

## Pros and cons of data sharing in radiological research



Data sharing is still not very common in the field of clinical research compared to other fields such as genetics, astronomy or physics. However, data sharing could be useful keeping in mind the patient-centred nature of medical research as well as the expectation that clinical data could provide benefit to all stakeholders.

The process of transition to data sharing will take time and planning, but there is no doubt that those who adopt this concept will benefit from it. Already, many agencies and journals require data sharing. As of 1 July 2018, the International Committee of Medical Journal Editors (ICMJE) will require a data sharing statement as consideration for publication.

There is still a long way to go, however, according to a recent article in *European Radiology*. Among the 18 general imaging journals, data sharing is mandatory upon request in only two journals, encouraged by three journals, requested by one journal and not even mentioned by 12 journals. Similarly, out of 17 general medicine journals, data sharing is considered mandatory by only one journal, requested by three, encouraged by only six and not even mentioned by seven journals.

However, several funding bodies have declared the necessity for data sharing. The US National Institutes of Health (NIH) has expressed its intention to request digital data from NIH-funded studies while the European Medicines Agency has also requested greater data sharing by companies that are engaged in the manufacturing of drugs and medical devices. Also, the WHO and the U.S. National Academy of Medicine have published reports asking for responsible data sharing from clinical trials. Foundations such as the Alfred P. Sloan Foundation, the Bill and Melinda Gates Foundation, the Ford Foundation, the Gordon and Betty Moore Foundation, and the National Science Foundation also require data sharing for any research grant proposals.

Some potential benefits of data sharing include:

- Verification and advancement in knowledge
- Reduced cost and time for clinical research
- Clinical improvement

However, there are some potential drawbacks of data sharing which should also be noted. These include:

- The risk that other people may use the data to produce new publications
- The possibility that secondary analyses could end up contradicting initially reported results
- Lack of authorship
- The potential for fault in patient identity protection
- Increase in the possibility of harm that could result from data usage and publication
- Potential to violate privacy right

It has been suggested that 'data authorship' could be used as an incentive to data sharing. Data authorship would ensure that the people who initially gather the data receive appropriate credit that they can use for academic advancement, grant applications, and other relevant situations.

So the question remains: should data be shared or not? While there is no doubt that there are some concerns that still need to be addressed, the fact is that we are operating in a business environment that demands greater transparency as well as privacy protection. Data sharing stands in between both these requirements. With the right effort and regulation, issues related to privacy and author credit can be resolved. But the transition to a more open medical science has begun, and radiologists should recognise this change and try to become part of the data sharing revolution. It is definitely time to share.

Source: [European Radiology](#)

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