Homework 1

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Research Methods, Spring 2025

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The answers to the homework questions using Python are described below. Note that I follow closely the analysis from professor McCarthy and his R script. My analysis file is also available in the analysis folder.

1. Provide a table of the count of plans under each plan type.

Plan Type	2015
Medicare Prescription Drug Plan	991457
Local PPO	704993
HMO/HMOPOS	479275
Employer/Union Only Direct Contract PDP	25630
Regional PPO	17578
PFFS	13658
1876 Cost	7157
MSA	6518
Medicare-Medicaid Plan HMO/HMOPOS	4130
National PACE	1216

2. Remove all special needs plans (SNP), employer group plans (eghp), and all "800-series" plans.

Provide an updated table after making these exclusions.

Plan Type	2015
Medicare Prescription Drug Plan	269153
HMO/HMOPOS	36588
Local PPO	16728
Regional PPO	8531
1876 Cost	6329
PFFS	4232
Medicare-Medicaid Plan HMO/HMOPOS	4130
National PACE	1216
MSA	232

3. Provide a table of the average enrollments for each plan type in 2015.

Plan Type	Count	Avg Enrollment
Medicare Prescription Drug Plan	60236	312
HMO/HMOPOS	9115	849
Local PPO	6126	311
Regional PPO	4853	202
PFFS	2052	125
1876 Cost	2019	228
Medicare-Medicaid Plan HMO/HMOPOS	522	624
National PACE	213	140
MSA	111	108