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| **Query** | Best Type of Graph | Reason |
| Distribution of Plans by Metal Level | Bar Chart | A bar chart effectively compares the frequency of different categories (metal levels) in a clear, straightforward manner. |
| Average Premiums by State | Choropleth Map or Bar Chart | A choropleth map provides a geographical visualization of data, highlighting variations across regions. A bar chart is also suitable for comparing values across different states. |
| Plan Availability by County | Heat Map | A heat map can represent the density of available plans across counties, making it easier to identify areas with higher or lower availability. |
| Out-of-Pocket Costs by Plan Type | Box Plot | Box plots are ideal for showing the distribution of costs, highlighting the median, quartiles, and outliers within each plan type. |
| Issuer Market Share | Pie Chart | A pie chart visually represents parts of a whole, making it suitable for showing the proportion of the market each issuer holds. |
| Rate of Increase in Premiums Over Years | Line Graph | A line graph is perfect for showing trends over time, such as how premiums have increased or decreased across different years. |
| Distribution of Specific Benefits (e.g., dental coverage) by Plan | Stacked Bar Chart | Stacked bar charts can show the proportion of plans with specific benefits, allowing for comparison across different categories simultaneously. |
| Comparison of Deductibles Across States | Box Plot or Violin Plot | These plots can display the distribution and range of deductibles across states, highlighting variations and trends. |
| Impact of Metal Level on Deductibles and Out-of-Pocket Maximums | Grouped Bar Chart | Grouped bar chart or side-by-side bar chart would allow us to compare two metrics (average deductible and average out-of-pocket maximum) across the different metal levels in a single visualization. |
| Relationship Between Premiums and Out-of-Pocket Maximums | Scatter Plot | A scatter plot is useful for examining the relationship between two quantitative variables, revealing patterns or correlations. |