10469	95.01566	16528	17531	12856
## 138	11372	94.99257	12337	13869	13444
## 10	10021	94.91878	499	2327	10619
## 103	11201	94.89551	22657	1786	11204
## 48	10530	94.86370	225	1637	1546
## 3	10009	94.61827	16293	20643	12285
## 37	10461	94.47499	12112	13579	11200
## 191	11787	94.46075	393	1574	8638
## 11	10022	94.41072	22704	2056	6418
## 87	10989	94.05050	22144	284	14806
## 57	10577	94.01740	1229	3462	8621
## 145	11414	93.97055	20148	21709	6934
## 114	11216	93.85380	6069	10178	12076
## 23	10038	93.71360	16015	22496	2470
## 136	11365	93.69050	17813	19507	9391
## 111	11213	93.62630	4931	7148	13061
## 25	10065	93.57888	341	2296	7929
## 229	12754	93.45150	4660	11731	13163
## 134	11362	93.15847	20797	22528	3296
## 7	10016	93.01982	22897	1852	11464
## 151	11432	92.84490	13464	16676	12062
## 74	10710	92.54217	21536	22949	6121
## 225	12550	92.51147	15795	18091	11737
## 199	11803	92.32028	574	1710	6818
## 47	10528	92.19690	807	2273	1109
## 80	10940	92.18360	16732	18280	10396
## 224	12534	91.96920	9954	15367	3781
## 8	10017	91.94580	113	1939	2782
## 172	11691	91.86633	5205	9680	11951
## 121	11228	91.77400	15738	19629	9933
## 16	10029	91.71381	3950	13018	13808
## 148	11419	91.42398	13164	14386	10601
## 142	11377	91.41545	13313	14694	14451
## 26	10075	91.27981	456	2271	6013
## 43	10475	91.23967	12203	13300	9533
## 139	11373	91.14750	10174	12908	15168
## 140	11374	90.36835	13166	16839	9759
## 53	10552	90.35460	19523	22687	4185
## 132	11360	90.13443	20478	22818	3619
## 44	10512	89.79670	22796	676	5582

## 306	14701	89.61350	5058	5768	9560
## 137	11366	89.44831	21040	22972	1767
## 31	10306	89.36590	20852	22717	12052
## 81	10941	89.27470	19456	21003	1317
## 221	12449	88.99440	14301	17761	8496
## 79	10924	88.53097	22035	23287	1116
## 154	11516	88.34320	22715	1279	13375
## 12	10023	88.26366	348	2309	12470
## 222	12518	88.16390	20862	23004	12454
## 6	10013	88.12338	19942	1722	5849
## 133	11361	87.95135	20153	21795	7099
## 223	12524	87.59866	19795	20637	915
## 144	11411	87.40237	19808	20858	3449
## 250	13224	87.07300	16651	19642	14608
## 228	12603	87.01037	21427	22591	9914
## 155	11520	86.97343	19730	22004	10648
## 192	11790	86.81050	345	1273	3339
## 115	11217	86.51440	20432	248	8944
## 9	10019	86.04467	22050	1630	9721
## 220	12401	85.59612	13605	16026	8861
## 120	11225	85.48155	7441	10459	12731
## 303	14624	85.13420	18208	18852	9489
## 41	10467	85.06552	5079	6445	14863
## 230	12771	84.75900	13075	16981	1793
## 233	12831	84.60040	19819	20802	2044
## 50	10541	84.32920	22822	936	6381
## 40	10466	83.75440	12508	13239	13283
## 264	13850	82.91475	18591	21300	4849
## 209	12159	82.88843	21929	72	13580
## 294	14534	82.65767	22732	1400	7455
## 253	13421	82.51940	11681	13464	1655
## 226	12553	82.24550	20463	21446	4951
## 211	12203	82.11479	14430	16912	8526
## 285	14225	81.70357	10923	10759	8809
## 304	14625	81.55350	20063	21149	584
## 242	13088	81.44947	13503	14413	4903
## 252	13413	81.42813	17503	21118	2687
## 227	12601	81.37865	12010	14729	10306
## 282	14222	81.06267	2790	7989	580
## 255	13461	80.66000	17986	17070	7934
## 298	14613	80.56960	3098	4015	2133
## 208	12110	80.55882	20706	22611	4408
## 237	12983	80.54510	10376	13482	13358
## 270	14081	80.48840	11411	15620	7667
## 290	14424	80.41963	14996	18044	5865
## 291	14450	80.40240	21155	22968	10071
## 214	12206	80.40098	2705	4134	2775
## 312	14895	80.22800	6895	8520	72
## 204	12010	80.15270	9076	11127	6255
## 309	14843	79.91460	6986	8457	1595
## 286	14226	79.74177	16666	19393	7310
## 277	14203	79.72200	1283	4103	881
## 279	14217	79.64290	11315	13455	5863
## 276	14201	79.60480	1302	2913	1670

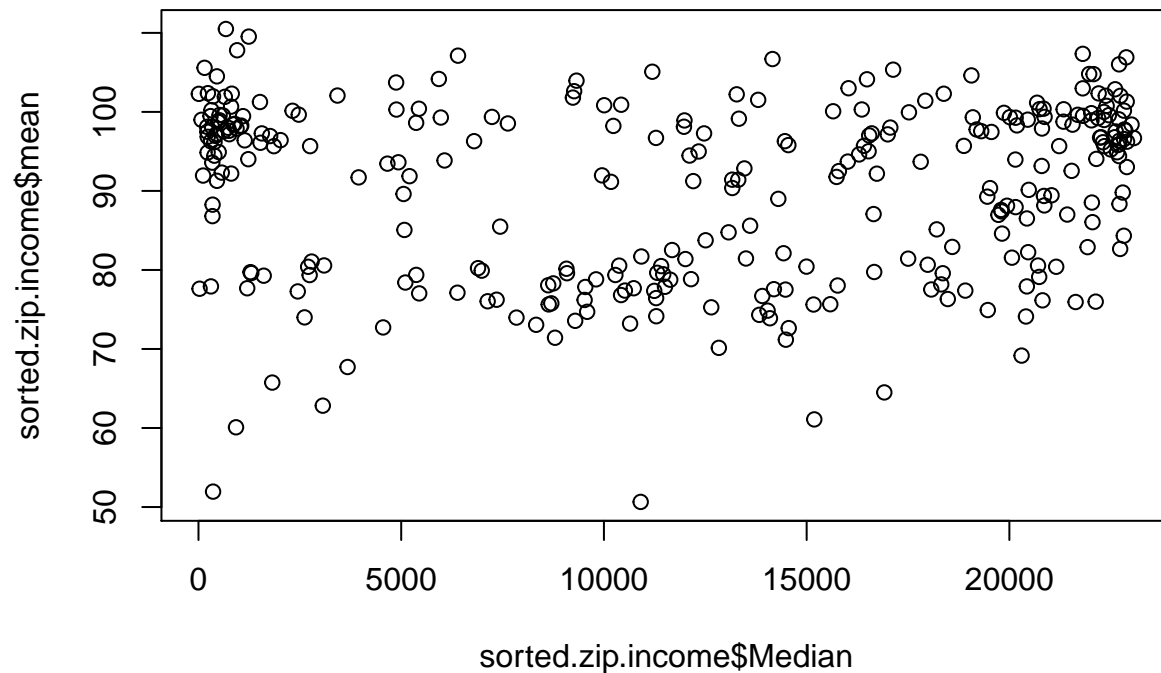
## 216	12304	79.58635	9089	11336	4421
## 213	12205	79.58322	18357	20720	6974
## 292	14456	79.45665	11463	14513	4362
## 278	14209	79.37533	5371	13315	14166
## 295	14569	79.36254	10282	10803	13017
## 246	13203	79.35395	2742	4719	2390
## 247	13210	79.27398	1609	3707	6795
## 281	14221	79.11666	20735	22996	11663
## 104	11203	78.83515	12149	14574	13968
## 240	13045	78.81220	9806	12152	7185
## 244	13126	78.76690	11635	13740	9187
## 297	14607	78.40958	5102	11764	2777
## 256	13502	78.29830	8750	8150	8348
## 234	12866	78.17182	18319	20956	8718
## 307	14760	78.06160	8626	9689	4342
## 310	14845	78.03280	15764	18081	4264
## 46	10522	77.91845	307	1623	323
## 296	14580	77.91820	20431	21936	10514
## 275	14150	77.87067	11506	12466	10710
## 210	12180	77.84478	9541	12802	11751
## 218	12308	77.68690	10735	12230	1713
## 313	14901	77.68440	1202	2522	848
## 268	14051	77.62320	27	1446	3535
## 289	14420	77.56455	14192	15654	4066
## 239	13031	77.52880	18074	19865	2331
## 212	12204	77.51511	14478	19835	13260
## 280	14220	77.39160	10517	10952	6405
## 269	14075	77.38630	18913	19581	10236
## 265	13903	77.35477	11241	15977	3923
## 301	14620	77.28091	2449	3667	3759
## 262	13815	77.12120	6387	10687	1895
## 267	14048	77.03240	5444	6662	2677
## 308	14830	76.82363	10423	14525	4036
## 215	12208	76.70437	13906	16983	4632
## 293	14513	76.43870	11287	10754	2109
## 232	12804	76.31825	18481	19972	5610
## 206	12078	76.23405	7353	8839	5497
## 287	14228	76.20623	9524	12213	2851
## 205	12065	76.15490	20818	22564	9651
## 258	13669	76.03750	7132	8229	3331
## 219	12309	75.98927	22129	301	6986
## 274	14127	75.94365	21634	23159	7012
## 261	13790	75.77365	8702	9494	3997
## 284	14224	75.66190	15583	16694	10041
## 236	12953	75.63870	8638	11797	2787
## 248	13212	75.62490	15170	16019	4661
## 254	13440	75.26990	12647	12856	10622
## 243	13090	74.92560	19468	20444	7732
## 260	13760	74.84812	14037	15701	10609
## 257	13601	74.70593	9587	10986	9297
## 271	14094	74.32037	13831	14779	11560
## 207	12095	74.14300	11291	13709	1325
## 300	14618	74.11095	20409	178	4917
## 217	12305	73.99775	2617	3422	12691

```
## 272      14103  73.97180   7843 10153   725
## 311      14850  73.88875  14094 17093 12816
## 231      12801  73.56465   9291 10800  2028
## 238      13021  73.21035  10645 12827  9904
## 266      14020  73.06230   8328 12006  5353
## 263      13820  72.72670   4554  7177  3435
## 273      14120  72.64010  14558 15416 10452
## 235      12901  71.42225   8794  9693  6643
## 241      13057  71.17438  14487 16023  2280
## 299      14616  70.14335  12835 12068  7018
## 249      13215  69.16293  20301 22444  1937
## 259      13676  67.71837   3677  6628  2918
## 302      14621  65.74954   1820  3051  9066
## 305      14626  64.50155  16915 18405  7211
## 251      13326  62.82547   3066  5272  8499
## 283      14223  61.08915  15188 15799  5557
## 245      13202  60.08933    926  2460 11896
## 55       10567  51.94900    360  1506  3753
## 288      14304  50.64850  10906 11354  7744
```

```
summary(incomes)
```

```
##      Zip      Median      Mean      Pop
## Min.   : 1001  Min.   :    1  Min.   :    1  Min.   :    1
## 1st Qu.:27301 1st Qu.: 6179 1st Qu.: 6652 1st Qu.: 3494
## Median :49875 Median :10874 Median :11576 Median : 7532
## Mean   :49875 Mean   :11214 Mean   :11748 Mean   : 7572
## 3rd Qu.:72134 3rd Qu.:16240 3rd Qu.:16900 3rd Qu.:11683
## Max.   :99929 Max.   :23073 Max.   :23567 Max.   :15172
```

```
plot(sorted.zip.income$mean~sorted.zip.income$Median)
```



```
cor(sorted.zip.income$mean,sorted.zip.income$Median)
```

```
## [1] 0.0457017
```

I thought there would be a correlation between the mean average medicare payment amount and the median income, but seems like there isn't. However, a further look at this income data makes it look like it isn't reliable