

Introduction

In the email you received from the hiring manager you will have received a dataset. We will ask you to analyze this dataset, guided by the questions below. There are no right or wrong answers, and feel free to be creative.

Using any data visualization or statistical software you are comfortable with (e.g. Excel, Tableau, R, Stata, etc.), prepare an analysis of the dataset you received. **This task is intended to take no longer than one hour.**

On the back side of this page is a list of data definitions.

Instructions

- 1) Open the file on the desktop titled “Data Test”
- 2) The file contains historical data on faculty salaries and FTEs. Also included are patient care revenue and research revenue. Please analyze the data, and make note of any trends, anomalies, or discoveries that leadership in the Medical School would be interested in seeing.
- 3) During the interview process be ready to present/discuss the following:
 - a. The results of your analysis and what you discovered
 - b. What your limitations were
 - c. What further analysis you would do if you had additional time

Data Definitions

Fiscal Year: The year in which the FTE record and pay occurred. Michigan Medicine's fiscal year runs from July to June.

Fiscal Month: The month in which the FTE record and pay occurred. Fiscal month 1 is July.

Employee ID: The unique identifier of each faculty member.

Salary Bucket: The bucket into which the pay dollars are assigned.

FTE: Stands for "Full-Time Equivalent" and represents the effort of the faculty member. A full-time faculty member will have a FTE of 1 for the year.

Pay: The salary dollars paid to the faculty member.

Fund: The fund on which the dollars were paid to the faculty member.

Track: The promotional path and primary function of the faculty member. This can be used as a proxy for what mission (clinical, research, or education) the faculty member primarily supports.

Department: The de-identified department the faculty member belongs to.

Patient Care Revenue: The amount of patient care revenue from the income statement. This can be used as a proxy for the amount of clinical work done by Michigan Medicine.

Research Revenue: The amount of research revenue from the income statement. This can be used as a proxy for the amount of research work done by Michigan Medicine.