Goal: have customer log into a PRS website (compliance.prsdata.com or coding.prsdata.com; subscription based) and ask the PRS Bot Coding or Compliance questions based on SME LLM models uploaded to Chat GPT.

Coding: what are the ICD10 and CPT codes that should be used for this note?

Compliance: are the billing codes used correct based on the documentation?

I’ve worked a lot with AI over the last few months. I’ve created multiple LLMs focusing on Medical Coding and Compliance, leveraging the Chat GPT API to query the LLMs and display the answer in a minimal web page. I’ve used AI to create well over 99% of the code (a combination of Python, HTML, and Flask) that I am going to demonstrate to you shortly. I am exploring easier ways to upload information, rather than go through the somewhat exhausting process of formatting everything into a jsonl format. I’ve even used, at the suggestion of Chat GPT, environmental variables to mask my secret API key.

I’ve learned a ton about AI, both its strengths and its limitations. For me, the greatest strength: When I ask it a question, it returns an informative and comprehensive answer. The greatest weakness: The answer may or may not be relevant to the question asked.

Here’s an example: after creating a compliance LLM, I asked the following question: what is a CPG? Answer: CPG stands for consumer packaged goods, and it refers to a type of product that is used frequently, bought often, and replaced frequently, such as food, beverages, clothes, tobacco, and household products.

Here’s what I expected from the jsonl file I painstakingly formatted, uploaded, and fine-tuned, following the Chat GPT documentation: “CPG stands for compliance program guidance documents. OIG developed compliance program guidance documents (CPGs) as voluntary, nonbinding guidance documents to support health care industry stakeholders in their efforts to self-monitor compliance with applicable laws and program requirements. These include CPGs directed at: (1) hospitals; (2) home health agencies; (3) clinical laboratories; (4) third-party medical billing companies; (5) the durable medical equipment, prosthetics, orthotics, and supply industry; (6) hospices; (7) Medicare Advantage (formerly known as Medicare+Choice) organizations; (8) nursing facilities; (9) physicians; (10) ambulance suppliers; and (11) pharmaceutical manufacturers.”

So then I asked: What does CPG stand for from the viewpoint of OIG healthcare compliance department?

Answer: The Office of Inspector General (OIG) has issued Compliance Program Guidance (CPG) documents directed at various segments of the health care industry. OIG first issued CPGs directed at the health care industry in 1998. CPGs tailored toward the hospital, home health agency, clinical laboratories, third-party medical billing companies, and Medicare+Choice organizations industry segments were issued in 1998 and 1999. OIG issued CPGs directed at the following industry segments in 2000: (1) the durable medical equipment, prosthetics, orthotics, and supply industry; (2) the hospice industry; (3) the practitioner industry; (4) the pharmaceutical manufacturers industry; (5) the Medicare Advantage (formerly Medicare+Choice) industry; and (6) the nursing facility industry. OIG has developed CPGs for additional industry segments, including, in 2004, ambulance suppliers and in 2005, independent diagnostic testing facilities, in 2008, the fourth updated the CPG for clinical laboratories, and in 2013, the fifth updated CPG for durable medical equipment and prosthetics, orthotics, and supply industry. Since publication of the 1998 CPGs, there have been significant legal and regulatory changes, as well as changes in the health care business and compliance practices. OIG has taken these changes into account in developing these updated compliance guidance documents: (1) OIG Supplemental Compliance Program Guidance for Hospitals (Supplemental Hospital Guidance); (2) OIG Supplemental Compliance Program Guidance for Pharmaceutical Manufacturers(Supplemental Pharmaceutical Guidance), and (3) OIG Supplemental Compliance Program Guidance for Third-Party Medical Billing Companies (Supplemental Billing Companies Guidance). These guidance documents are intended to (1) assist providers, pharmaceutical manufacturers, and billing companies in implementing and operating effective compliance programs; (2) assist Federal and State enforcers in assessing the effectiveness of compliance programs; and (3) foster ethical business practices that promote the prevention, detection, and resolution of instances of conduct that do not conform to applicable Federal and State law, program requirements, and ethical standards. These supplemental compliance guidance documents do not— and cannot—alter any criminal laws or regulations, including those prohibiting health care fraud and abuse. Nor do they alter existing Federal legal or regulatory requirements or create new ones, contractual obligations, or legal duties outside of those created by existing Federal law or regulation. Compliance with these documents is voluntary.