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It is time for a communication revolution in the NHS—paper is dead, and secretaries must go Des Spence, p 41

Some peer reviewers should be credited as authors

Thomas C Erren, Michael Erren, David M Shaw

The question of exactly who should receive credit and bear responsibility for scientific publications has been discussed repeatedly in recent years. Most journals in the medical arena adhere to the authorship standards that have been developed by the International Committee of Medical Journal Editors (ICMJE). The ICMJE's Uniform Requirements for Manuscripts Submitted to Biomedical Journals aim to combat ghost and guest authorship and to allow appropriate recognition and accountability for what was done and how it is published. However, consideration of the ICMJE's Ethical Considerations in the Conduct and Reporting of Research leads to the following questions. Should substantial contributions by peer reviewers be openly declared? Should some reviewers perhaps even be credited as authors?

Admittedly, reviewers' contributions arrive after a study has been planned, conducted, analysed, and written up. However, diligent reviewers examine how research was designed and data collected, analysed, and interpreted (meeting ICMJE criterion 1).¹ Also, reviewers suggest modifications to design and text that often substantially improve the paper (criterion 2).¹ A reviewer's recommendation to accept the paper for publication could qualify as final approval (criterion 3).¹ In principle, therefore, some reviewers' contributions may justify credit for authorship as recommended by the ICMJE. This is similar to the suggestion that ethics committees sometimes act as authors or should at least be acknowledged for their substantial contributions to published work.² It is recognised that peer review provides added value,^{3 4} and it may be unethical not to acknowledge reviewers' contributions if all three criteria are met.

An example helps to illustrate this point. Let's imagine that Susan and Louise conduct a study, write a paper together, and submit it to a journal for publication. They receive a "revise and resubmit" decision from the journal along with substantial, helpful comments from one reviewer. They implement all the comments, which include suggestions for some additional experiments and analyses, and resubmit the paper. At this point, the reviewer has already met the ICMJE's first and second criteria for



ROB WHITE

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authorship, having influenced the design of the study and the format and content of the resulting paper. If the reviewer is now happy with Susan's and Louise's additions and revisions, she or he will communicate this to the editor of the journal, who is almost certain to accept the paper for publication. In so doing, the reviewer fulfils the third ICMJE criterion for authorship. (Note that if Susan conceived the study and Louise carried it out, the reviewer has actually been involved in more of the criteria than either of the authors—but then, of course, neither Susan nor Louise would qualify as an author under the ICMJE criteria.⁵)

The case of Susan and Louise highlights a paradox of authorship that lies at the heart of the current peer review system. If they had shown their paper to Justine, a casual acquaintance at another university, and she had suggested substantial changes and additional experiments and analyses that they implemented, wrote up, and confirmed with her before submission, she would clearly qualify as an author under the ICMJE criteria and would understandably be aggrieved if she ended up as a ghost author. Yet under the current system, if Justine had been approached as a reviewer and made the very same suggestions, she would get no credit at all. This is illogical and unethical.

Authors sometimes thank "anonymous reviewers for helpful comments" in the published paper. No journals seem to specify how to acknowledge advice from reviewers who contributed substantially to the final paper, and a few even discourage such acknowledgements. Although the notion of qualification as formal authors might go too far, it seems appropriate for reviewers to be included as contributors and have their precise contributions described. (And, of course, it might be awkward for the original authors if the contributions of a reviewer clearly merited full author credit.) Moreover, full disclosure of reviewer contributions could be relevant with regard to responsibility and accountability, as reviewers' comments can (whether intentionally or deliberately) bias a paper.⁶ Readers would then have a chance to use reviewers' specified contributions to judge how those peers may have shaped, and sometimes distorted, material and interpretations.

Given these potential distortions, reviewers may also have to declare to readers (not just to editors, as is usual in many journals today) any potential conflicts of interest, whether theoretical or financial. After all, if authors must declare conflicts of interest, and some reviewers qualify as authors, it would actually be odd not to demand such a declaration. These suggestions could also have the beneficial effect of ensuring that reviewers do their jobs well.

The case of Susan, Louise, and Justine highlights the absurdity and inappropriateness of the current system. Accurate interpretation of evidence in medicine requires accurate evidence regarding the role of reviewers; at the very least, it should be recognised that some reviewers are currently contributing more to research than some authors. Greater transparency demands that reviewers receive due credit and shoulder due responsibility for their work.

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References are in the version on bmj.com.

Cite this as: *BMJ* 2013;346:f166

FROM THE FRONTLINE **Des Spence**

Doctors no longer need medical secretaries

In 1995, learning to type using two fat fingers, I cursed the fact that I hadn't taken secretarial studies. Since then computers have transformed primary care with online systems, scanned letters, electronic referrals, and searchable databases. Paper is dead. And as a consequence we have dispensed with secretarial support. I type all my own referrals and reports, I answer emails on the go, and I use my phone as my diary. Communication is easier and quicker. Technology is both revolution and revelation. So why has the NHS as a whole been so slow to respond to the changes in how we communicate?

The health service is a large, hierarchical bureaucracy, and senior members are resplendent with badges of office—a glass office, a secretary (sometimes two) for correspondence, and also a personal assistant to keep the diary. Status and power are measured by the size of our entourage of administrative bodyguards. This administrative muscle is purportedly to improve commu-



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nication, but in reality it is a barrier that enables senior staff to become detached from the frontline.

It is time to call time on the bling-bling of secretarial support that trust executives and senior managers enjoy. What about also phasing out the traditional medical secretaries in NHS hospitals and general practice surgeries while we're at it?

Most doctors and managers can type as quickly as they can dictate. Voice control and recognition software is getting better, and mobile computing means we are always contactable. And experience shows that when we are responsible for typing our own letters they become shorter and more direct, with fewer poorly punctuated, rambling, unreadable monologues. And patients would receive letters sooner if the communication process was simpler and more accountable.

Many doctors are already seeing the withdrawal of secretarial support. But the process is ad hoc, chaotic, and

often inequitable. A proper review and a universal policy are needed so that change can be implemented throughout the NHS in a systematic way.

As for personal assistants, there seems to be no justification, in my opinion, for any at all within NHS structures. But calling time on this function can be achieved only with improvements in information technology in the NHS. These systems are overcomplicated, clunky, with multiple, ever changing passwords, difficult and slow to access at best.

There is also the rise of the online, five page, tick-list referral protocol, designed by the computer illiterate. These are the product of poor commissioning and a distant, hierarchical, and unaccountable management. It's time for a communication revolution in the NHS. Savings can be made, communication improved, and hierarchy broken down.

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Cite this as: *BMJ* 2013;346:f226

THE BEST MEDICINE **Liam Farrell**

Conversation with a pill

"You don't appreciate us," he lamented, sitting on the edge of the desk, little legs dangling in the air. "No thanks—just complaints about dependence, cost, side effects. 'For when the noble Caesar saw him stab, Ingratitude, more strong than traitor's arm, Quite vanquished him; then burst his mighty heart.'

"Think about it," he continued. "We are convenient, easily transported, eminently suitable for use in the home. Our quality can be monitored, standardised, and regulated; our dosages are reliable and flexible. And we are uniquely suited to testing in double blind, randomised controlled trials. We're hardcore science, the Lionel Messi of evidence based medicine."

"Providing that the trial results are released, even if the results are negative," I said.

"Of course," he said.

"And made available to peer reviewed journals," I said.

"Goes without saying," he said, and then, more sharply, "Been following Richard Smith and Ben Goldacre on Twitter, have we?"

"You have to admit," I said, "your record is a bit dodgy."

"Can't argue with that," he shrugged. "Statistics are sluts; for the right money, they'll prove anything you want them to, and drug companies are greedy, blood sucking, capitalist pigs who will be first against the wall when the revolution comes. But that's what makes the world go round, man.

"Greed is good, alas," he said. "Profit is the motivator, the innovator; if the pope or Mother Teresa ran a drug company, would any new products be developed? I'm small, not cheap."

"And vitamin pills and homeopathic



"If the pope or Mother Teresa ran a drug company, would any new products be developed?"

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pills and flower remedies?" I asked.

"Yeah, yeah, a load of shite, I know," he said. "But everyone has relatives they ain't proud of."

He drew himself up. "We are of ancient provenance," he said, and for a moment his voice sounded far away, heavy with longing and loss. "And across the ages we have wedded ourselves to humanity. We hitched our wagon to a star, but when the last human breathes his final breath under the indifferent skies, we will die too.

"Why do you need us so much? To paraphrase Tolstoy, the strongest of all cures are these two, time and patience; but humans have no patience."

"I'm going to eat you now," I said.

"Et tu, Brute?" he said sadly. "Then fall, Cialis."

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Cite this as: *BMJ* 2012;345:e8664