**Data for Improvement: Control Chart Tools**

**Control Chart Selection Guide**

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

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| **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*