**Dates:** May, June 2024

**Methods:**

1. Using LangChain and Prompt Engineering with ChatGPT (version gpt-3.5-turbo-0125 – trained to September 2021 ++ version gpt-4o-2024-05-13 – fastest and most affordable flagship model – trained to October 2023).
2. [Prompt Engineering](https://arxiv.org/pdf/2310.14735) is used to provide more useful output.
   1. Each note refers to a unique patient to avoid LLM hallucinations – no sequential patient notes generated.
   2. The model is given a role.
   3. Precise and detailed prompts are given.
   4. Several rounds of the same prompt are used to generate a variety of results.
   5. Several different prompts given based off 10 fake notes created by a qualified nurse (5 notes based on unmet needs, 5 notes based on met needs).
3. GPT3:
   1. generated 5783 notes for met (2904 notes) and unmet (2879 notes) palliative needs.
      1. Results (5783) notes in total are shuffled and a sample (600 notes) are sent to qualified nurse (QN) for blind review.
      2. QN marks unlabeled notes as met or unmet.
4. GPT4:
   1. generated 6253 notes for met (3098 notes) and unmet (3155 notes) palliative needs.
      1. Results (6253) notes in total are shuffled and a sample (650 notes) are sent to qualified nurse (QN) for blind review.
      2. QN marks unlabeled notes as met or unmet.
5. COMPARE (QN vs GPT 3.5) vs (QN vs GPT 4.0)