Kicking Off Cost-Efficient Abstracts: Factors Influencing Abstract Development Time

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Abstract

Objective: We aimed to determine factors affecting abstract development time (ADT) in order to maximize efficiency and minimize cost.

Research Design and Methods: Data were collected from 27 (of 157 total) abstracts developed by Nucleus Global in conjunction with external clients for publication at scientific meetings. The mean number of hours spent on the project (editorial and management time) was calculated, and predictors were examined. Two-tailed *t* tests were used to determine the relationship between key predictors and ADT. For continuous predictors, a median split was performed prior to conducting the *t* test.

Results: Results are presented in the table.

Conclusion: Having data available and holding a kickoff call at abstract initiation significantly reduce the number of hours required for completion; more drafts were associated with longer ADT. The number of authors was not significantly related to ADT.

Table 1. Descriptive Statistics of Continuous Predictors					
	Median	Range			
Number of external authors (KOLs)	7	0-20			
Number of internal client authors	3	1-9			
Number of drafts	6	3-15			
Number of rounds of review	6	3-12			

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Figure 1. Impact of Data Availability (A) and Kickoff Call (B) Prior to Abstract **Initiation on Abstract Development Time**

Table. Factors Impacting ADT					
		Yes, Hours	No, Hours	P Value	
Data availability prior to initiation		24.1	45.5	< .0001	
Kickoff call prior to initiation		28.7	41.2	.017	
	Median (range), Number/Rounds	≤ Median, Hours	> Median, Hours	<i>P</i> Value	
Number of external authors	7 (0-20)	30.1	36.3	.240	
Number of internal authors	3 (1-9)	36.2	26.1	.060	
Number of drafts	6 (3-15)	27.6	38.5	.031	
Rounds of review	6 (3-12)	29.5	39.6	.061	

Background

- Medical communications agencies are involved in the development of scientific abstracts for congress presentations in conjunction with pharmaceutical clients
- Anecdotally, Nucleus Global noted that there was a wide variance in the amount of time required for an agency to deliver a scientific abstract
- Core team members identified factors thought to impact abstract development time (ADT), which included the following:
 - Availability of data prior to commencement of writing
 - Holding a project kickoff call with authors
 - Number of authors (internal client and external key opinion leader [KOL])

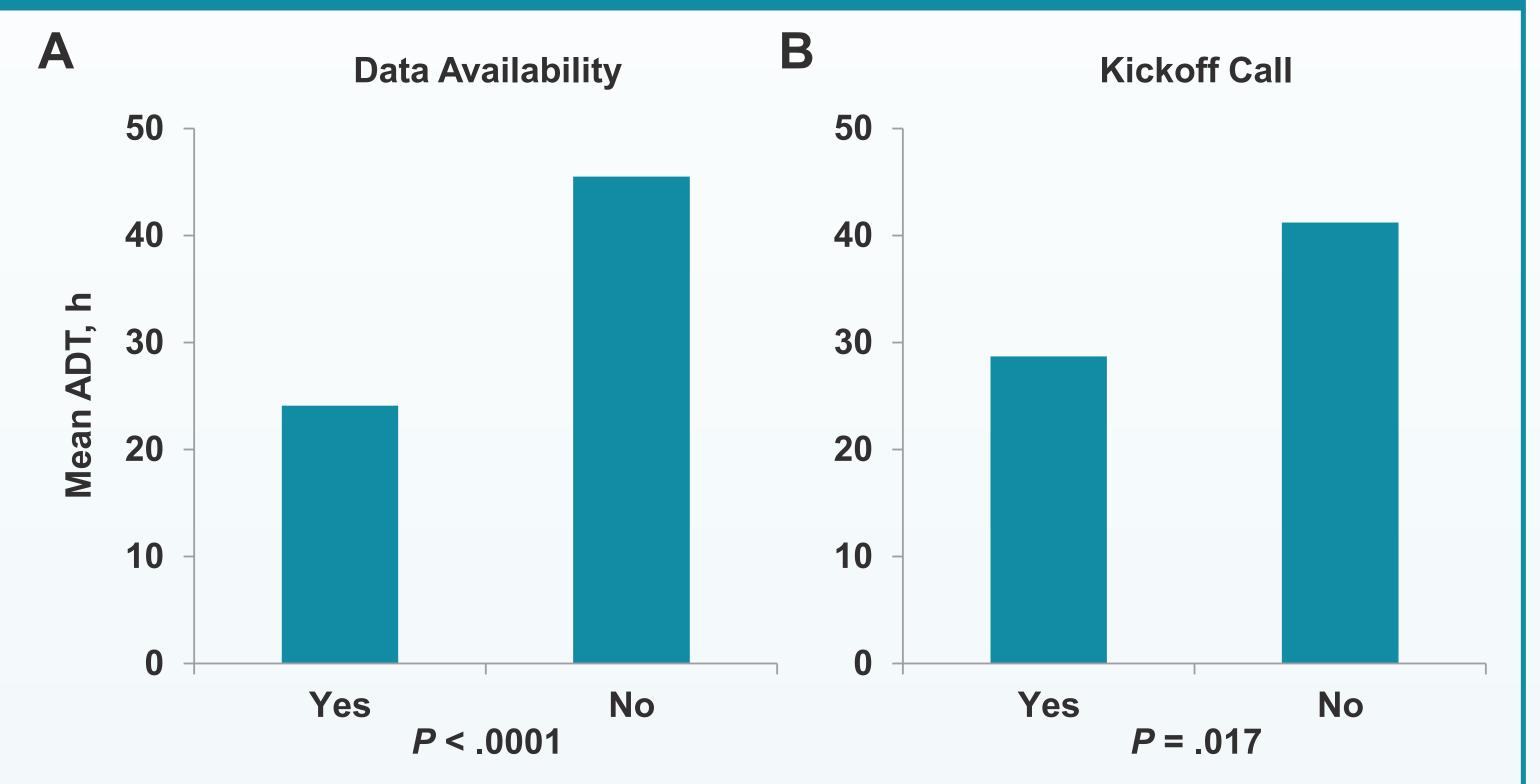
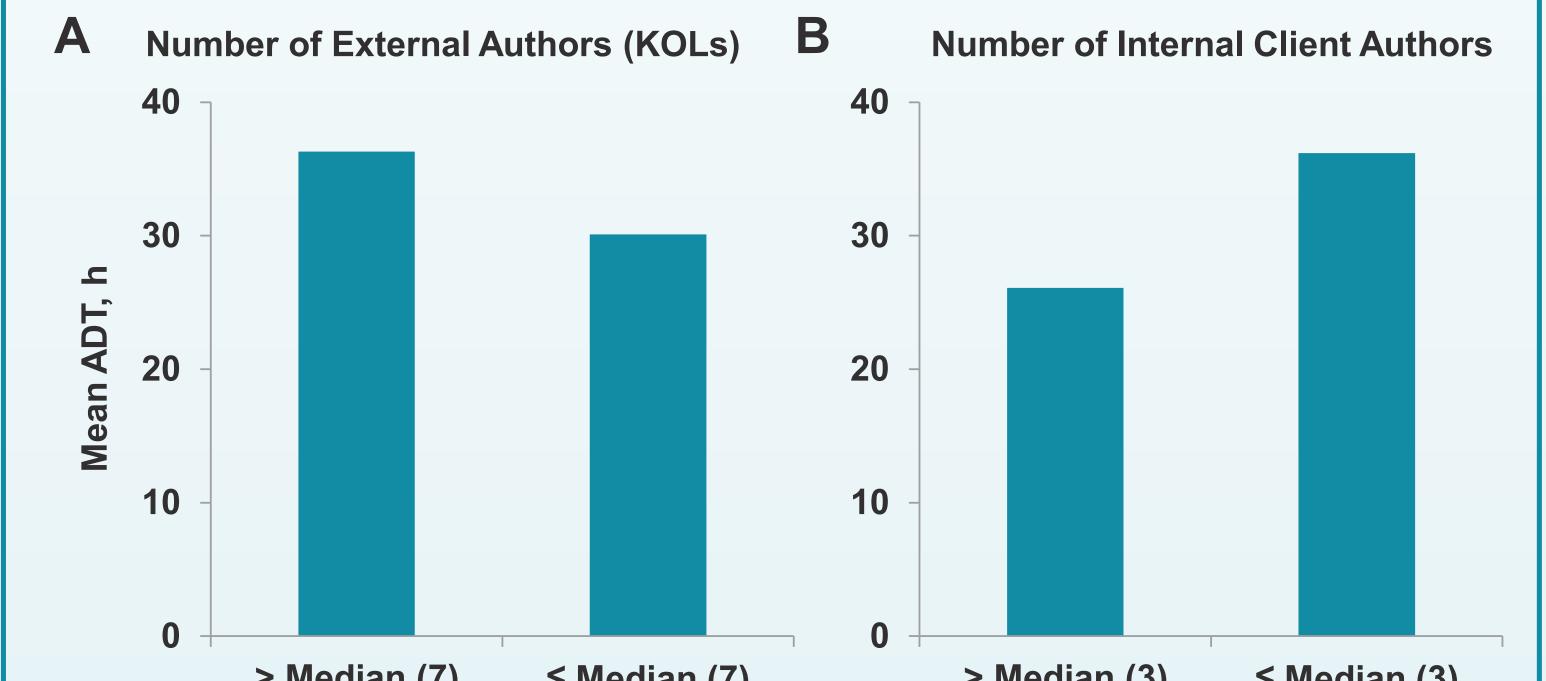


Figure 2. Impact of Number of External (A) and Internal Authors (B) on **Abstract Development Time**



- Number of abstract drafts
- Number of rounds of review

Objective

• To scientifically analyze data from a selection of projects to better understand factors that can increase or decrease development time for a scientific abstract

Methods

- ADT data were collected from abstracts developed by Nucleus Global (N = 27) in conjunction with external pharmaceutical clients for publication at scientific meetings. This was a convenience sample of data from recent projects
- Data were collected retrospectively after project completion and were supplied by the project managers
- The primary outcome was mean number of hours spent by Nucleus Global on the project
 - Project hours included both scientific services and project management time
- A variety of predictors were examined. In order to collect the appropriate data, project managers responded to the following queries:
 - Were there data agreement and availability prior to starting the project? Yes/No
 - Was a client/lead/author kickoff call held? Yes/No
 - Number of internal authors on the project
 - Number of external authors on the project
 - Number of drafts of the abstract generated
 - Number of rounds of review (including both internal and external review)
- For continuous predictors, median values and ranges were calculated

> Median (7) \leq Median (7) > Median (3) \leq Median (3) *P* = .240 P = .060

Figure 3. Impact of Number of Drafts (A) and Rounds of Review (B) on **Abstract Development Time**

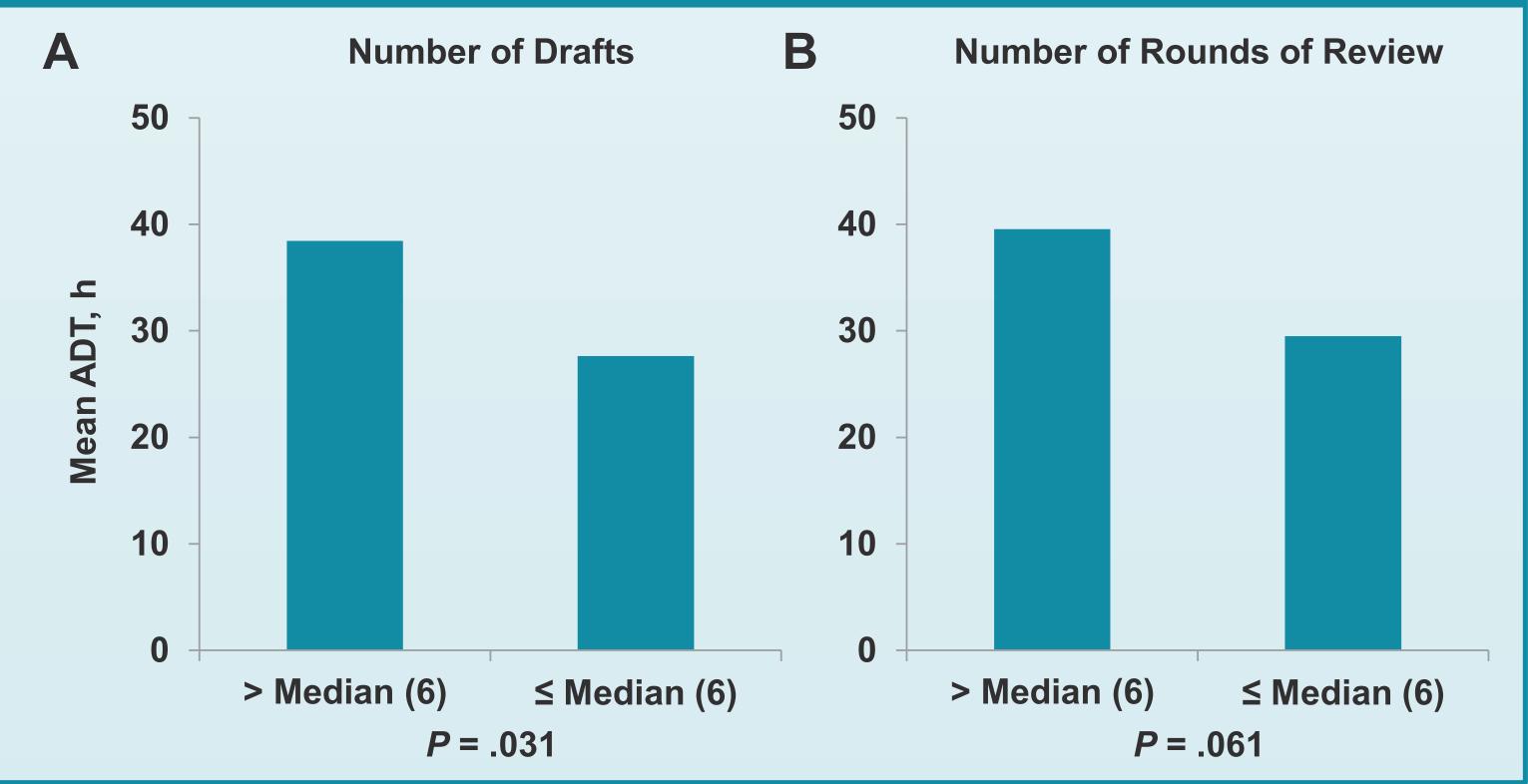
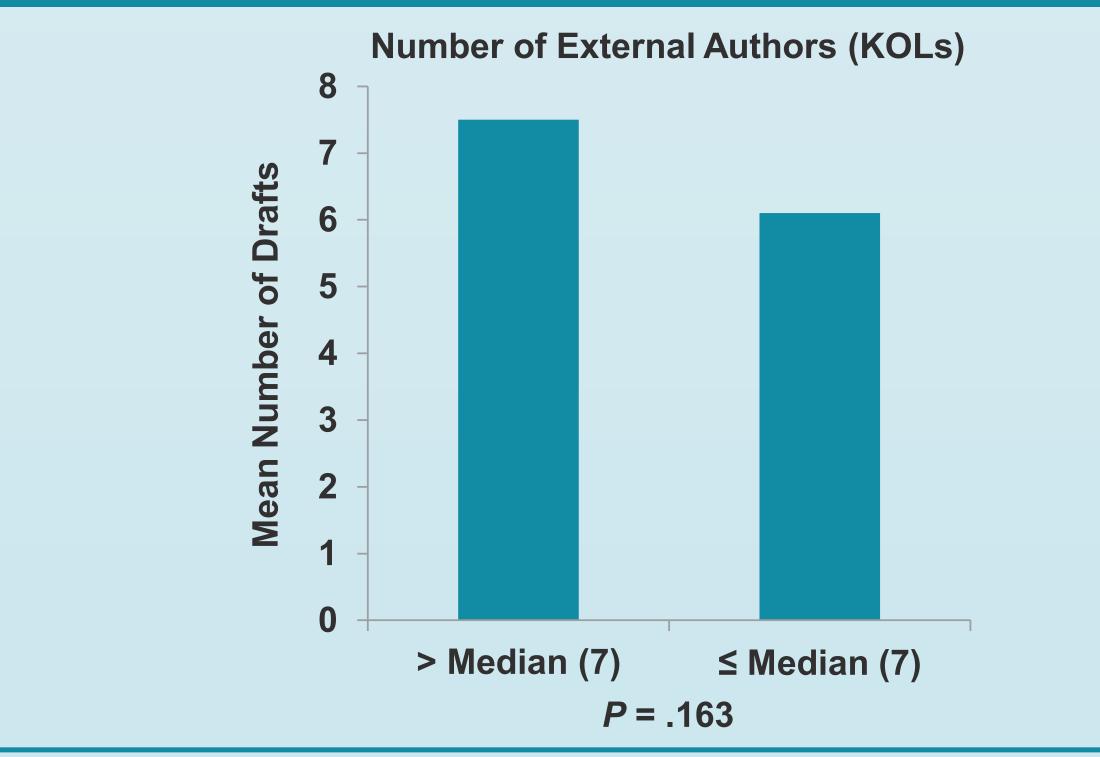


Figure 4. Relationship Between Number of External Authors and Number of Drafts



• Two-tailed *t* tests were used to determine the relationship between dichotomous predictors and hours, including Yes/No categories and >/≤ median occurrence

Results

- As anticipated, there was considerable variance in the parameters assessed (Table 1)
- Of the abstracts assessed:
 - More external authors were used than internal authors
 - Number of external authors ranged from 0 to 20
- Having finalized data available and holding a kickoff call prior to project initiation were the strongest predictors of time required to develop an abstract (Figure 1)
- Although not significant, a few interesting findings were observed with respect to the number of authors (Figure 2)
 - When the number of external authors was > median, development time was numerically longer vs \leq median (36.3 h vs 30.1 h)
 - For internal authors, the effect appeared to be in the opposite direction: > median number of internal authors was associated with shorter ADT compared with \leq median (26.1 h vs 36.2 h)
- Number of drafts > median was associated with significantly longer ADT vs \leq median (Figure 3A)
- Number of rounds of review > median were associated with a numerically longer ADT than number of rounds of review \leq median (Figure 3B)
- No significant relationship was observed between number of external authors and number of drafts in this study (Figure 4)

Conclusions

- Having data available and holding a kickoff call prior to abstract initiation significantly reduced the number of hours required for completion; more drafts and rounds of review were associated with longer ADT
- Number of authors did not significantly impact ADT
- Study limitations included the following:
 - A relatively small convenience sample was retrospectively collected
 - Abstract length requirements were not included, as it was assumed that a complex, nonlinear relationship would be difficult to determine in a small sample size (eg, shorter abstracts do not necessarily take less time to write)
- Future directions may include:
 - Collection of prospective data on a larger sample size of abstracts
 - Collection of data on manuscripts to determine if the same variables impact development time in that setting
 - Communication of this information to a broader audience to promote efficiency in publications deliverables overall

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