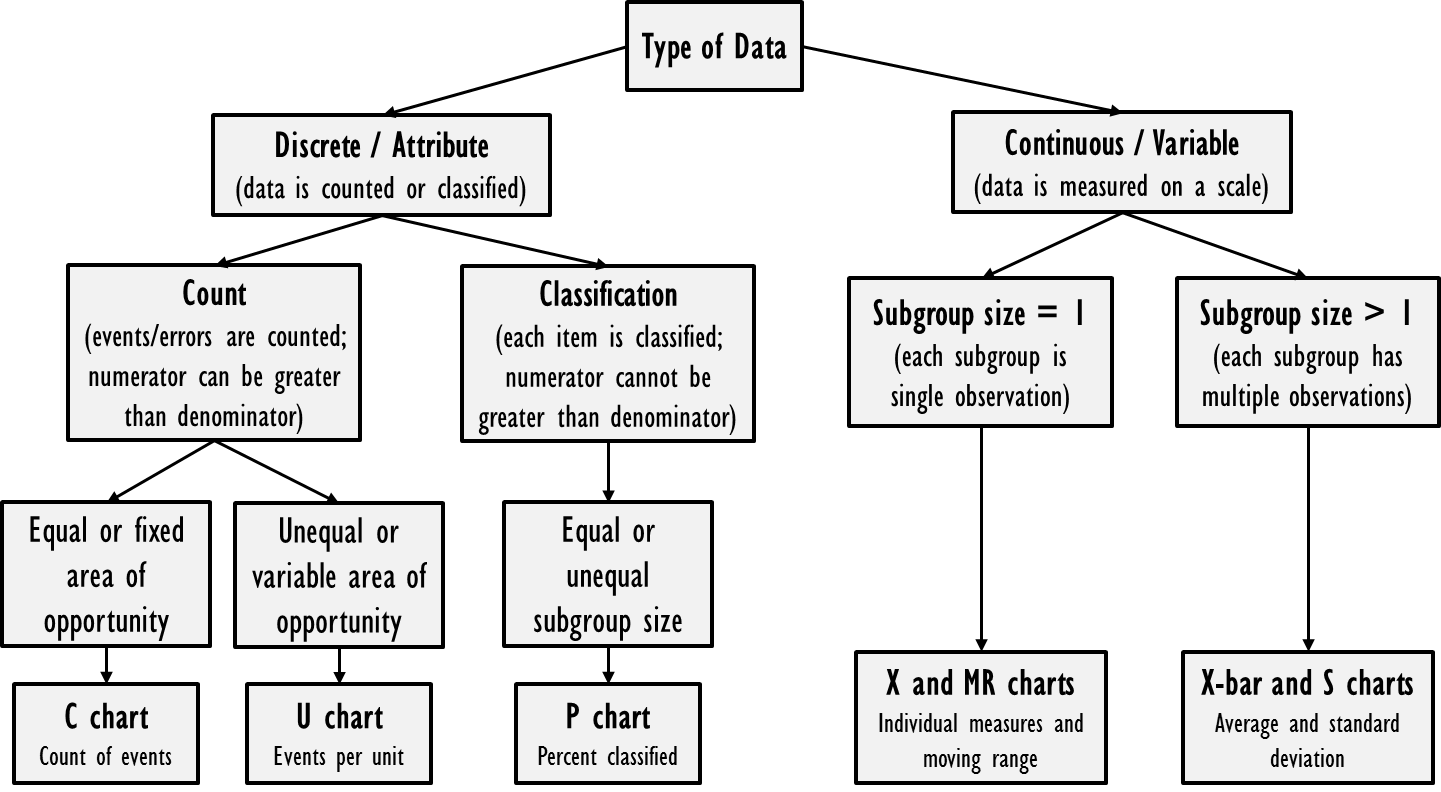
**Data for Improvement: Control Chart Tools**

**Control Chart Selection Guide**

*Gupta and Kaplan, Clinics in Perinatology, 2017, 44 (3):627-644.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rule-Based Conventions for Special Cause Variation in Control Charts  Selected Author Recommendations** | | | | |
|  | Provost and Murray | Benneyan | Carey | Montgomery |
| One or more points more than 3 SD from the mean |  |  |  |  |
| 2 of 3 consecutive points more than 2 SD from the mean |  |  |  |  |
| 4 of 5 consecutive points more than 1 SD from the mean |  |  |  |  |
| 8 consecutive points on one side of the mean |  |  |  |  |
| 6 consecutive points increasing or decreasing |  |  |  |  |
| 15 consecutive points within 1 SD of the mean |  |  |  |  |
| 14 consecutive points alternating up and down |  |  |  |  |
| 8 points in a row more than 1 SD from the mean |  |  |  |  |

*Provost LP and Murray SK, The Health Care Data Guide, 2011  
Benneyan JC et al, Qual Saf Health Care, 2003, 12(6):458-464   
Carey RG, Improving Healthcare with Control Chart: Basic and Advanced SPC Methods and Case Studies, 2003  
Montgomery DC, Introduction to Statistical Quality Control, 7th ed, 2013*