**MSDS 6370**

Due: June 06, 2017

1. Exercise 5.1

The tables would change to:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Size (in No. of Beds) | No. of Hospitals | Pi\_h | Average Payroll | Sigma\_h for Payroll | Average No. of Employees | Sigma\_h for No. of Employees |
| Under 50 | 2614 | 0.345 | 266 | 183 | 54 | 25 |
| 50-99 | 1566 | 0.207 | 384 | 316 | 123 | 51 |
| 100-199 | 1419 | 0.187 | 1484 | 641 | 262 | 95 |
| 200-299 | 683 | 0.090 | 3110 | 1347 | 538 | 152 |
| 300-499 | 679 | 0.090 | 5758 | 2463 | 912 | 384 |
| 500+ | 609 | 0.080 | 10964 | 7227 | 1548 | 826 |
| Total | 7570 | 1 |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Size (in No. of Beds) | n Based on Proportional Allocation | n\* Based on Sigma\_h for Payroll | n\* Based on Sigma\_h for Employees | n\* Based on Bed Size |
| Under 50 | 345 | 54 | 57 | 45 |
| 50-99 | 207 | 56 | 70 | 81 |
| 100-199 | 187 | 102 | 117 | 147 |
| 200-299 | 90 | 104 | 90 | 118 |
| 300-499 | 90 | 188 | 227 | 188 |
| 500+ | 80 | 496 | 438 | 421 |
| Total | 1000 | 1000 | 1000 | 1000 |
| Sigma^2\_xbar for Payroll | 4908 | 871 | 908 | 941 |
| Sigma^2\_xbar for No. of Employees | 71 | 17.1 | 16.5 | 17.2 |

1. Exercise 5.2

Sampling rate in rare Hispanic area is 26% of all Hispanic area.