

# Retaining Experts: Retirement Plans of Clinical Laboratory Professionals

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## ABSTRACT

A survey to assess the retirement plans of clinical laboratory professionals (CLP) and the factors that would influence those plans was distributed to members of the American Society for Clinical Laboratory Science (ASCLS) in May, 2012. A majority of respondents (65%) between 50 – 62 years indicated that there was a greater than 50% chance they would be working after age 62. Only 15.8% of the respondents thought that there was a greater than 50% chance that they would be working full time after they retired from their current job. The retirement option selected most often by respondents was part time work. This was true for respondents in all age groups and job functions. The greatest personal influence on retirement plans was concern about health issues. The results indicate that, if employers can provide part time options, older workers may stay in the workforce as long as they are healthy.

**ABBREVIATIONS:** CLP - Clinical Laboratory Professionals, ASCLS – American Society for Clinical Laboratory Science, MLT – Medical Laboratory Technician, MLS – Medical Laboratory Scientist

**INDEX TERMS:** Workforce, Retirement, Medical Laboratory Personnel

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## INTRODUCTION

The need for laboratory services is likely to increase in the next decade due to an aging population and an influx of newly insured individuals. At this critical time, the persistent problem of the clinical laboratory personnel shortage threatens to limit access to health care. The Bureau of Labor Statistics estimates that there will be a need for 42,900 additional Medical Laboratory Scientists (MLS) and Medical Laboratory Technicians (MLT) in the U.S. between 2010 and 2020.<sup>1</sup> This is a 13% growth in workforce needs at a time when clinical laboratory vacancy rates range from 2.7% to 10.3% for staff and from 7.6% to 18.6% for supervisors.<sup>2</sup>

To address the personnel shortage, professional organizations, and laboratory educators have worked together to develop recruitment materials, promote the laboratory field to the public, and provide scholarship support for students. As a result, the number of educational programs has stabilized and the number of graduates is gradually increasing.<sup>3</sup> A study by Beck and Doig suggests that, even with full enrollment, the number of new graduates will not be sufficient to fill all the laboratory positions needed now and in the future.<sup>4</sup> It is therefore also imperative to retain current employees in all areas of laboratory practice.

Many of the current laboratory employees are in the “baby boomer generation” (born between 1946 and 1964) and will soon be eligible for retirement.<sup>5</sup> Beck and Doig reported that 42.5 % of employees who left their jobs after working more than ten years, did so because of retirement.<sup>4</sup> A recent survey by the American

Society for Clinical Pathology (ASCP) found that Blood Banking, Chemistry, Hematology and Microbiology departments expect 14 – 15% of their employees to retire in the next five years.<sup>2</sup> Understanding more about the retirement plans of laboratory professionals is important in addressing the workforce shortage. If older employees could be encouraged to work longer it could help employers meet their staffing needs, reduce the costs associated with turnover, and retain professionals who have years of institutional and scientific knowledge.

Studies of the general population and of health professions, particularly nursing, indicate that the single most important factor in the decision to retire is health.<sup>6,7</sup> Financial issues are also critical with financial security associated with early retirement and financial insecurity associated with working longer.<sup>7</sup> Phillipson and Smith described financial security and a desire to enjoy life while still young as “pull” factors that encouraged retirement.<sup>7</sup> In contrast, they listed job stress and increased workloads as factors that “push” decisions to retire. Other studies have linked early retirement to lack of recognition, lack of staffing, and low job satisfaction.<sup>8,9,10</sup> There are conflicting reports on the relationship between marital status and retirement age. Some researchers report that married people retire later and speculate that they time their retirement to coincide with their spouse’s retirement.<sup>7,8</sup> Friis reported that single nurses retired later and suggested that they did so for financial reasons or because they valued their work and social connections more than married nurses.<sup>11</sup> Other studies of retirement plans in the nursing profession indicate that most nurses plan to work into their 60’s but not always at the same institution.<sup>12</sup>

This study was undertaken to better understand the retirement plans of clinical laboratory professionals. Specifically, this study addressed the following questions:

1. Do clinical laboratory professionals want to continue to work in the clinical laboratory past age 50 or past the traditional retirement age of 62?
2. Do plans to continue to work past age 50 or 62 differ by the respondents’ job function, financial or relationship status?
3. What are the retirement plans of the laboratory professionals in this study?
4. Do plans for retirement differ by the respondents’ age group or job function?
5. What personal factors influence laboratory professionals’ decisions to retire?
6. Do personal factors that influence retirement decisions differ by the respondents’ age group or job function group?

## MATERIALS AND METHODS

The researchers developed a survey to assess the retirement plans of clinical laboratory professionals and the factors that would influence those plans. The Clinical Laboratory Professional Retirement Survey included demographic questions on geographic location, type of work facility, primary job function, highest degree, relationship status, financial status and years of experience. The survey included forced-choice and open-ended questions. The survey was tested in a pilot study using a convenience sample of laboratory professionals known to the researchers. The results of the pilot study were reviewed and the survey was revised based on their suggestions. The study was approved by the Institutional Review Board of the Office of Human Research Ethics at the University of North Carolina at Chapel Hill.

The on-line survey was sent to members of the American Society for Clinical Laboratory Science (ASCLS) in May, 2012 by email. Email addresses were available for 4,634 ASCLS members and 4,448 of those email messages were successfully sent. One follow up reminder was sent.

## Data Analysis

IBM SPSS Statistics 20 was used to analyze the data collected in this study. Descriptive statistics were used to tabulate responses and calculate means. Subgroups of respondents were analyzed to assess differences based on job function and age. The following labels were used to describe age groups; “early career” for respondents less than 30, “mid-career” for respondents between 30 and 50, “late career” for respondents between 51 and 62 and “retirement eligible” for respondents over 62. Job function groups were defined as practitioners, administrators, and educators. The practitioner group included respondents who identified their major job function as a phlebotomist, laboratory assistant, MLT, or MLS. The administrator group included respondents who indicated their major job function was supervisor,

manager, administrator, or director. The MLT and MLS educators were combined to form the educator group. Laboratory professionals with job functions other than practitioner, educator or administrator were excluded from analyses that were based on job function. Respondents who did not indicate their age were excluded from analyses that were based on age group. The mean age of laboratory professionals in each job function group was compared using analysis of variance.

## RESULTS

### Response

After one month, responses were received from 1206 clinical laboratory professionals for an overall response rate of 27%. Because the survey sought information on the retirement plans of clinical laboratory professionals, only the 1049 respondents who indicated they were still working in the laboratory field were used in the analysis. Not all respondents answered every question on the survey.

### Demographics

The clinical laboratory professionals in this study came from every state in the union. The mean age of the respondents was 48.8 years with a range of 21 – 81 years. The respondents' years of experience ranged from 1 to 53 with a mean of 23.7 years. The majority of the respondents were married or living with a partner (69.9%). Other respondents were single/never married (17.2%), divorced (10%), or widowed (3%).

Most respondents listed their highest degree as a baccalaureate degree (52.8%) or a Master's degree (34.2%). Other highest degrees included high school (0.1%), Associate (3.8%), Doctorate (7.4%), Medical Doctor (0.3%) and "other" (1.3%). Most respondents in the "other" category described work in progress toward another degree.

The respondents' job functions included phlebotomist (0.4%), laboratory assistant (0.5%), MLT (2.7%), MLS (33.2%), laboratory supervisor / manager (14.7%), laboratory director/ administrator (6.3%), PhD scientist (0.5%), MLS educator (15.2%), MLT educator (6.6%), point of care testing coordinator (0.7%), LIS analyst (0.7%), QA/compliance officer (0.9%), consultant (1.3%) and "other" (3.2%).

The mean age of respondents in the practitioner group

was 43.5 years compared to mean age of 51.8 for administrators and 53.0 for educators. The practitioners were significantly younger than the laboratory professionals in the educator and administrator groups ( $F = 52.2, p < .001$ ).

Fifty nine percent of the laboratory professionals in this study worked in hospitals or medical centers. The next largest percentage worked in a college or university setting (20.9%). Other work settings included reference/ independent laboratories (6.0%), physician's office/group practices (4.1%), industry (2.5%), and "other" (7.5%). Work settings described in the "other" category included public health laboratories, blood centers, and oncology clinics.

Respondents were asked to describe their current employment arrangement. Most were working full time in the laboratory field and had been since they completed their education (73.9%). An additional 12.4% were working full time in the laboratory field but had taken some time off during their careers. Approximately nine percent (8.9%) were working part time in the laboratory field and had not retired. A smaller percent (2.4%) had previously retired and were now working part time in the laboratory field. Only a few respondents (0.4%) had retired and were now working full time in the laboratory field. Eighteen (1.7%) of the respondents were working in a non-laboratory field.

When asked about their financial status, 70.4% indicated that they or their families depended on their paychecks to maintain their desired standard of living. Approximately a quarter of the respondents (24.4%) stated that they or their families could live better because of their paychecks and 5.2% of the respondents indicated that they or their families did not depend on their paycheck to maintain the desired standard of living.

### Retirement Plans and Influences

Respondents who were less than 50 years old were asked to estimate the chance that they would be working past the age of 50. A majority (87.2%) indicated that there was a greater than 50% chance that they would be working after age 50. Respondents who were between 50 and 62 were asked to estimate the chance that they would be working past the age of 62. Sixty five percent

of the respondents in this age group thought there was a greater than 50% chance that they would be working past the age of 62. This question was further analyzed for respondents in job function, financial status, and relationship status groups (Table 1).

**Table 1.** Likelihood that respondents between 50 and 62 will work past age 62 in job function, financial status and relationship status groups.

Group		Number in Group	Percent of group indicating that the chance of working past age 62 was >50%
Job Functions	Practitioners	189	57
	Educators	149	62
Financial status	Administrators	144	72
	Respondent/family depends on respondent's income	396	71
	Respondent/family lives better with respondent's income	177	49
Relationship status	Respondent/family does not depend on respondent's income	20	25
	Married / living with partner	391	60
	No partner (single, widow or divorced)	142	77

Respondents of all ages were asked to estimate the chance that they would be working full time after they retired from their current job and only 15.8% of the respondents thought that there was a greater than 50% chance that this would happen. The analysis of this question based on job function, financial status, and relationship groups is shown in Table 2.

Respondents were asked to review a list of retirement options and select all that applied to them. The selection of retirement options was tabulated for the total group of respondents and for respondents based on job function groups and age groups (Table 3). The five retirement options selected most by the total respondents were:

1. Reduced work hours (26.9%).
2. Work as a volunteer (26.7%).
3. Take a phased retirement by gradually reducing hours (23.3%).
4. Change the kind of work that I do (20.3%).

5. No current plans, continue as is (19.8%).

**Table 2.** Likelihood that respondents between 50 and 62 will work past age 62 in job function, financial status and relationship status groups.

Group		Number in Group	Percent of group indicating that the chance of working full time after re-tirement was >50%
Job Functions	Practitioners	389	16
	Educators	245	11
	Administrators	231	19
Financial status	Respondent/family depends on respondent's income	657	18
	Respondent/family lives better with respondent's income	232	11
	Respondent/family does not depend on respondent's income	45	4
Relationship status	Married/living with partner	662	16
	No partner (single, widow or divorced)	270	16

Respondents were asked to review a list of personal factors that would influence their decision to retire and select all that applied to them. The selection of influencing factors was tabulated for the total group of respondents and for respondents based on job functions and age group (Table 4). The top five personal factors that would influence retirement decisions for all respondents were:

1. Health issues (72.0%).
2. Job stress (46.3%).
3. No longer enjoy the work (43.5%).
4. Burn out (42.6%).
5. Frustration with management (35.2%).

**DISCUSSION**

**When will clinical laboratory professionals retire?**

The study attempted to assess how long laboratory professionals intend to work. This is difficult to measure because many individuals have not yet made these decisions or may be reluctant to commit to a date. For this reason, the survey asked respondents to estimate the likelihood that they would work past age 50, past age 62, and past the age at which they could retire from their current jobs.

## RESEARCH AND REPORTS

**Table 3.** Retirement options for the overall group of respondents and those in job functions and age groups.

Retirement Options	All Respondents n = 1049	Job Function			Age Groups			Retirement Eligible (>62) n = 81
		Practitioners n = 441	Administrators n = 253	Educators n = 260	Early Career (< 30) n = 103	Mid-Career (30-50) n = 262	Late Career (51-62) n = 386	
		%	%	%	%	%	%	
Stop working altogether	16.3	17.2	17.8	14.6	14.6	12.2	<b>20.5</b>	17.3
Have not given it much thought	17.1	<b>23.4</b>	15.8	11.2	<b>41.7</b>	<b>29.8</b>	6.2	4.9
No CURRENT plans, continue as is	<b>19.8*</b>	<b>20.4</b>	<b>20.2</b>	<b>18.8</b>	<b>23.3</b>	<b>23.3</b>	15.5	<b>25.9</b>
Reduce work hours	<b>26.9</b>	<b>27.2</b>	<b>26.1</b>	<b>29.2</b>	<b>24.3</b>	<b>22.5</b>	<b>29.5</b>	<b>28.4</b>
Take a phased retirement by gradually reducing hours	<b>23.4</b>	<b>22.7</b>	<b>25.3</b>	<b>25.4</b>	<b>22.3</b>	<b>21.4</b>	<b>25.9</b>	14.8
Change the kind of work I do	<b>20.3</b>	18.1	<b>24.1</b>	18.5	15.5	19.1	<b>25.4</b>	13.6
Work for myself	8.7	4.8	11.1	11.2	5.8	6.9	10.9	8.6
Work until my health fails	17.5	17.7	17.4	<b>19.6</b>	10.7	13.4	19.7	<b>29.6</b>
Work as a volunteer	<b>26.7</b>	<b>21.1</b>	<b>30.4</b>	<b>31.9</b>	<b>17.5</b>	<b>22.5</b>	<b>30.3</b>	<b>35.8</b>
Teach / consult	1.1	0.9	1.2	1.2	0.9	0	1.6	<b>24.7</b>
Travel, have personal life	0.6	0.7	1.2	1.2	0	0.4	0.8	1.2
Other	0.9	0.7	0.4	1.5	0	0	1.0	2.4

\* The top five retirement options are in bold font. Respondents could select more than one option.

**Table 4.** Factors that influence retirement plans for the overall group of respondents and those in job functions and age groups.

Retirement Options	All Respondents n = 1049	Job Function			Age Groups			Retirement Eligible (>62) n = 81
		Practitioners n = 441	Administrators n = 253	Educators n = 260	Early Career (< 30) n = 103	Mid-Career (30-50) n = 262	Late Career (51-62) n = 386	
		%	%	%	%	%	%	
Health issues	<b>72.0</b>	<b>75.3</b>	<b>71.5</b>	<b>71.9</b>	<b>69.9</b>	<b>71.0</b>	<b>75.4</b>	<b>72.8</b>
No longer enjoy the work	<b>43.5</b>	<b>43.5</b>	<b>42.7</b>	<b>42.7</b>	<b>55.3</b>	<b>51.9</b>	<b>39.4</b>	<b>39.5</b>
Difficult relationships with coworkers	22.3	25.9	19.0	21.9	28.2	23.3	21.8	18.5
Burn out	<b>42.6</b>	<b>45.6</b>	<b>46.6</b>	<b>38.5</b>	<b>56.3</b>	<b>54.6</b>	<b>40.7</b>	<b>21.0</b>
Job Stress	<b>46.3</b>	<b>49.6</b>	<b>53.4</b>	<b>39.2</b>	<b>48.5</b>	<b>52.7</b>	<b>46.9</b>	<b>30.9</b>
Spouse / partner retiring	29.8	32.2	30.4	<b>31.2</b>	45.6	33.6	28.5	16.0
Frustration with management	35.2	38.3	<b>36.4</b>	<b>31.2</b>	39.8	36.3	<b>36.8</b>	<b>25.9</b>
No income benefit to continue working	34.9	<b>38.8</b>	34.4	26.9	<b>50.5</b>	<b>42.7</b>	31.1	14.8
Want to do something completely different	25.0	25.6	26.1	21.5	34.0	32.4	21.8	17.2
Lack of recognition for my work	23.1	29.9	19.7	15.4	36.9	25.2	20.2	12.3
Economy / finances	2.3	2.7	1.6	1.5	0	1.9	3.1	2.5
Personal life plans	1.3	1.4	1.6	0.8	1.0	0.8	1.0	3.7
Other: please describe	1.8	0.9	2.4	3.1	0	1.5	0.5	11.1

\* The top five retirement influences are in bold font. Respondents could select more than one option.

Most of the respondents who were less than 50 years old plan to work past age 50 and a majority of

respondents who were between 51-62 years old estimate that there is a greater than 50% chance they will work

past age 62. When laboratory professionals between 51 – 62 years old were compared by job function, the practitioner group had the lowest percent of respondents predicting that they would work past age 62 compared to administrator and educator groups. It is possible that the stress of the high paced current clinical laboratory environment tends to push practitioners toward retirement. Given that the current vacancy rates for supervisors are higher than those for staff members in most laboratory departments, it is encouraging to note that 72% of administrators in the 51 - 62 year old age group expect to work past age 62.<sup>2</sup>

When late career (51-62) respondents were compared by their financial status group, those who felt the most responsibility for their own or their family's finances were more likely to work past age 62. The importance of financial security as an influence on the decision to retire is not surprising given similar findings in other studies and the changes that have occurred in the retirement system in the U.S.<sup>7</sup> When the Social Security program was introduced in 1935, most people lived only 3 years after retiring.<sup>13</sup> The average life expectancy in the U.S. is now 76 years for men and 80 years for women.<sup>14</sup> Living longer requires more financial resources at a time when many face losses in their retirement savings and uncertainty about the future of Social Security and Medicare. A survey conducted by the Employee Benefit Research Institute that reported that 64% of American workers lack confidence that their Social Security benefits will be equal to current benefits and only 14% of workers feel confident that they will have enough money to live comfortably throughout their retirement years.<sup>15</sup> For individuals, the need for financial security may delay retirement, but for the clinical laboratory, this could have the beneficial effect of retaining experienced professionals.

### **What are the retirement plans of laboratory professionals?**

Once laboratory professionals in this study reach the time at which they could retire from their current job, they do not want full time employment in the clinical laboratory. A low percent of respondents (15.8%) indicated that there was a greater than 50% chance that they would be working full time after retirement. This was true across respondents in different job functions, financial status, and relationship status groups. Similar to nurses, laboratory professionals indicated that part

time employment is desirable.<sup>6</sup> Reduce work hours and take a phased retirement by gradually reducing hours were two of the top five retirement options selected by all the respondents.

Respondents in the late career group differed from the overall group by including *stop working altogether* in their top five retirement options. A lower percent of early and mid-career respondents predicted that they would stop working altogether (14.6% and 12.2%, respectively). It appears that the time to influence retirement decisions is before laboratory professionals enter the late career phase. If options such as reducing work hours are known to laboratory professionals early in their careers, they may envision retirement differently and stay in the workforce longer.

Respondents in the retirement eligible group (>62 years) differed from the overall group by including work until my health fails and teach or consult in their top five selections. Those laboratory professionals who are still working past age 62 may have already made the commitment to extending their current position, find their work rewarding, or enjoy sharing their expertise through teaching and consulting.

There were some differences in retirement options when respondents were compared by job functions. Practitioners appeared to have given retirement less thought than educators and administrators. Educators were less inclined to change the kind of work they did and more likely to work as long as they were healthy. These results may be explained in part by the age of the laboratory professionals in each group. The practitioners were the youngest group (mean age = 43.5) and therefore included more individuals who were farther away from retirement. As the oldest group (mean age = 53.0), the educators had made a commitment to the work they were doing and so health became their major determining factor.

### **What personal influences decisions to retire?**

The greatest personal influence on the retirement plans for laboratory professionals was their concern about health issues. From written comments it was clear that this included concerns about personal health, the health of a spouse, and concerns about health coverage. The other influential factors were aspects of the job including job stress, burn out, no longer enjoying the

job, and frustration with management. These were consistent when respondents were compared by job function and by age group. Having “no income benefit to continue working” appeared to be more important to the practitioners group and to younger respondents. The factors selected most often by the laboratory professionals in this study were those that tend to “push” people into retirement.<sup>7</sup> Fewer respondents selected or described “pull” factors, although 25% indicated that they “want to do something completely different”. From the response to the question on retirement options and from written comments, it appeared that “something different” for many people would be volunteering.

### Limitations of study.

The response rate for this survey was 27%, which is comparable to similar surveys of laboratory professionals.<sup>4,14</sup> The respondents in this study were all members of one professional organization and email addresses were not available for all ASCLS members. The study was also subject to self-selection bias. It is possible that those who did not respond would have answered the questions differently than the responders. These limitations affect generalizability of the study; however, based on the demographic characteristics of the respondents, it appears that the survey was successful in reaching the target population and reflecting the views of laboratory professionals of all ages, in all work settings, at all levels of practice, and all U.S. geographic regions.

### CONCLUSIONS

The way that Americans look at retirement is changing because people are living longer, living healthier, and living in an age of economic instability. Now many people reaching retirement age want to work longer, but they also want to work less.<sup>16</sup> It is clear from this study that some laboratory professionals want to work part time and this presents both an opportunity and a challenge for the laboratory profession. If meaningful part time positions are available, older workers may be encouraged to stay in the workforce unless their health prevents them from working. This would help alleviate the shortage and retain the knowledge, skills, and professional wisdom of older workers. The challenge will be to create those positions in such a way that they are attractive to older workers and are fair to all employees. Further research on the retirement of clinical laboratory professionals is needed to assess the

effect of part time work options, the financial plans that best facilitate retirement, and the effect of the Affordable Care Act on retirement decisions.

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