

# Return on Investment Study Conducted for Catalyst Learning by The Work Institute

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## Executive Summary

This study, commissioned by Catalyst Learning Company (CLC) and conducted by The Work Institute (TWI), provides a starting point for identifying the costs associated with turnover and replacement of hospital employees other than nurses. Much has been written over the years about the cost of hiring and retaining nurses in the hospital environment; however, CLC and TWI are not aware of any significant research regarding the costs of hiring and replacing other hospital staff that provide support to nurses and other clinical professionals. This lack of information is somewhat surprising given the healthcare industry's concern (described as a crisis situation in the American Hospital Association's report, "In Our Hands") regarding the future workforce shortages.

The purposes of this report are to provide information that will allow hospitals to quantify:

- Sample baseline costs associated with hiring Other Clinical, Clerical, and Support staff, and
- Forecast savings accrued by hiring from within as opposed to hiring from outside the hospital for each group of employees.

By using this information, hospital human resource executives will be able to:

- Develop a summary of costs for Other Clinical, Support, and Clerical staff for their individual facility,
- Quantify the value of training existing workers to gain new skills as opposed to seeking outside candidates who already possess the needed skills, and
- Begin to determine the financial benefits of promoting employees from within the organization.

## Method

During February, March, and April 2004, TWI and CLC collaborated in soliciting data from 62 hospitals that participate in CLC's School at Work (SAW) "Building a Career Ladder in Healthcare program. TWI, utilizing its Human Asset Financial Analysis program (HAFA), identified data to be obtained from participating hospitals. These data were calculated as an average per position and include both hard dollar costs such as the cost of conducting exit interviews and estimated indirect costs such as lost productivity while new employees learn how to achieve 100% productivity. Total estimated costs of turnover in this report will be shown with and without lost productivity costs.

The following data were used to calculate some of the costs associated with turnover and replacing exiting employees:

- Number of terminations
- Number of candidates interviewed per new hire
- Average hourly rate for new hire
- Average hourly rate for human resources staff and departmental interviewers
- Average hourly rate for trainers
- Average number of days to fill positions
- Average number of days until a new hire achieves 100% productivity

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The costs below were either provided by responding hospitals or calculated from data provided above. The average costs per position for each of the following factors were added together to get average total costs with and without the costs associated with lost productivity (See Figure 1).

- Cost of conducting or outsourcing exit interviews
- Costs associated with separation processing  
(e.g., administrative issues such as filling out forms and retrieving equipment)
- Costs of severance pay when applicable
- Cost of overtime (premium part of time-and-a-half pay) to cover for positions until they are filled  
(based on number of days to fill a position)
- Agency staffing fees when used to cover for unfilled positions
- Recruiting costs  
(e.g., advertising, staffing job fairs)
- Pre-employment costs  
(e.g., background checks, drug testing)
- New hire expenses  
(e.g., travel, uniforms, moving expenses)
- Training costs  
(e.g., time spent by trainees and trainers and/or outsourced training costs)
- Training program costs  
(e.g., materials, software, development costs)
- Cost associated with time it takes new employees to get to 100% productivity  
(based on number of days it takes to achieve 100% productivity)

Data were segmented by the following job categories so that costs could be established for each of these types of positions. Data for Other Clinical, Clerical, and Support staff were more difficult for hospitals to obtain than for Nurses. However, perhaps this data will prompt hospitals to start keeping records in such a way that these data will be easier to obtain in the future.

- Other Clinical  
(e.g., LPN/LVN, Surgery Techs, Lab Tech, Radiology Tech)
- Clerical  
(e.g., Medical Transcription, Billing/Coding, Medical Secretary, Unit Clerk)
- Support  
(e.g., Food Service Worker, Nurse Aide, Patient Care Tech, Housekeeper, Maintenance that is non-supervisory)

The Work Institute received data from 16 hospitals. (See Appendix B for a list of hospitals.) While this represents a low response rate (26%), the data obtained are useful as representative of hospitals that had the ability to obtain the requested data in a timely manner. It may be that costs associated with hospitals that found it difficult to retrieve these data would be significantly different than the data contained in this report. In TWI's experience, organizations that have difficulty tracking costs typically have higher costs. The data presented in this pilot study are important benchmarks and represent a starting place in understanding the costs of turnover by different job groups.

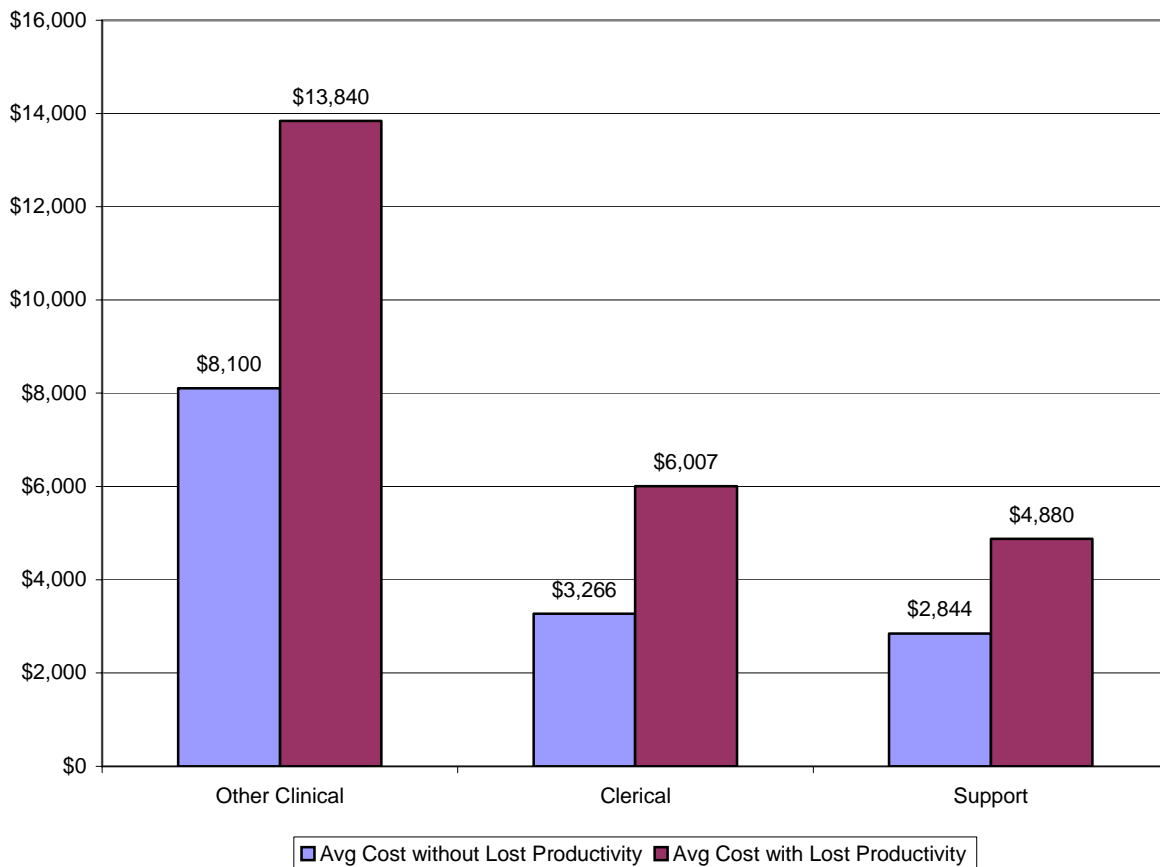
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**Total Cost of Turnover**

Figure 1 shows the cost of turnover by type of position with and without taking into account lost productivity. Lost productivity was estimated from the number of days for an employee to achieve 100% productivity as provided by the hospitals. For example, 61.7 days is the average for Other Clinical staff and 37.9 days for Support staff. In order to show a conservative estimate of the cost of lost productivity this number was then multiplied by 50% and by the average daily rate to arrive at the estimated lost dollars due to less than 100% productivity.

**Figure 1: Average Cost of Turnover per Position With and Without Lost Productivity**



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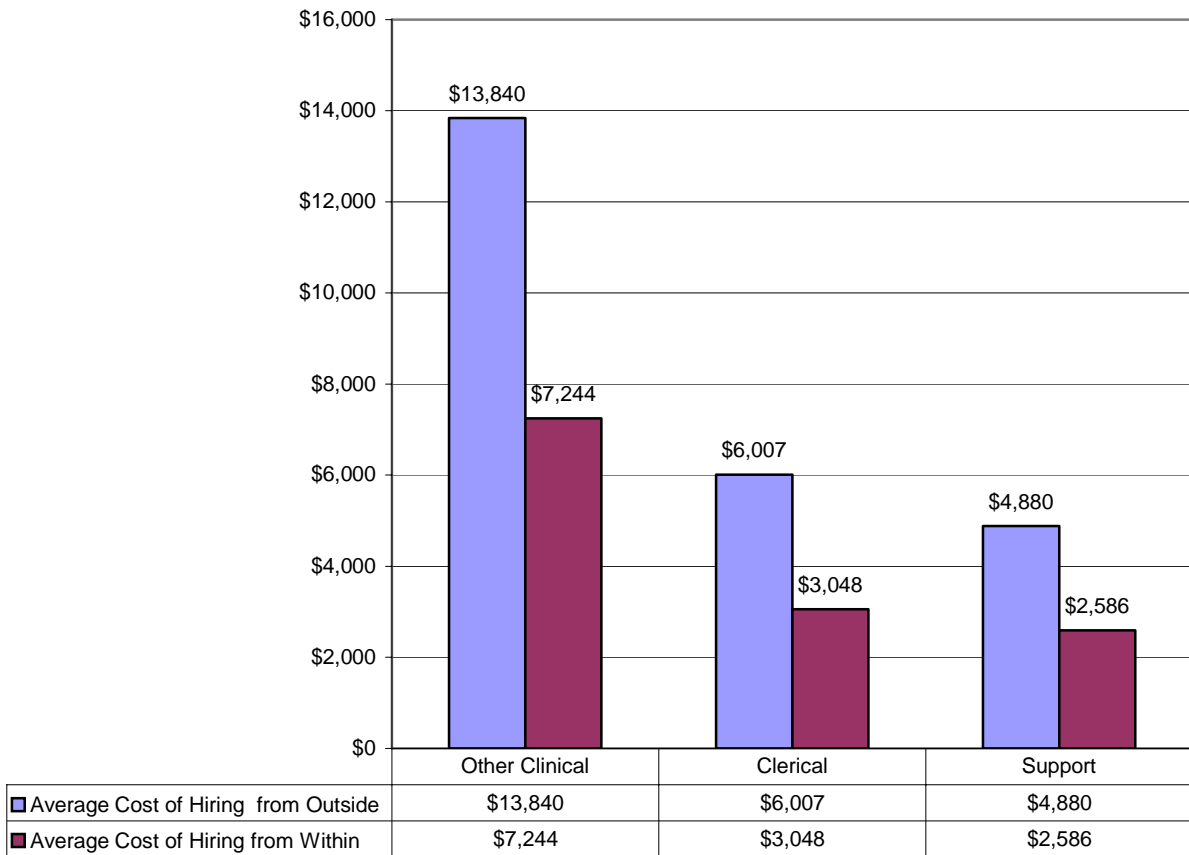
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**Costs of Hiring from Within vs. From Outside**

In Figure 2, the costs of hiring from within are compared to the costs of hiring from outside the hospital. The costs for hiring from within were based on the following assumptions:

- 90% of the following costs would be saved by hiring from within
  - Pre-employment
  - Interviewing
  - New hire expenses
  - Separation processing costs
  - Exit interview costs
  - Recruiting costs
  - Replacement/Agency staffing fees
- 75% of Termination required overtime premium pay costs would be saved
- 50% of Productivity costs would be saved
- 25% of Training costs would be saved
- 0% of the following costs would be saved
  - Training program costs (materials, software, etc.), and
  - Separation/Severance costs

**Figure 2: Cost of Hiring from Within and from Outside**

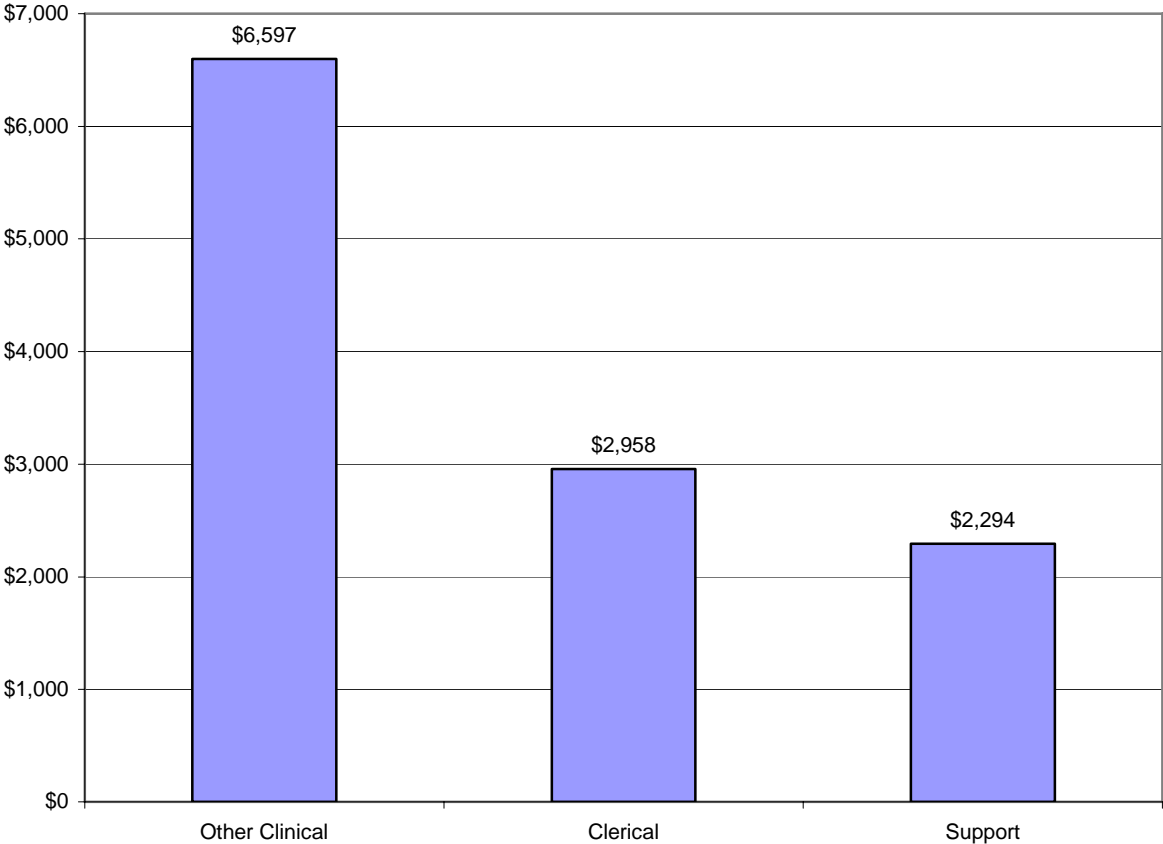


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Figure 3 shows the saving by type of position.

**Figure 3: Differences Hiring from Outside Compared to from Within**

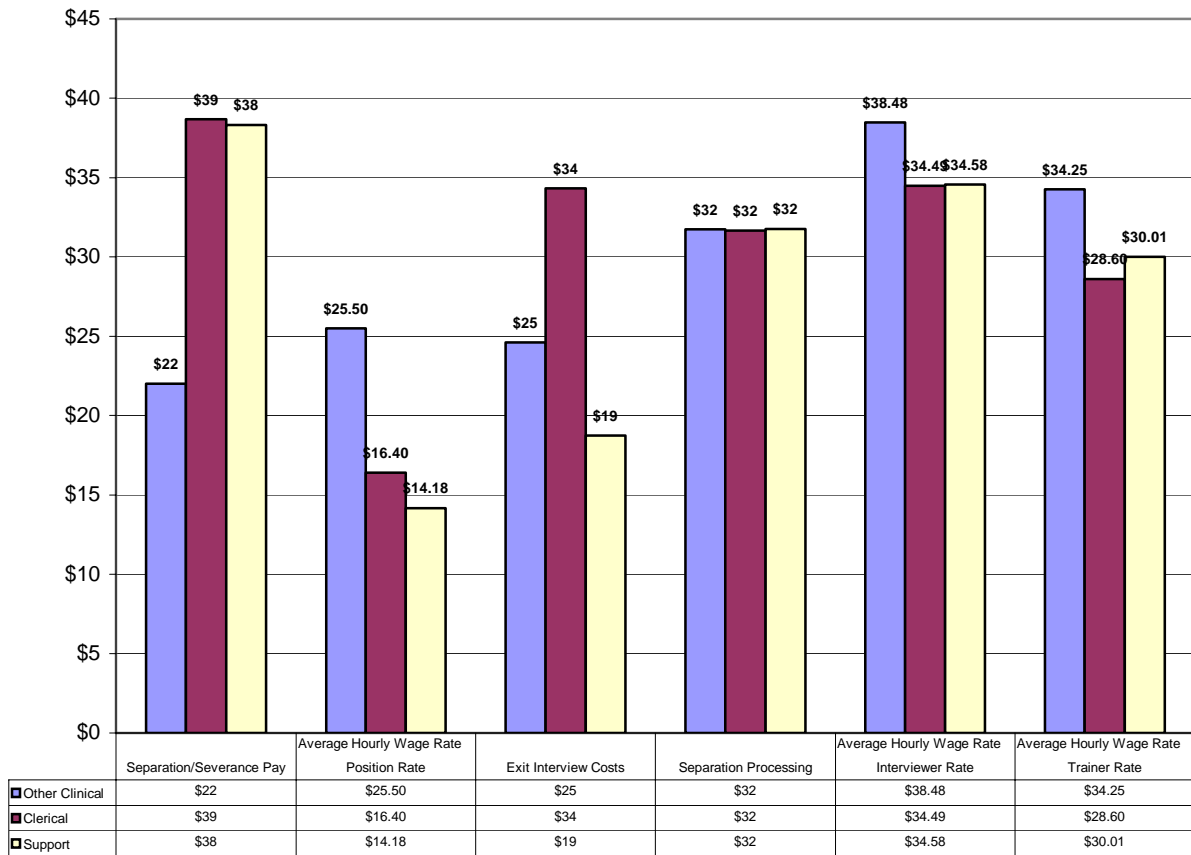


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Figures 4-7 show the breakdown of costs by category for each type of position.

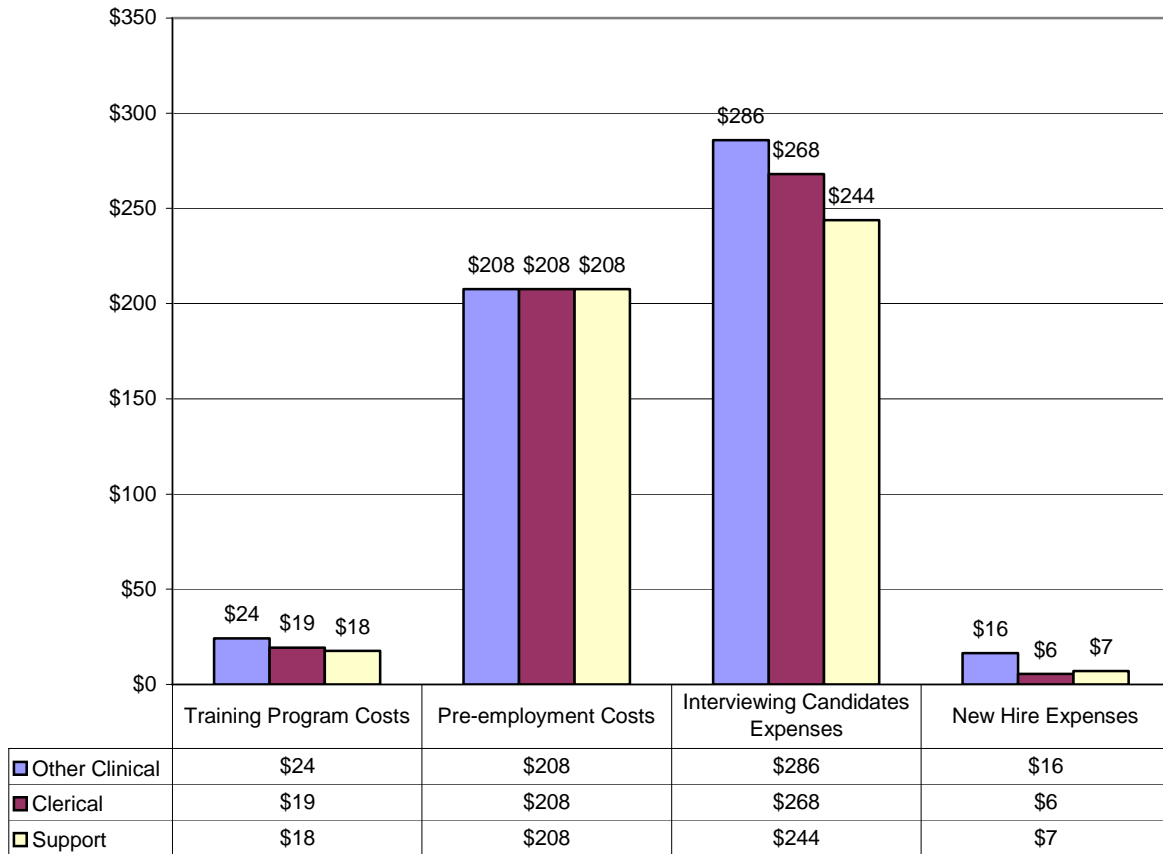
**Figure 4: Costs and Rates per Position**



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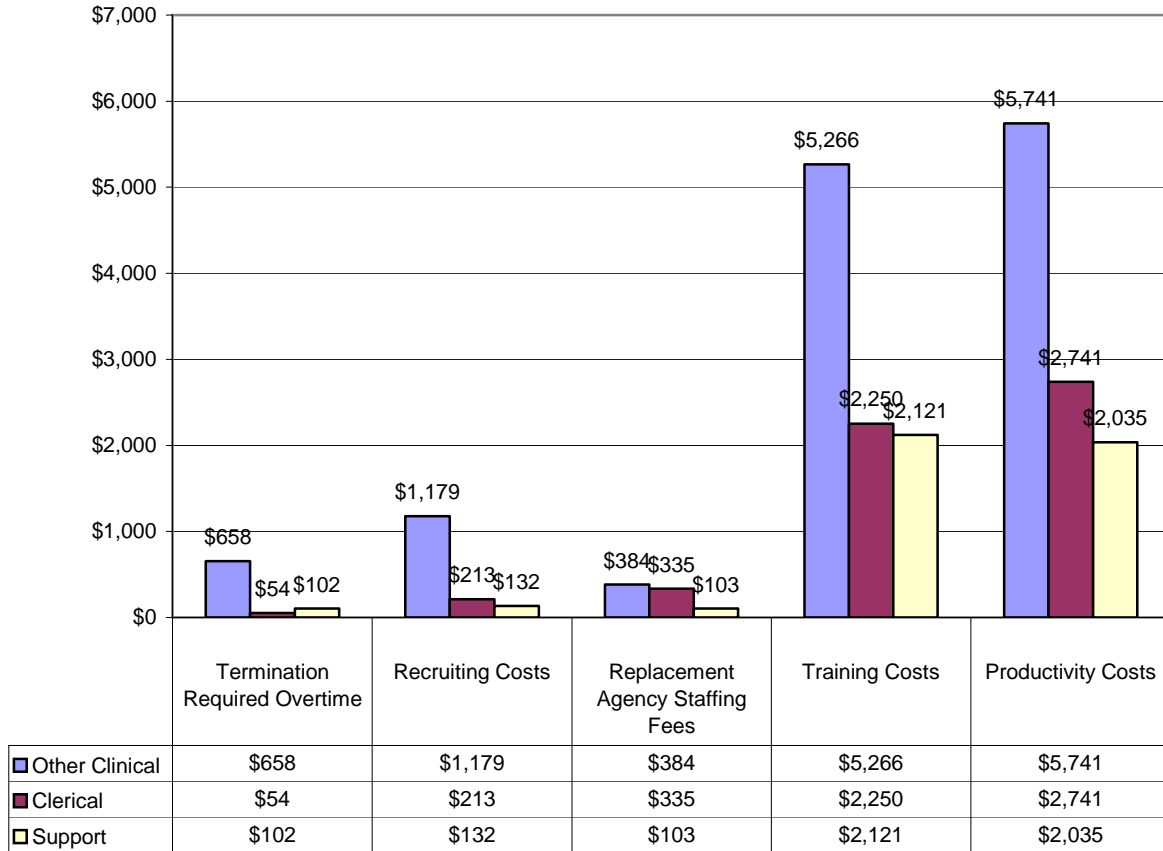
**Figure 5: Costs per Position**



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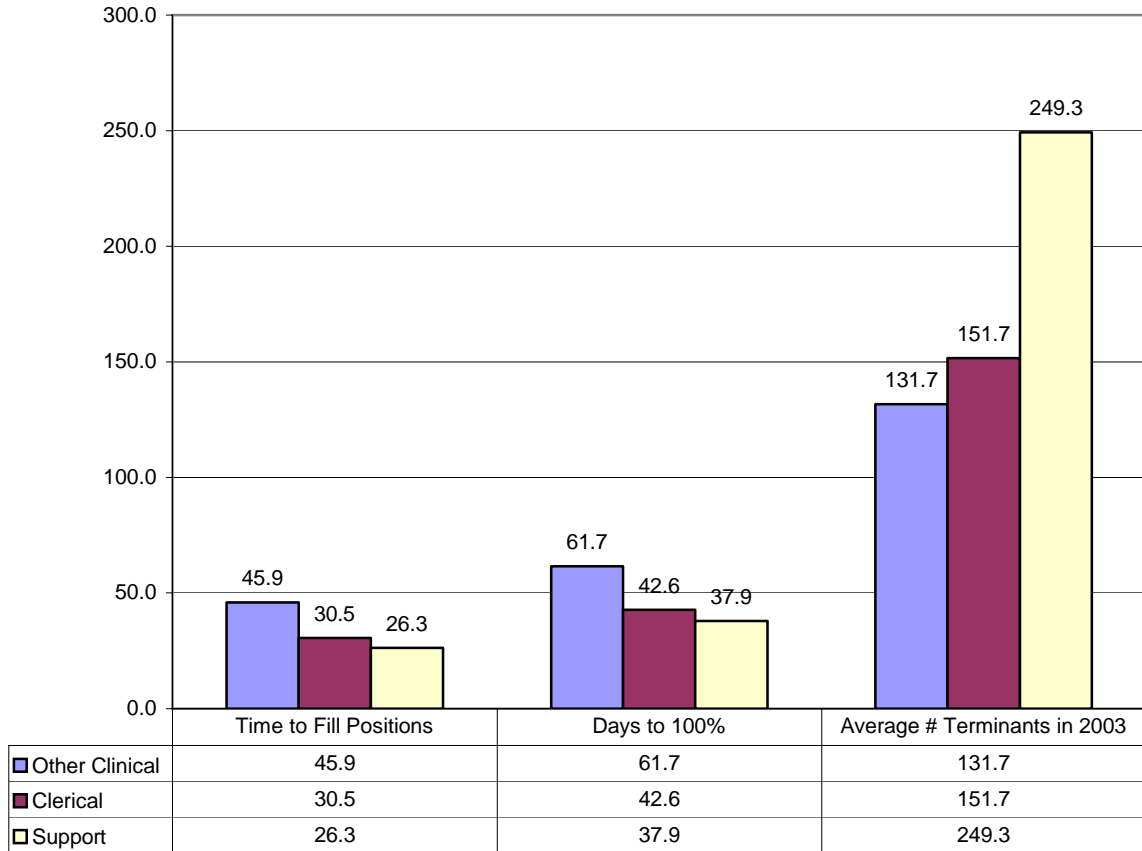
**Figure 6: Costs per Position**



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**Figure 7: Time and Number of Terminations to Replace**



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**Appendix B**  
**Participating Hospitals**

<b>Hospital</b>	<b>City</b>	<b>State</b>	<b>Number of Beds</b>
Advocate Trinity	Chicago	IL	156
Norton Healthcare	Louisville	KY	632
Nashville General	Nashville	TN	127
Suburban Hospital	Bethesda	MD	263
St. Agnes Healthcare	Baltimore	MD	333
Christus St. Joseph	Houston	TX	434
JFK Medical Center	Atlantis	FL	387
Children's Hospital - Michigan	Detroit	MI	228
Rehabilitation Institute of Michigan (2 hospitals combined)	Detroit	MI	94
BJC Hospital	St. Louis	MO	898
St. Louis Children's Hosp	St. Louis	MO	235
Clarian Health IU-Riley	Indianapolis	IN	1379
Clarian Methodist (2 Hospitals Comb)	Indianapolis	IN	Included in IU Riley
Bethesda Oak Hospital	Cincinnati	OH	279
Good Samaritan Hospital (2 Hospitals Combined)	Cincinnati	OH	446
Boca Raton Community	Boca Raton	FL	244