Nexford University **AI Disclosure Form |** MODULE

Learner Name: LEOPOLD BUNZA MUTERO

1. Did you use any AI tool(s) to assist with this assignment?

○ No. Why not?

YES

● Yes. List the AI tool(s) you used and briefly describe the purpose for which you used the tool(s). *(e.g., brainstorming, research, drafting content)*

I used Claude (Anthropic's AI assistant) for the following purposes:

Research and literature review on PCA applications in healthcare analytics and donor funding models
- Brainstorming relevant variables that influence donor funding decisions in cancer centers
- Technical guidance on implementing PCA methodology and interpreting principal components
- Drafting initial project structure and refining analytical approach

2. To demonstrate effective AI use, please provide your initial prompt(s) and a brief description of the steps you took to refine and iterate on the AI's output for this

Initial Prompt:

"I am a data analyst at Anderson Cancer Center working on a model to address growing referrals. We need to use Principal Component Analysis to identify essential variables for securing donor funding. Can you help me understand what variables would be most relevant for this analysis and how PCA can help reduce dimensionality while preserving the most important information for donor decision-making?

Asked follow-up questions about specific types of variables (patient demographics, clinical outcomes, operational metrics, financial indicators) that donors typically value

- Requested clarification on PCA assumptions and data preparation requirements, particularly regarding standardization and handling of missing data
- Refined the variable selection by asking AI to categorize variables by domain (clinical, operational,

3. List at least one source you consulted to verify the AI-generated content in your work.

- Anderson Cancer Center internal documentation on referral patterns and operational metrics (2023-2024 reports)
- Python scikit-learn documentation for PCA implementation: https://scikit-learn.org/stable/modules/decomposition.html#pca