Collecting metrics in medical writing – the benefits to you and your business

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Abstract
Collecting and using metrics may not be at the forefront of all medical writers' minds, but they can be an important asset to writers and managers, from freelancers to those working within companies, large or small. Keeping a record of pertinent details of writers' work and information about the department can help plan, determine resources, set timelines, assess budgetary needs, respond to new business enquiries, and update curriculum vitae, to name but a few of the benefits. This article explains what medical writing metrics are and how they can be used to the advantage of writers and managers.

The Cambridge English dictionary defines metrics as "a set of numbers that give information about a particular process or activity".[1] Although the word "metrics" does not sound exciting and may even elicit groans of "oh no, what do I have to do?", collecting metrics can require relatively minimal effort for large gains. Whether you are a freelancer, a company employee, or manager, you may be aware of and be collecting at least some metrics already.

Typical metrics in medical writing are listed in Box 1. If you are collecting any of these then you are hopefully already making the most of them. If not, read on to learn more about why metrics should be collected and how they can be used.

Why collect metrics?

Collecting metrics is essential for keeping on top of a business's activities. You may be asked a question about your work by business development, a client, or senior managers, such as how many documents of a certain type or therapeutic area have been written, how long it takes to write a certain type of document, or how many writers within the department have experience with a certain type of document and/or therapeutic area. When this happens, it is essential to be able to give an answer that is timely and accurate. This is where metrics come into play.

As well as providing information for enquiries, metrics can allow work to be planned and can ensure that the required headcount will

Box 1. Examples of metrics in medical writing

- Basic document information: client company name, therapeutic area, study phase, and start and end date of authoring
- Type of document, for example, protocol, clinical study report, paediatric investigation plan, manuscript, or abstract
- New business enquiries, wins, and losses
- Departmental headcount, including employees currently on a break from work and reasons (for example, parental leave, extended holidays, or sick leave)
- In global departments, distribution of workload across geographical regions
- Departmental skill sets, such as which types of document, therapeutic area, study phase, and study population, etc. have been written by which writers
- Utilisation – how busy individuals and the team are by tracking billable hours versus total hours (billable and non-billable)
- Profit and loss – which work was over budget, which was under budget, and why
- Timelines – whether projects were delivered on time, were completed early, or over-ran the planned timelines and why
- Lessons learned from completed work
- Findings from audits that involved medical writing projects or the department

be available to do the work at the right time. Perhaps you or your department has been steadily winning more work over the course of the past few months, but the headcount has not increased. Metrics that track new business wins can translate into the estimated number of writers needed in the department and hence influence – and importantly, justify – recruiting decisions. This sort of forward planning is essential for running a successful organisation. Metrics are the tool for reporting information to your managers, and yourself, and can give quantifiable evidence of your successes, not to mention areas for improvement. Regardless of what type of writing you do and the size or structure of your department, there will be metrics that will be useful and beneficial to you.

How can metrics be used?

Metrics can be useful in many ways. The simplest of tasks, such as noting client names, can show you the amount of new or repeat business. Likewise, tracking new business enquiries, wins, and losses can provide insight into your business development needs – a simple calculation of the proportion of wins and losses versus enquiries will show how successful you are at acquiring new work and whether you need to focus on improving your win rate.

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For all writers, noting the start and end date of the authoring time would show realistically how long it takes to write a given document and this, in turn, could be used to help to plan timelines for similar future projects. Realistic projections help to not only reduce stress but also provide clients with achievable expectations and make having to reset timelines during the course of the project avoidable. In addition, if you know you are beating your timelines regularly on certain projects or coming in under budget, show it with the metrics data. Metrics can highlight successes – that are proven with data – which you can share with your colleagues, management, or clients.

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Likewise, and importantly, keeping a track of the hours spent on a project can be translated into money spent, and comparing the final cost with the original budget estimate can be translated simply into a profit or loss, a must for anybody in business. As each project is completed and hours and money spent is tracked, common loss-making work can be identified. For example, if a project involves writing patient narratives to support a clinical study report and the estimated time and budget needed for each narrative is too low, the financial loss will soon stack up, especially if there is a lot of narratives to be written. Diligent medical writers will spot trends in the metrics and adjust the assumptions for estimating budgets and timelines before the project gets underway. Building up a record of the type of work, whether it was within the timelines and budget, and what could be done better next time will help avoid potential pitfalls on future, similar projects. This information, in conjunction with other metrics, such as whether the department was under-resourced, can help determine why, for example, a project exceeded its planned timelines.

By tracking data on how much time is being spent performing project work and other non-billable tasks (such as training, meetings not associated with a project or client, and general administrative tasks), the proportion of time spent on project work versus non-billable work ("utilisation") can be calculated. Utilisation can be used to assess how busy writers or whole departments are. Low utilisation could prompt a push to win new business, whereas high utilisation could justify recruiting additional staff. Tracking future work when it is won can be used to predict the planned forthcoming workload and resource needs. Of course, there will always be surprises, with unplanned work arriving at the last minute. Supplementary to this would be tracking any extended staff absences, such as maternity leave or extended holidays.

In large, global departments, metrics capturing the type and count of projects or documents being worked on in each region can help managers map the distribution of the work. This can be used to target growth of the business in areas with smaller shares of the global workload. Senior departmental managers also benefit extensively from metrics, allowing, for example, informed decisions on budgetary needs (e.g., training requirements), identifying gaps in service offerings, planning, hiring, helping business development initiatives, and providing invaluable positive feedback to their employees. Metrics can also be an extremely useful internal selling tool within a large organisation, for example justifying the need for a new service offering to executive management. Generating client-specific metrics can also provide further insight into the status of a key relationship (for both parties) and can be used to analyse key performance indicators. At the other end of the scale, for individual writers, keeping track of your own work information, such as types of document, phase, and therapeutic area, will provide details for a comprehensive and accurate curriculum vitae, which in turn, would "sell" you as a writer. If audits have been performed, tracking findings could create the basis of process improvement at the department level in order to avoid the same audit findings in the future. The usefulness of collecting different types of metrics will depend on the business you have and changes to the business over time. Keep in mind that variations due to company expansion or diversification of the type of work performed could lead to changes in the requirement for – and the usefulness of – certain metrics.

How to collect metrics

The way that metrics are collected will be determined by what data are available and the format of the data. Firstly, the need for specific metrics should be identified – what information would be most useful if it was collected, and once identified, how it can be collected should be decided, using the least labour-intensive method. Making sure all possible existing sources of metrics data are explored is a must, before setting up new methods of collecting data. Care should be given in creating new methods of collection so that the data can be used in the most efficient way – such as designing a spreadsheet with filters, conditional formatting, and calculations of total values (as required) set up from the outset. Decisions should be made about how much data needs to be summarised too; if the source information originates from email, think carefully about what needs to be carried across to your spreadsheet and what does not, to make the process of capturing the information as efficient as possible.

Box 2 provides some simple tips and tricks for collecting and using metrics.

Box 2. Tips and tricks for collecting and using metrics

- Explore the data-handling systems at your company – do you have access to software that summarises data for you already, such as headcount, financial data, or hours worked (often collected in timesheets)? If so, use it!
- Brush up on your Microsoft Excel skills – spreadsheets can be a great tool for collecting metrics. Just accessing the Help function within the Excel programme can show you how to perform the basics such as calculating row or column totals, using conditional formatting (to automatically change the colour of a cell, row, or column if it meets certain criteria), and calculating the difference between two dates.
- Create graphs – again, Excel's Help function can show you how easy it is to use the data in your spreadsheet to create a graph that will enable you to visualise trends better than data in a tabular format.
- Create searchable databases for information – this will allow quick answers to be provided for any questions from clients or from within your organisation. Explore the use of software tools for metrics collection and presentation (for example utilising Tableau® dashboards).
- Keep on top of it – little and often works best. Don't procrastinate about adding some data to your spreadsheet later, as you may not get around to it (or you will do it later but will forget some of the details you intended to input).
- Keep it streamlined – collect what you need to collect, and don't collect what you don't need to collect. Think about what you want to get from the data and don't over-burden yourself or others by collecting information that doesn't meet your needs. This is especially important if you are asking a team to supply their individual metrics in order to avoid unnecessary and unwanted additional effort from the writers. Routinely review the metrics you collect, to see if they are fit for purpose.
- Impress others – create accurate presentations using your metrics that show to your stakeholders (your manager, those enquiring about your business capabilities, other departments within your company) that you are on top of your numbers.
- Any process designed for metrics collection should comply with current data protection principles, or company legal policies (particularly if you are collecting any personal or confidential information). If appropriate, obtain approval to collate certain information and follow the basic tenets of lawful data protection: lawfulness, fairness and transparency, purpose limitation, data minimisation, accuracy, storage limitation, integrity and confidentiality.

Conclusion

You have useful data – metrics – at your fingertips. Collecting and using metrics will help you as a medical writer and will help your business, regardless of what kind of work you do or your role. Although starting to collect metrics can feel like adding another task to your already busy day, the benefits of their use will outweigh the effort and they will provide you with great insight into how you and your department or business are performing. Ultimately, the more you know about your own work, the more proficient you will be at dealing with enquiries and knowing what has happened, is happening, and will happen in the future.

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Conflicts of interest

The authors declare no conflicts of interest.

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