**Case Background**

The client is a mid-size growing pharmaceutical company acquiring, developing, and commercializing innovative treatments in the pain management therapeutic area. They are approaching the launch of their next treatment – the first FDA-approved [Epidural Steroidal Injection](https://my.clevelandclinic.org/health/treatments/22301-epidural-steroid-injection-esi) (ESI) for the treatment of lumbar (lower back) pain. In preparation for the launch, the client is seeking our help in answering the following business questions:

1. Which doctors should we target for the upcoming launch?
2. How do we segment these doctors?

**The Data**

We proposed the use of publicly available information on services and procedures provided to Medicare Part B beneficiaries by physicians and other healthcare professionals provided by CMS (Centers for Medicare and Medicaid Services). Medicare is a US federal health insurance program largely focused on subsidizing healthcare for people 65 and older. Medicare Part B covers certain doctors’ services, outpatient care, medical supplies, and preventive services. This data is available at: <https://data.cms.gov/provider-summary-by-type-of-service/medicare-physician-other-practitioners/medicare-physician-other-practitioners-by-provider-and-service>. .

The pool of physicians relevant for this analysis are those conducting ESI procedures on patients. The client’s medical affairs team has provided the following procedure (HCPCS) codes to help identify these relevant physicians. To speed up data processing, you may consider using the “View data” functionality at the link above and export a filtered version of the data.

**The Analysis**

***Part A: Understanding the target physician universe.***

Using the datasets provided filter on the relevant pool of physicians and answer the following questions:

* How many physicians do you see? How many ESI patients are they treating?
* What is the distribution of these physicians by the number of ESI patients treated?
* What does it tell you about this market?
* How are these physicians distributed geographically?
* What are the key physician specialties?
* Do these make sense based on the context provided in the case background?
* Can you group these specialties logically?
* Are there any other key questions that we should think about?

***Part B: Developing a target list for the salesforce.***

* How would you segment the relevant pool of physicians based on a combination

of ESI patient volume and specialty?

* Which of the segments created would you prioritize and why?
* What other segmentation attributes might be interesting to consider? What

additional data will you need to better estimate these attributes?