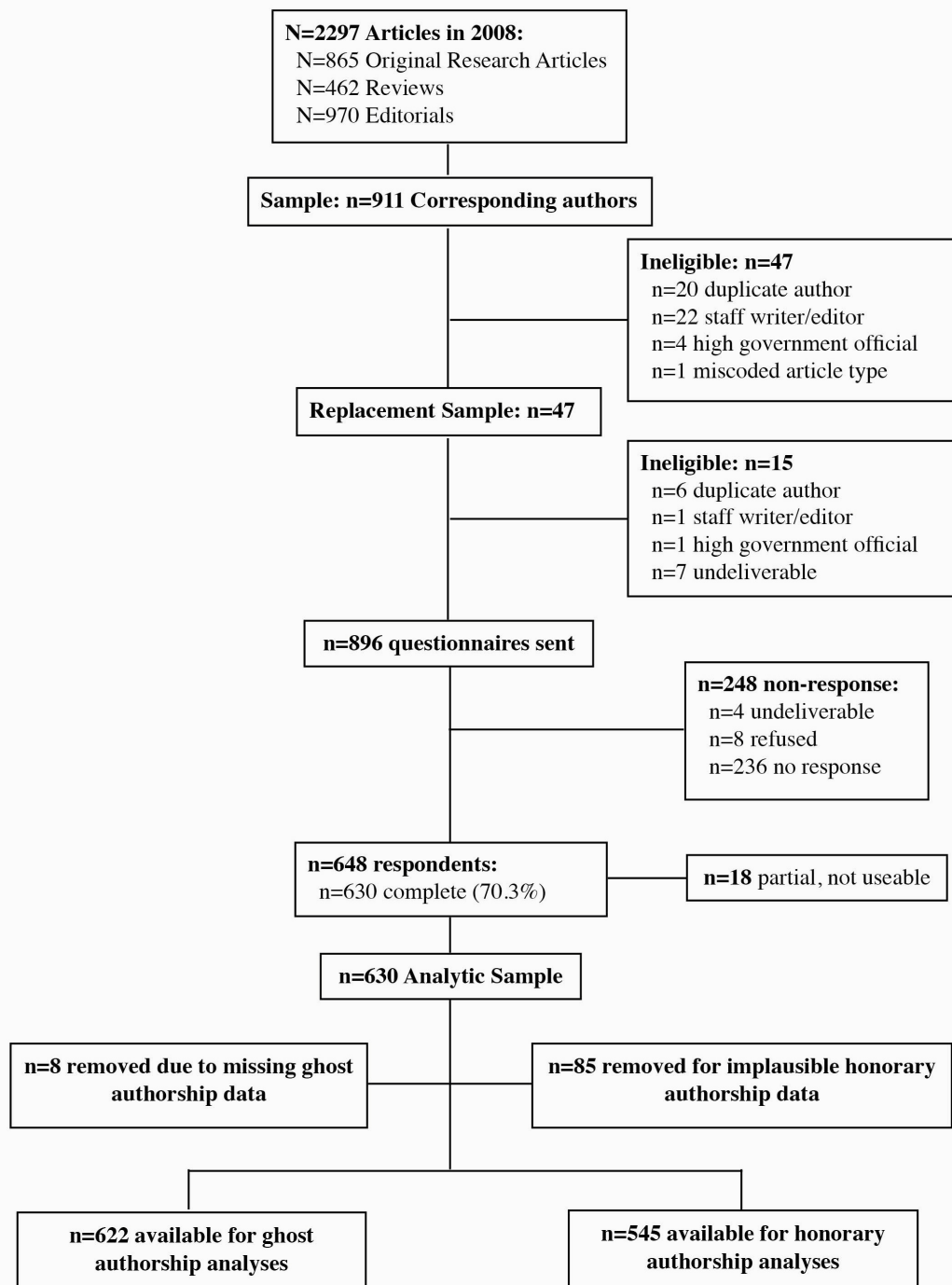


Web extra figure. Survey sampling frame and respondents



Web extra table 1. International Committee of Medical Journal Editors (ICMJE) criteria for authorship*

Authorship credit should be based on:

1. Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
and
2. Drafting the article or revising it critically for important intellectual content;
and
3. Final approval of the version to be published.

Authors should meet conditions 1, 2, and 3.

Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship.

All persons designated as authors should qualify for authorship, and all those who qualify should be listed.

Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

Increasingly, authorship of multicenter trials is attributed to a group. All members of the group who are named as authors should fully meet the above criteria for authorship/contributorship

*http://www.icmje.org/ethical_1author.html

Web extra table 2. Article sampling and response rates by journal

| Journal | No. of Questionnaires Sent | No. (%) of Questionnaires Returned¹ |
|------------------------|-----------------------------------|---|
| <i>Ann Intern Med</i> | 76 | 61 (80.3) |
| <i>JAMA</i> | 163 | 140 (85.9) |
| <i>Lancet</i> | 254 | 148 (58.3) |
| <i>Nature Medicine</i> | 85 | 50 (58.8) |
| <i>N Engl J Med</i> | 228 | 165 (72.4) |
| <i>PLoS Med</i> | 90 | 66 (73.3) |
| Total | 896 | 630 (70.3) |

¹Of 648 questionnaires returned (72.1%), 630 had complete, useable data (70.3%)

Web extra table 3. Characteristics of corresponding authors in 2008 study sample

| | Total (n=630) | | <i>Ann Intern Med</i> (n=61) | | <i>JAMA</i> (n=140) | | <i>Lancet</i> (n=148) | | <i>Nature Med</i> (n=50) | | <i>N Engl J Med</i> (n=165) | | <i>PLoS Med</i> (n=66) | |
|-----------------------------|--------------------------|-------------|---------------------------------|----------|------------------------|----------|--------------------------|----------|-----------------------------|----------|--------------------------------|----------|---------------------------|----------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| Gender | | | | | | | | | | | | | | |
| Male | 474 | 75.2 | 38 | 62.3 | 100 | 71.4 | 124 | 83.8 | 43 | 86.0 | 123 | 74.5 | 46 | 69.7 |
| Age | | | | | | | | | | | | | | |
| <30 | 11 | 1.7 | 0 | 0.0 | 1 | 0.7 | 4 | 2.7 | 0 | 0.0 | 0 | 0.0 | 6 | 9.1 |
| 30 – 39 | 90 | 14.3 | 14 | 23.0 | 29 | 20.7 | 12 | 8.1 | 4 | 8.0 | 17 | 10.3 | 14 | 21.2 |
| 40 – 49 | 189 | 30.0 | 26 | 42.6 | 44 | 31.4 | 44 | 29.7 | 16 | 32.0 | 46 | 27.9 | 13 | 19.7 |
| 50 – 59 | 221 | 35.1 | 16 | 26.2 | 38 | 27.1 | 51 | 34.5 | 22 | 44.0 | 68 | 41.2 | 26 | 39.4 |
| 60 – 69 | 101 | 16.0 | 5 | 8.2 | 21 | 15.0 | 36 | 24.3 | 4 | 8.0 | 28 | 17.0 | 7 | 10.6 |
| 70 – 79 | 16 | 2.5 | 0 | 0.0 | 6 | 4.3 | 0 | 0.0 | 4 | 8.0 | 6 | 3.6 | 0 | 0.0 |
| >80 | 2 | 0.3 | 0 | 0.0 | 1 | 0.7 | 1 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Country | | | | | | | | | | | | | | |
| USA/Canada | 397 | 63.0 | 53 | 86.9 | 115 | 82.1 | 51 | 34.5 | 33 | 66.0 | 120 | 72.7 | 25 | 37.9 |
| Europe | 181 | 28.7 | 6 | 9.8 | 20 | 14.3 | 72 | 48.6 | 13 | 26.0 | 35 | 21.2 | 35 | 53.0 |
| Asia | 17 | 2.7 | 0 | 0.0 | 2 | 1.4 | 7 | 4.7 | 3 | 6.0 | 3 | 1.8 | 2 | 3.0 |
| Aust / NZ | 16 | 2.5 | 1 | 1.6 | 2 | 1.4 | 8 | 5.4 | 1 | 2.0 | 3 | 1.8 | 1 | 1.5 |
| Other | 19 | 3.0 | 1 | 1.6 | 1 | 0.7 | 10 | 6.8 | 0 | 0.0 | 4 | 2.4 | 3 | 4.5 |
| Primary profession | | | | | | | | | | | | | | |
| Physician | 337 | 53.5 | 36 | 59.0 | 83 | 59.3 | 84 | 56.8 | 10 | 20.0 | 101 | 61.2 | 23 | 34.8 |
| Researcher | 227 | 36.0 | 17 | 27.9 | 39 | 27.9 | 48 | 32.4 | 38 | 76.0 | 52 | 31.5 | 33 | 50.0 |
| Other | 66 | 10.5 | 8 | 13.1 | 18 | 12.9 | 16 | 10.8 | 2 | 4.0 | 12 | 7.3 | 10 | 15.2 |
| Degrees¹ | | | | | | | | | | | | | | |
| MD | 458 | 72.7 | 50 | 82.0 | 110 | 78.6 | 113 | 76.4 | 25 | 50.0 | 128 | 77.6 | 32 | 48.5 |
| PhD | 283 | 44.9 | 17 | 27.9 | 49 | 35.0 | 72 | 48.6 | 39 | 78.0 | 66 | 40.0 | 40 | 60.6 |
| MPH | 70 | 11.1 | 9 | 14.8 | 21 | 15.0 | 20 | 13.5 | 0 | 0.0 | 14 | 8.5 | 6 | 9.1 |
| MA/MS | 60 | 9.5 | 10 | 16.4 | 16 | 11.4 | 7 | 4.7 | 2 | 4.0 | 15 | 9.1 | 10 | 15.2 |
| Other | 95 | 15.1 | 10 | 16.4 | 23 | 16.4 | 28 | 18.9 | 1 | 2.0 | 2 | 1.2 | 14 | 21.2 |
| Academic appointment | | | | | | | | | | | | | | |
| Yes | 557 | 88.4 | 53 | 86.9 | 120 | 85.7 | 128 | 86.5 | 46 | 92.0 | 155 | 93.9 | 55 | 83.3 |

| | | | | | | | | | | | | | | |
|----------------------------------|------------|-------------|----|------|----|------|----|------|----|------|-----|------|----|------|
| Academic title | | | | | | | | | | | | | | |
| Professor | 324 | 51.4 | 21 | 34.4 | 60 | 42.9 | 83 | 56.1 | 32 | 64.0 | 98 | 59.4 | 30 | 45.5 |
| Associate Professor | 114 | 18.1 | 18 | 29.5 | 31 | 22.1 | 12 | 8.1 | 10 | 20.0 | 35 | 21.2 | 8 | 12.1 |
| Assistant Professor | 67 | 10.6 | 9 | 14.8 | 19 | 13.6 | 13 | 8.8 | 4 | 8.0 | 13 | 7.9 | 9 | 13.6 |
| Other | 96 | 15.2 | 4 | 6.6 | 10 | 7.1 | 11 | 7.4 | 6 | 12.0 | 9 | 5.5 | 3 | 4.5 |
| Publications in 2003-2008 | | | | | | | | | | | | | | |
| 1 – 4 | 49 | 7.8 | 3 | 4.9 | 13 | 9.3 | 17 | 11.5 | 0 | 0.0 | 10 | 6.1 | 6 | 9.1 |
| 5 – 10 | 66 | 10.5 | 9 | 14.8 | 15 | 10.7 | 13 | 8.8 | 5 | 10.0 | 13 | 7.9 | 11 | 16.7 |
| 10 – 20 | 120 | 19.0 | 15 | 24.6 | 27 | 19.3 | 21 | 14.2 | 11 | 22.0 | 30 | 18.2 | 16 | 24.2 |
| >20 | 395 | 62.7 | 34 | 55.7 | 85 | 60.7 | 97 | 65.5 | 34 | 68.0 | 112 | 67.9 | 33 | 50.0 |

¹ Participants checked all that applied

Web extra table 4. Characteristics of articles included in the 2008 study sample

| | Total (n=630) | | <i>Ann Intern Med</i> (n=61) | | <i>JAMA</i> (n=140) | | <i>Lancet</i> (n=148) | | <i>Nature Med</i> (n=50) | | <i>N Engl J Med</i> (n=165) | | <i>PLoS Med</i> (n=66) | |
|-------------------------------------|--------------------------|-------------|---------------------------------|----------|------------------------|----------|--------------------------|----------|-----------------------------|----------|--------------------------------|----------|---------------------------|----------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| Article Type | | | | | | | | | | | | | | |
| Original research | 230 | 36.5 | 26 | 42.6 | 56 | 40.0 | 31 | 20.9 | 28 | 56.0 | 61 | 37.0 | 28 | 42.4 |
| Editorials | 264 | 41.9 | 10 | 16.4 | 60 | 42.9 | 89 | 60.1 | 21 | 42.0 | 64 | 38.8 | 20 | 30.3 |
| Reviews | 136 | 21.6 | 25 | 41.0 | 24 | 17.1 | 28 | 18.9 | 1 | 2.0 | 40 | 24.2 | 18 | 27.3 |
| Conflict of Interest | | | | | | | | | | | | | | |
| No statement | 52 | 8.3 | 3 | 4.9 | 1 | 0.7 | 4 | 2.7 | 40 | 80.0 | 4 | 2.4 | 0 | -- |
| Statement, no conflict | 345 | 54.8 | 28 | 45.9 | 92 | 65.7 | 98 | 66.2 | 0 | -- | 75 | 45.5 | 52 | 78.8 |
| Statement, conflict | 233 | 37.0 | 30 | 49.2 | 47 | 33.6 | 46 | 31.1 | 10 | 20.0 | 86 | 52.1 | 14 | 21.2 |
| Study Design¹ | | | | | | | | | | | | | | |
| RCT | 64 | 17.5 | 8 | 15.7 | 17 | 21.3 | 13 | 22.0 | 0 | 0.0 | 26 | 25.7 | 0 | 0.0 |
| Cohort | 74 | 20.2 | 10 | 19.6 | 27 | 33.8 | 12 | 20.3 | 1 | 3.4 | 12 | 11.9 | 12 | 26.1 |
| Case-control | 19 | 5.2 | 1 | 2.0 | 2 | 2.5 | 1 | 1.7 | 10 | 34.5 | 1 | 1.0 | 4 | 8.7 |
| Survey | 14 | 3.8 | 2 | 3.9 | 7 | 8.8 | 1 | 1.7 | 0 | 0.0 | 1 | 1.0 | 3 | 6.5 |
| Case report/series | 86 | 23.5 | 5 | 9.8 | 11 | 13.8 | 3 | 5.1 | 17 | 58.6 | 42 | 41.6 | 8 | 17.4 |
| Systematic review and meta-analysis | 30 | 8.2 | 13 | 25.5 | 11 | 13.8 | 0 | -- | 0 | -- | 0 | -- | 6 | 13.0 |
| Narrative review | 73 | 19.9 | 12 | 23.5 | 3 | 3.8 | 29 | 49.2 | 1 | 3.4 | 18 | 17.8 | 10 | 21.7 |
| Other | 6 | 1.6 | 0 | -- | 2 | 2.5 | 0 | -- | 0 | -- | 1 | 1.0 | 3 | 6.5 |
| Number of authors | | | | | | | | | | | | | | |
| Median, IQR (Q1,Q3) | 3 | 2, 8 | 5 | 3, 9 | 3 | 2, 8 | 3 | 2, 6 | 5 | 2, 12 | 2 | 1, 10 | 4 | 2, 8 |

Web extra table 5: Distribution of inappropriate authorship by ICMJE criteria item in the questionnaire

| Criteria | n | % |
|--|-----------|-------------|
| Honorary authors were present if the corresponding author did not: | | |
| 1a. Conceive and design the work, <u>or</u> Analyze and interpret the data, <u>or</u> Collect data or other material | 12 | 2.2 |
| and | | |
| 1b. Write the manuscript or part of the manuscript, <u>or</u> Revise the manuscript to make important changes in content | 3 | 0.6 |
| and | | |
| 1c. Approve the final version of the manuscript | 8 | 1.5 |
| Total not meeting 1a and 1b and 1c | 1 | 0.2 |
| OR | | |
| 2. Feel comfortable explaining the major conclusions | 2 | 0.4 |
| OR | | |
| 3. Any coauthor performed only one function, and nothing else. | 93 | 17.1 |
| Total Honorary (1a-c or 2 or 3) | 96 | 17.6 |
| Ghost authors were present when a corresponding author reported: | | |
| 4. An individual who was not listed as an author made contributions that merited authorship | 48 | 7.7 |
| OR | | |
| 5. An unnamed individual participated in writing the article | 1 | 0.3 |
| Total Ghost (4 or 5) | 49 | 7.9 |