

## Handout for April 2020 Newsletter Health Economics in FRED®

### **Purpose.**

1. Create a plot of medical expenses price indexes.
2. Customize the units of the series by selecting a different date for their base period.
3. Describe and discuss patterns in the evolution of medical expenses price indexes over time.

**Pedagogical Rationale.** This assignment requires that you first look for data and plot them into a graph. Next, you will customize the graph by adding two more series. Next, you will change the units of the series. Lastly, you will describe and discuss patterns in the evolution of the data series. These tasks will develop your proficiency in searching for, transforming, and interpreting data.

**Grading.** Your grade will be determined by (a) how precisely you complete the search and transformation data tasks and (b) how accurately you interpret the data.

### **Steps to Search for and Transform the Data.**

1. Access <https://fred.stlouisfed.org/> and search for “Medical Services Expenditures by Disease Price Index, Blended Account Basis (MDSBDSPIBLEND).”
2. Select “Index 2009=100, Annual, Not Seasonally Adjusted.”
3. Click on EDIT GRAPH and select FORMAT.
4. Select “Line style: dash” and “Width: 3.”
5. Click on EDIT GRAPH and select ADD LINE.
6. Search for “Medical Services Expenditures by Disease: Infectious and Parasitic Diseases Price Index, Blended Account Basis, Index 2009=100, Annual, Not Seasonally Adjusted (INFAPSPIBLEND)” and click on “Add.”
7. Click on ADD LINE.
8. Search for “Medical Services Expenditures by Disease: Mental Illness Price Index, Blended Account Basis, Index 2009=100, Annual, Not Seasonally Adjusted (MNINEIPIBLEND)” and click on “Add.”
9. Click on EDIT LINES and select EDIT LINE 1.
10. Under “Units” select “Index (Scale value to 100 for chosen date).” In the (enter a date) box below the message “Select a date that will equal 100 for your custom index:” type “2000-01-01.” Click on “Copy to all.”

### **Writing Prompts.** Answer the following questions:

1. Between 2000 and 2016, which medical services expenditures price index grew faster than the average (the dashed line)? Explain your answer.
2. Between 2000 and 2016, which medical services expenditures price index grew slower than the average (the dashed line)? Explain your answer.
3. Examine the slope of the three lines in the graph between 2015 and 2016. Which medical services expenditures price index decreased between those two years? Explain your answer.