cohen-s-hwk1-3

2023-01-23

Answers

1. The monthly plan enrollment data contains 19,126,783 observations. This means there are 19,126,783 plans offered from 2007 to 2015 by Medicare.
2. There are 27 different plan types offered, although this does contain an NA categorization of plans.
3. Table: Plan Count by Year

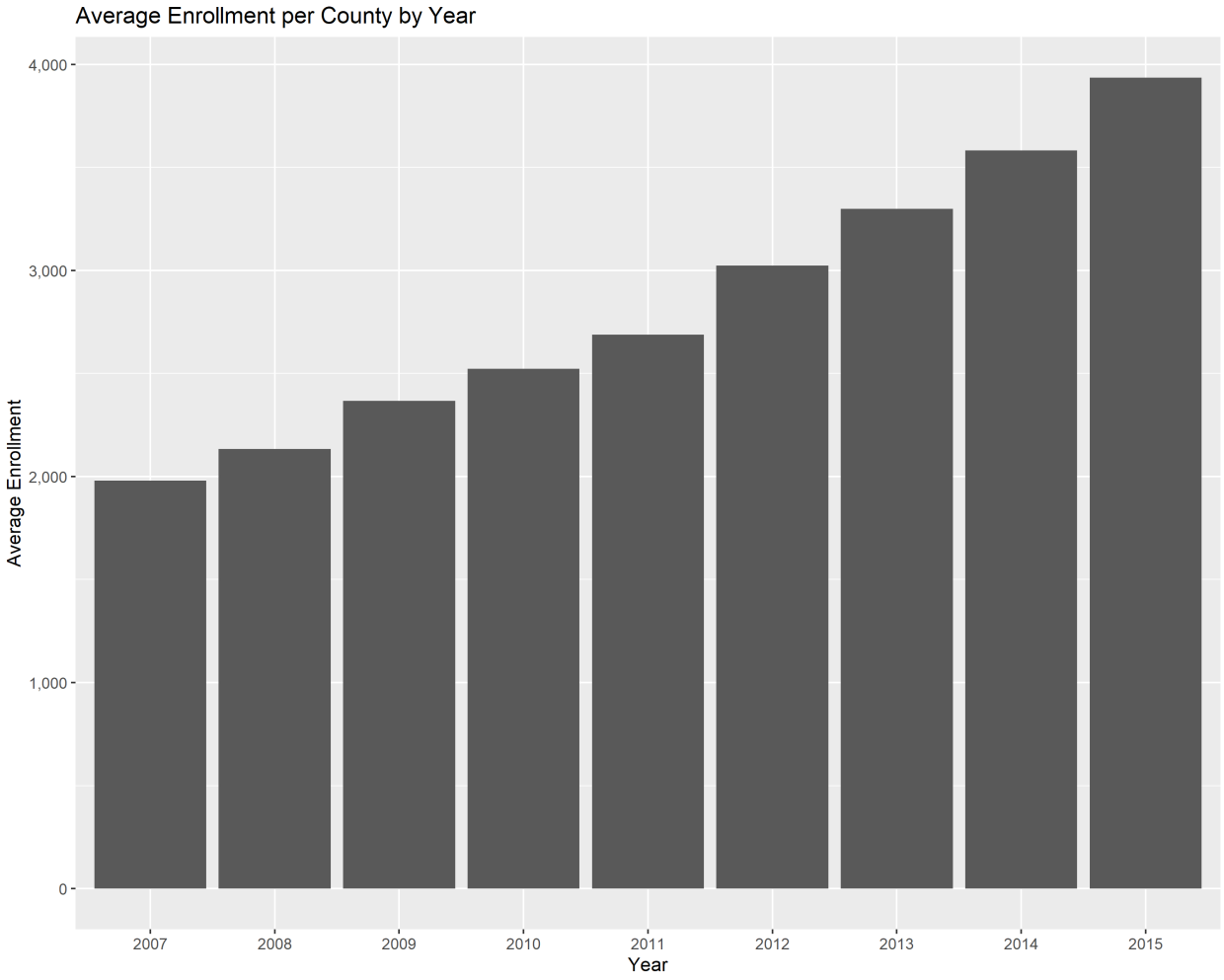
	2007	2008	2009	2010	2011	2012	2013	2014	2015
1876 Cost	5855	5459	5825	6035	6851	7633	7731	7069	7157
Continuing Care Retirement Community	95	122	158	142	0	0	0	0	0
Employer Direct PFFS	3247	0	0	0	0	0	0	0	0
Employer/Union Only Direct Contract PDP	32358	29113	25860	28700	28697	28669	25526	25528	25630
Employer/Union Only Direct Contract PFFS	0	3332	3335	3332	3329	3323	0	0	0
ESRD I	75	122	123	117	0	0	0	0	0
ESRD II	12	12	7	8	0	0	0	0	0
HCPP - 1833 Cost	13	13	3938	3604	11	11	10	9	9
HMO/HMOPOS	60012	70176	479978	506802	528473	507272	530909	523304	479275
Local PPO	17427	38470	405197	417551	515700	636701	633884	664716	704993
MA Health Senior Care Options	73	0	0	0	0	0	0	0	0
Medicare-Medicaid Plan HMO/HMOPOS	0	0	0	0	0	0	265	1319	4130
Medicare Prescription Drug Plan	920058	963478	945794	893609	771694	815223	826907	1122209	991457
MN Disability Health Options	21	0	0	0	0	0	0	0	0
MN Senior Health Options	968	0	0	0	0	0	0	0	0
MSA	4422	16515	12267	135	6421	6416	6431	6449	6518
MSA Demo	3274	0	0	0	0	0	0	0	0
National PACE	405	548	616	717	781	858	953	1118	1216
PFFS	364285	630756	683361	385733	45781	36423	31919	24905	13658
Pilot	15	12	201	53	3	3	2	2	2
PSO (Federal Waiver of State License)	162	0	0	0	0	0	0	0	0
PSO (State License)	421	535	87	123	176	171	0	0	0
Regional PPO	26402	27990	25943	24442	22773	21602	19970	19773	17578
RFB PFFS	0	0	3006	0	0	0	0	0	0
SHMO	1125	0	0	0	0	0	0	0	0
WI Partnership Program	42	0	0	0	0	0	0	0	0

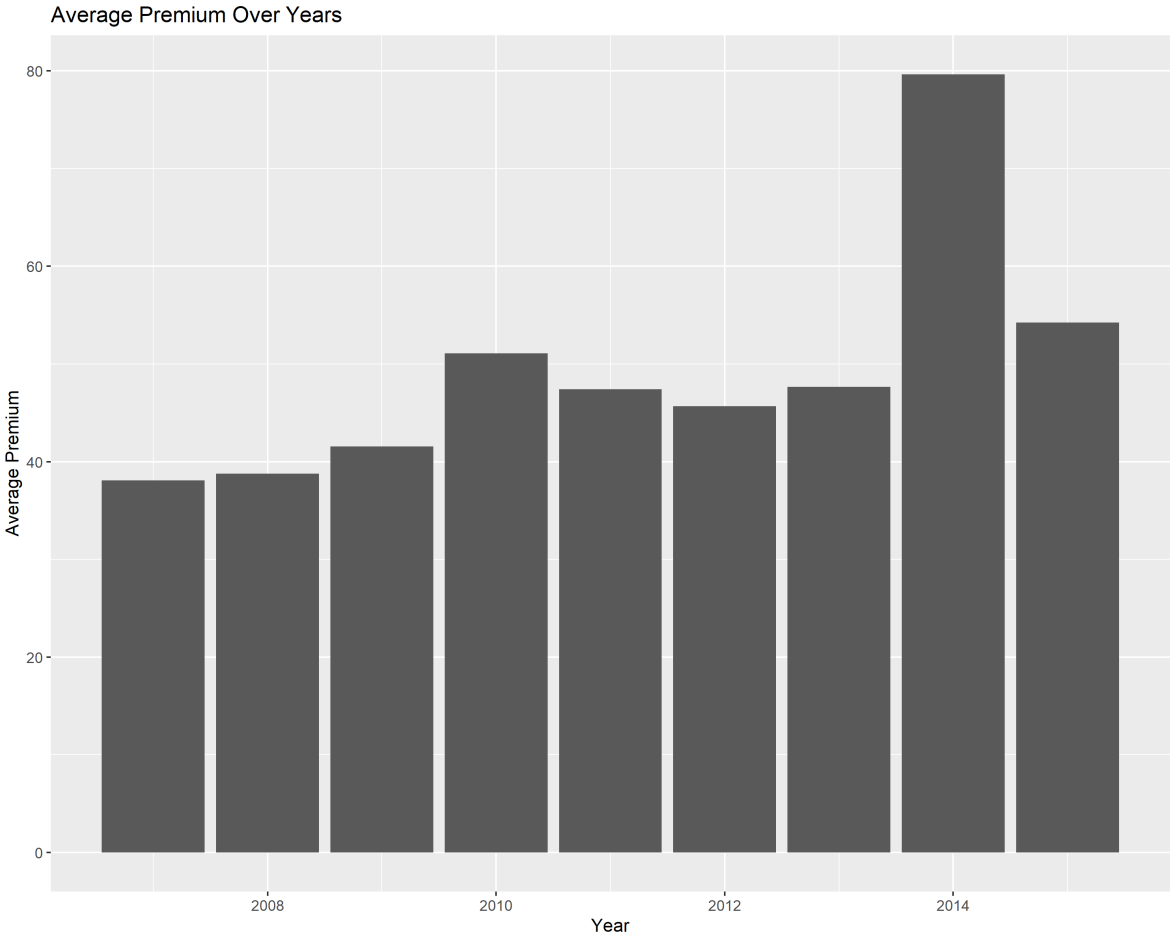
4.

Table 2: Plan Count by Year (Without Special needs plans, employer group plans, or 800-Series plans)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
1876 Cost	5048	4577	4781	4923	5829	6647	6759	6207	6329
Continuing Care Retirement Community	68	66	60	64	0	0	0	0	0
ESRD I	75	122	123	117	0	0	0	0	0
HMO/HMOPOS	30670	34545	36166	34460	33931	37551	37179	38893	36588
Local PPO	6116	7612	9929	11652	13874	17030	17089	17169	16728
Medicare-Medicaid Plan HMO/HMOPOS	0	0	0	0	0	0	265	1319	4130
Medicare Prescription Drug Plan	398167	428936	415027	391205	295458	289044	278091	301082	269153
MSA	2177	3303	2459	68	131	132	145	163	232
MSA Demo	129	0	0	0	0	0	0	0	0
National PACE	395	548	615	717	781	858	953	1118	1216
PFFS	51987	105859	89586	54119	23795	17449	12945	6053	4232
PSO (Federal Waiver of State License)	110	0	0	0	0	0	0	0	0
PSO (State License)	376	394	75	97	141	143	0	0	0
Regional PPO	7254	7794	8470	10659	10995	11279	9660	10420	8531
RFB PFFS	0	0	3006	0	0	0	0	0	0
SHMO	458	0	0	0	0	0	0	0	0

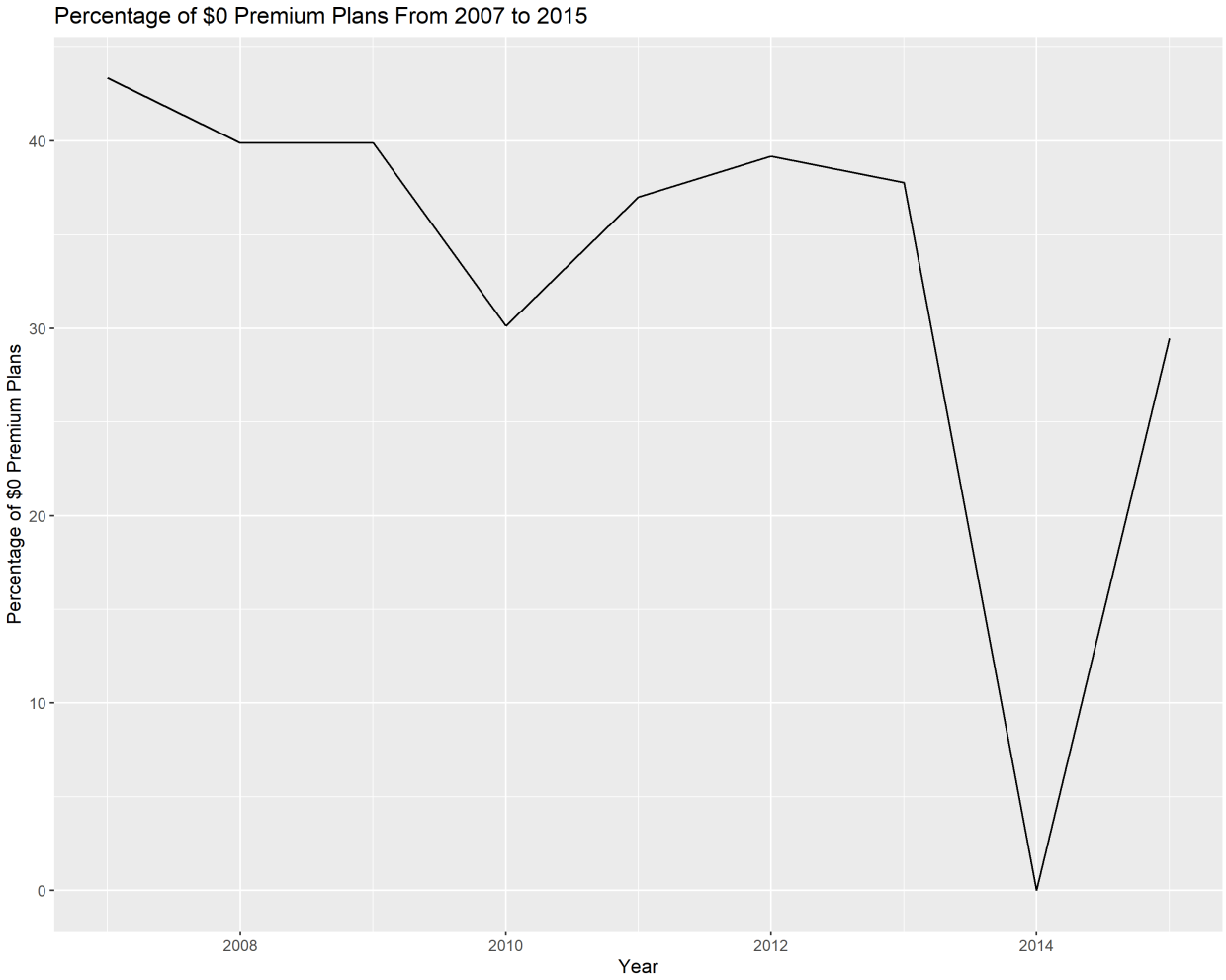
5.


Average Enrollment per County by Year
4,000
3,000
2,000
1,000
0
Average Enrollment
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year


Average Premium Over Years
Average Premium
80
60
40
20
0
2008
2010
2012
2014
Year

6.

7.



8.The 800 series plans are offered by third party organizations, such as plans from Medicare Advantage providers, to employer groups. These plans are different from the rest as they are offered through employers rather than Medicare Advantage through Medicare, thus they would have potentially different reasons for varying premiums, outside of what we are looking for,

9.Since these plans are through medicare, many medicare plans have $0 premiums as they are paid through taxes throughout the beneficiary's career. This means that the beneficiary pays $0 a month for their insurance, but this does not mean they pay nothing as there is still co-pays and deductibles.

10.After working on it again for the last turn in, I can say that I expected this to be easier. Overall it was not the most difficult but I had some difficulty in merging as well as formatting nicely. I really want my analysis code to be neater as you may see its a mess. It felt like a scrap sheet of paper for my math final rather than an R script. I will work on trying to have that neater which should make converting that to a markdown file easier as well. I learned though that it is possible to use rmarkdown to write the final report using the data already in R. Previously I exported the results to Overleaf, so this is much preferred.