

How Many Data Manager's Does it Take to...

Authors: Rosha Nodine, BAAS; Kristi Verschelden, BSN, RN; Tiffany Reyna, RHIA

Problem:

In the past, abstraction turnaround time data has not been available to new facilities joining the Vascular Quality Initiative (VQI) registry to help with Full Time Equivalent (FTE) calculations. Likewise, existing data managers need assistance in the stratification of requesting more FTEs when volumes are increasing at their facilities. Data managers have also requested national benchmarks to better understand how their abstraction times compare to their peers.

Goal:

Survey national VQI data managers in order to get an overall picture of average abstraction times per registry as well as data manager backgrounds and role responsibilities. Provide VQI data managers with a way to calculate how many FTEs their facility needs in order to abstract cases based on volumes and number of registries. In addition, establish registry specific national benchmarks of abstraction turnaround times to allow data managers the ability to measure their performance amongst their peers. Lastly, see if there are any trends in higher turnaround times with specific data manager backgrounds.

Improvement Strategies:

Created and sent a national survey to VQI data managers and received an overall picture of average turnaround times for each registry. A formula was created taking into account registry volume, registry participation level, employee downtime and average abstraction time per case. Using the average abstraction time eliminated outliers and gave a better middle ground in calculating a start up to mid-range level data manager. In addition, the relationship between registry abstraction times and data manager experience, roles and responsibilities were analyzed.

Results:

A 14% (130/942) participation rate in the survey provided a national average abstraction time for each registry. A formula was created to calculate the number of FTEs needed at a facility based on volumes and number of registries.

| Data Manager Responses | | | | | | Total number of people surveyed | Average Time per Case | People not Partipating in Registry |
|---|----------------|---------|---------|--------|-----|---------------------------------|-----------------------|------------------------------------|
| <30 Min | 30 Min - <1 Hr | 1-2 Hrs | 2-4 Hrs | >4 Hrs | | | | |
| TEVAR/Complex EVAR | 5 | 23 | 15 | 14 | 1 | 58 | 91.29 | 66 |
| EVAR | 11 | 34 | 35 | 3 | 0 | 83 | 66.87 | 40 |
| CEA | 27 | 50 | 23 | 1 | 0 | 101 | 52.57 | 23 |
| CAS | 14 | 45 | 32 | 5 | 1 | 96 | 67.34 | 26 |
| Infra-Inguinal Bypass | 14 | 31 | 28 | 1 | 0 | 74 | 61.01 | 50 |
| Supra-Inguinal Bypass | 13 | 26 | 28 | 1 | 0 | 68 | 62.65 | 55 |
| PVI | 7 | 33 | 27 | 3 | 0 | 70 | 66.64 | 53 |
| Varicose Vein | 4 | 4 | 0 | 0 | 0 | 8 | 37.50 | 113 |
| Hemodialysis Access | 13 | 10 | 3 | 0 | 0 | 26 | 42.69 | 98 |
| Open AAA | 11 | 25 | 25 | 6 | 0 | 67 | 71.42 | 55 |
| IVC Filter | 6 | 5 | 1 | 0 | 0 | 12 | 41.25 | 112 |
| Lower Extremity Amput | 6 | 9 | 2 | 0 | 0 | 17 | 45.00 | 106 |
| Median Times of Each Range in the Survey for Calculations | | | | | | | | |
| | 30 | 45 | 90 | 180 | 240 | | | |

Challenges:

Since there is a variation in VQI registry participation across facilities, it was difficult to show any correlation between the relationship of abstraction times and data manager roles. Per the survey, the experience was spread evenly throughout all registries. However, this doesn't exactly mean the data manager has the same level of experience across all registries. This survey would have been more accurate if the background questions were asked specific to each registry. In order to take into account the varied experience levels amongst data managers in conjunction with the complexity of cases across facilities, we considered both the range and average abstraction times when creating the formula for facility FTE needs.

Success:

A 14% participation rate in the national survey resulted in the creation of a tool to calculate the number of FTEs needed. Data managers now have access to national benchmarks for abstraction times specific to each VQI registry.