Identifying possible improvements to reporting guideline dissemination: focus groups with guideline experts

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| Hello COM-Bers! |
| Thank you for taking the time to read this 🤩  I asked guideline experts to to expand upon the output of our previous meetings. I’ve rearranged the results into a list of possible changes and the barriers they address.  If you have time before we meet:   * Please read through the possible changes. Feel free to add comments. You can read through the barriers too if you want a refresher. * As you read, note down changes you think EQUATOR could enact, and which of those could be done through the website. * If you have time and motivation, try wireframing what a guideline page could look like, and what the home page could look like. But no pressure - I’ve spent time doing this already so we will already have plenty to talk about!   Thank you! |

# Proposed Intervention Changes

## 1: Create guidance for earlier stages of work

Guideline developers could create more guidance for earlier stages of work (e.g., protocols, funding applications).

Intervention Functions: Education

Stakeholders: Guideline Developers

Barriers:

[Researchers may need tools for the job at hand](#sec-need-tools)

[Researchers need guidance at a stage where they are able to act on it](#sec-need-right-time)

## 2: Do not duplicate guidance

To avoid duplicating resources, developers could consult EQUATOR’s register of guidelines under development and contact the developers of related guidelines before commencing a new guideline. When a new resource is justified, developers could build on top of existing resources instead of starting from scratch. This could mean extending or replacing subsets of items instead of publishing a totally new guideline. Developers could consider making guidance modular, like the Journal Article Reporting Standards for psychology. This could also be done retrospectively, e.g., by splitting broad guidance into shorter, related resources (e.g. STROBE being split into STROBE Cohort, STROBE Case-control and STROBE Cross-section).

Intervention Functions: Enablement

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[What reporting guidelines exist?](#sec-what-rgs-exist)

[Researchers may need to reconcile multiple sets of guidance](#sec-need-to-reconcile)

## 3: Avoid Prescribing Structure

Avoid prescribing structure as it may clash with journal guidelines or other reporting guidelines. Instead, give options for where items can be reported including options beyond the article body (e.g. tables, figures, appendices).

Intervention Functions: Education

Stakeholders: Guideline Developers

Barriers:

[Researchers may need to reconcile multiple sets of guidance](#sec-need-to-reconcile)

[Researchers may need to keep writing concise](#sec-need-concise-writing)

## 4: Make RGs easy to understand

To make resources easy to understand, developers could use plain language, define key terms, use consistent terms across related resources, provide translations, and update guidance in response to user feedback.

Intervention Functions: Education, Enablement

Stakeholders: Guideline Developers

Barriers:

[(Mis)understanding](#sec-understanding)

[Researchers may need guidance in a language they can understand](#sec-need-translations)

## 5: Keep RGs agnostic to design choices

Reporting guidance could encourage transparent reporting irregardless of design choices. Recommending or admonishing design choices elongates guidelines and risks shaming researchers making them *less* likely to report transparently. Guideline developers that wish to impart good design practice can consider linking to design and appraisal resources elsewhere.

Intervention Functions: Education

Stakeholders: Guideline Developers

Barriers:

[Researchers may feel restricted if reporting guidelines prescribe design](#sec-feel-restricted)

[Researchers may feel afraid to report transparently](#sec-feel-transparent)

## 6: Item content

For each item, an author needs to know the following:

* What needs to be reported
* State why the information is important, and to whom
* Any circumstances where the item is not applicable and what to write
* Indicate priority, and any circumstances that modify importance
* Where the item can be reported, including beyond the main article body (e.g., section, table, figure, appendix)
* What to write if an item wasn’t, or couldn’t be done
* What to write if an item cannot be reported for external reasons
* Examples of good and bad reporting with explanations
* Links to external design or appraisal advice

Intervention Functions: Education, Persuasion

Stakeholders: Guideline Developers

Barriers:

[When does guidance apply?](#sec-scope)

[Researchers may not know how to report an item in practice](#sec-how-to-report)

[Researchers may not know how to do an item](#sec-how-to-do)

[Researchers may not know what to write when they cannot report an item](#sec-how-to-report-not-done)

[Researchers may need to keep writing concise](#sec-need-concise-writing)

[Why are items important?](#sec-importance)

[Researchers may not care about the benefits of using a RG](#sec-care-about-benefits)

[Researchers may be asked to remove guideline content](#sec-need-to-remove)

## 7: RG introduction content

For each RG, authors need the following information:

* A clear definition of the RGs intended scope in plain language.
* If-then rules to direct authors to other, more appropriate guidelines.
* What tasks the RG can and cannot be used for
* Why reporting is the responsibility of the author
* How long the resource will take to use
* Why the guidance should be trusted and link to how it was developed

Intervention Functions: Education, Enablement, Persuasion

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[When does guidance apply?](#sec-scope)

[When should reporting guidelines be used?](#sec-when-to-use)

[Researchers may feel that checking reporting is someone else’s job.](#sec-feel-not-my-job)

[Researchers have limited time](#sec-need-enough-time)

[Researchers may feel patronized](#sec-feel-patronized)

## 8: Keep guidance short

Keep guidance as a short as possible. Be concise but clear. Be realistic about what to expect from authors as each additional item increases the chances an author will be put off. Link to longer guidance elsewhere if desired.

Intervention Functions: Enablement

Stakeholders: Guideline Developers

Barriers:

[Researchers have limited time](#sec-need-enough-time)

[Researchers may expect the costs of using a RG to be higher than they are](#sec-believed-costs)

## 9: Display value statement

Summarize what RGs are, how and when to use them, what personal benefits to expect, and the importance to others. A generalised statement could go wherever authors are likely to first encounter RGs e.g., journal author guidelines, EQUATOR’s home page. A guideline specific statement could go at the top of guideline resources.

Intervention Functions: Education

Stakeholders: Publishers, EQUATOR Network, Guideline Developers, Funders, Ethics Committees, Institutions

Barriers:

[What are reporting guidelines?](#sec-what-are-rgs)

[When should reporting guidelines be used?](#sec-when-to-use)

[What benefits to expect](#sec-benefits)

[Why are items important?](#sec-importance)

## 10: Ready to use resources

Ensure all resources are in ready-to-use formats (e.g. Word files) as opposed to e.g., checklists as tables within published articles that have to be copied by the user.

Intervention Functions: Environmental Restructuring

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[(Un)usable formats](#sec-need-usable-formats)

## 11: Accessible resources

Ensure all resources are open access. This allows access to authors without journal subscriptions and allows others to build upon the guidance.

Intervention Functions: Enablement

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[(In)accessible resources](#sec-need-accessible)

## 12: Citing RGs

Display citation data alongside the guidelines as a form of social proof. Encourage authors to cite the guideline so readers discover it.

Intervention Functions: Education, Persuasion

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[What reporting guidelines exist?](#sec-what-rgs-exist)

[Researchers may not believe stated benefits](#sec-believed-benefits)

## 13: Use persuasive language and design

Stakeholders could use language and design to communicate confidence and simplicity as opposed to to judgement and complexity, and reassure authors that *all* research has limitations that can be addressed in Discussion sections. Developers could reassure authors when guidelines are *just* guidelines, and could encourage explanation even when choices were unusual or sub-optimal.

Intervention Functions: Persuasion

Stakeholders: Guideline Developers, EQUATOR Network, Publishers, Funders, Ethics Committees, Institutions

Barriers:

[Researchers may feel afraid to report transparently](#sec-feel-transparent)

[Researchers may feel patronized](#sec-feel-patronized)

[Researchers may not believe stated benefits](#sec-believed-benefits)

## 14: Create tools

Stakeholders could create tools for different tasks e.g., discussion points for planning research, to-do lists for conducting research, templates for drafting, checklists for checking manuscripts, tools for generating tables and figures, and suggested ctrl-F keywords for reviewers assessing reporting.

Intervention Functions: Enablement

Stakeholders: Guideline Developers, EQUATOR Network, Funders, Ethics Committees, Publishers

Barriers:

[Researchers may need tools for the job at hand](#sec-need-tools)

[Researchers need guidance at a stage where they are able to act on it](#sec-need-right-time)

## 15: Ensure resources are easy to discover and find

Guideline resources should link to related resources. For example, checklists should link to example and elaboration documents. Related RGs should link to each other. All resources could all be hosted somewhere consistent with a search function that is easy to use. Links should be permanent (e.g. DOIs) where possible, and all stakeholder\_ids should ensure old URLs are maintained or redirected to avoid broken links. Web pages could all be optimized for search engines.

Guideline names could be descriptive, as acronyms may be meaningless to novice users. Related guidelines could use consistent names and terms to show relationships (e.g. the names PRISMA and PRISMA-P appear more related than CONSORT and SPRIT).

Intervention Functions: Environmental Restructuring

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[What reporting guidelines exist?](#sec-what-rgs-exist)

[What resources exist for each guideline?](#sec-what-resources-exist)

[Easy to Find](#sec-need-findable)

## 16: Information architecture TODO

Organise information so it is easy to navigate and not overwhelming. Cater read from start to finish, but others will dip in and out. Structure text with headings. For information presented online, consider showing/hiding information as required, and use section URLs to send authors directly to relevant parts of guidance. Embed or hyperlink related resources.

Intervention Functions: Enablement

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[Researchers have limited time](#sec-need-enough-time)

[Researchers may expect the costs of using a RG to be higher than they are](#sec-believed-costs)

## 17: Testimonials

Testimonials can be short quotes or longer case studies. They could come from:

* from research consumers explaining the impact that (missing) information.
* from decision makers (e.g., editors/grant managers) explaining that they value good reporting and/or explaining how they check for reporting as part of their evaluation.
* From peer reviewers explaining how they use RGs to check for good reporting.
* From other researchers (including nervous ones) about their positive experiences of using RGs.

Intervention Functions: Persuasion, Modelling

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[Researchers may not believe stated benefits](#sec-believed-benefits)

[Researchers may expect the costs of using a RG to be higher than they are](#sec-believed-costs)

[Researchers may not care about the benefits of using a RG](#sec-care-about-benefits)

[Researchers may feel afraid to report transparently](#sec-feel-transparent)

## 18: Budget for reporting

Funders and research supervisors could encourage applicants to allocate sufficient time and money for documenting and reporting results.

Intervention Functions: Enablement

Stakeholders: Funders, Institutions

Barriers:

[Researchers have limited time](#sec-need-enough-time)

[Researchers may not consider writing as reporting](#sec-feel-not-a-job)

## 19: Create Rewards

Stakeholders could create new rewards. Journals could badge well reported articles. EQUATOR could offer a certification service. Funders could reward good reporting financially. Institutions could offer prizes.

Intervention Functions: Incentivization, Persuasion

Stakeholders: Guideline Developers, EQUATOR Network, Publishers, Funders, Institutions

Barriers:

[Researchers may not believe stated benefits](#sec-believed-benefits)

## 20: Create discussion spaces

Stakeholders could create spaces for authors to discuss reporting and reporting guidelines. These could be online (forums, social media, email) or offline (meet-ups, clubs). Authors could use these spaces to solicit help, share experiences, and provide feedback to guideline developers. Being able to provide feedback may help cultivate a feeling of community ownership.

Intervention Functions: Enablement, Persuasion

Stakeholders: EQUATOR Network, Guideline Developers

Barriers:

[(Mis)understanding](#sec-understanding)

[Researchers may feel patronized](#sec-feel-patronized)

## 21: Create ways to catch authors earlier

Stakeholders could create new acquisition channels to reach authors at earlier stages of work. Funders and ethics committees could create automated email campaigns to prompt researchers at early stages. The EQUATOR website could have dedicated user journeys for planning and drafting research. Web resources could be optimised for search terms like “protocol”, “research plan” or “funding application”.

Intervention Functions: Environmental Restructuring

Stakeholders: EQUATOR Network, Guideline Developers, Publishers, Funders, Ethics Committees, Institutions

Barriers:

[Researchers may need prompting to use guidelines at earlier research stages](#sec-need-prompts)

[Researchers need guidance at a stage where they are able to act on it](#sec-need-right-time)

## 22: Endorse and enforce

Funders, ethics committees, institutions and publishers could endorse reporting guidelines and, where possible, enforce their use either by enforcing checklists or (preferably) adherence to the guidelines directly.

Intervention Functions: Education, Restriction, Persuasion

Stakeholders: Publishers, Institutions, Ethics Committees, Funders

Barriers:

[What reporting guidelines exist?](#sec-what-rgs-exist)

[Researchers may not believe stated benefits](#sec-believed-benefits)

## 23: Evidence benefits

Evidence any stated benefits. Experiential benefits could be evidenced by testimonials (e.g. feeling confident, easier writing, value to readers). Quantifiable benefits could be evidenced with data (e.g., acceptance rates, publishing speed, writing speed).

Intervention Functions: Persuasion, Education

Stakeholders: Guideline Developers, EQUATOR Network

Barriers:

[Researchers may not believe stated benefits](#sec-believed-benefits)

## 24: Make RGs appear as a priority

Journals, funders and ethics committees can make RGs appear as a priority by prominently mentioning them early in author instructions, by placing checklists earlier in compiled PDFs, and by publicizing when RGs are used by reviewers.

Intervention Functions: Persuasion

Stakeholders: Publishers, Funders, Ethics Committees, Institutions

Barriers:

[Researchers may not believe stated benefits](#sec-believed-benefits)

[Researchers may not care about the benefits of using a RG](#sec-care-about-benefits)

## 25: Promote RGs

All stakeholder\_ids can promote RGs on and offline. Online may include websites, email campaigns, social media, and blogs. Offline may include appearing at conferences.

Institutions could promote RGs in their curricula, learning materials, or through [reporting champions](#sec-reporting-champions). Guideline developers or EQUATOR could push for RGs to be included in text books.

NB. Promotion is different to endorsement; a journal could run an email campaign to promote RGs without having an endorsement policy.

Intervention Functions: Education

Stakeholders: Institutions, Publishers, Guideline Developers, EQUATOR Network, Ethics Committees, Funders

Barriers:

[What are reporting guidelines?](#sec-what-are-rgs)

[What reporting guidelines exist?](#sec-what-rgs-exist)

## 26: Reporting Champions

Funders, ethics committees, institutions and publishers could have members to promote and facilitate the usage of reporting guidelines. This could follow a local network model, such as the one used by UKRN (#REF), with EQUATOR as the central organiser.

Intervention Functions: Education, Persuasion

Stakeholders: EQUATOR Network, Guideline Developers, Institutions, Funders, Ethics Committees, Publishers

Barriers:

[What reporting guidelines exist?](#sec-what-rgs-exist)

[Researchers may not believe stated benefits](#sec-believed-benefits)

[(Mis)understanding](#sec-understanding)

## 27: Additional teaching

Authors may benefit from guideline specific education or training. Students could learn the importance of good reporting, and good workflows for documenting and communication research, and how to think about writing as a process. Students could attempt a replication or be asked to use a RG as part of their studies. These could be delivered on or offline, as education or training.

Intervention Functions: Education, Training

Stakeholders: Guideline Developers, EQUATOR Network, Publishers, Institutions, Funders, Ethics Committees

Barriers:

[Researchers may not consider writing as reporting](#sec-feel-not-a-job)

[(Mis)understanding](#sec-understanding)

[Why are items important?](#sec-importance)

[Researchers may not know how to report an item in practice](#sec-how-to-report)

[Researchers need guidance at a stage where they are able to act on it](#sec-need-right-time)

[Researchers may not care about the benefits of using a RG](#sec-care-about-benefits)

# Barriers

## 1: What are reporting guidelines?

Researchers may have never heard the term “reporting guideline” or may misunderstand it. Researchers may more commonly use terms like “writing” or “writing up” and the word “reporting” may get interpreted as a formal task (such as reporting progress to a funder). The word “guideline” may be interpreted by some as rules (as per journal “author guidelines”) and others as recommendations. Some researchers may perceive RGs as a set of design requirements, especially if they only use checklists, which typically lack the instructions and nuances included in the full guidance.

Behavioural Driver: Capability

Recommendations:

[Display value statement](#sec-value-statement)

[Promote RGs](#sec-promote)

## 2: What reporting guidelines exist?

Researchers may not be aware of which reporting guidelines exist. Most guidelines on the EQUATOR site are hardly ever accessed

Behavioural Driver: Capability

Recommendations:

[Citing RGs](#sec-citation)

[Do not duplicate guidance](#sec-avoid-proliferation)

[Ensure resources are easy to discover and find](#sec-findable-resources)

[Endorse and enforce](#sec-endorse-enforce)

[Promote RGs](#sec-promote)

[Reporting Champions](#sec-reporting-champions)

## 3: When does guidance apply?

If the scope of a RG is undefined or unclear, then researchers won’t know whether the guidance applies to them. Researchers may not understand study designs, making it difficult for them to identify which guidance applies.

Behavioural Driver: Capability

Recommendations:

[Item content](#sec-item-content)

[RG introduction content](#sec-rg-introductions)

## 4: Which guideline fits best?

Researchers may not know when more specific guidance exists. An author’s “perfect fit” guideline may not exist, in which case they may not know know when to stop searching, and they may try to use an “imperfect fit” guideline without understanding which items are applicable.

Behavioural Driver: Capability

Recommendations:

## 5: What resources exist for each guideline?

Resources include the guidance itself, checklists, E&E files, templates, and web tools (e.g. PRISMA flow chart maker). Not all resources exist for each RG and researchers may be unaware of the ones that do. Many researchers may only use the checklist. Sometimes this is purposeful, but other times it may be because researchers don’t know that full guidance and examples exist.

Behavioural Driver: Capability

Recommendations:

[Ensure resources are easy to discover and find](#sec-findable-resources)

## 6: When should reporting guidelines be used?

Researchers may not know when, in their research workflow, they should use RGs. Guideline developers may want researchers to use guidance as early as possible, but this is may not be obvious to researchers who may only ever receive instruction to complete a checklist as part of journal submission and may [never discover the full guidance](#sec-what-resources-exist). Consequently, researchers may assume that RGs are supposed to be used by single authors as pre-submission checklists to demonstrate adherence. It may not occur to them that RGs can be used earlier, or by teams.

Behavioural Driver: Capability

Recommendations:

[Display value statement](#sec-value-statement)

[RG introduction content](#sec-rg-introductions)

## 7: (Mis)understanding

Researchers may not understand concepts, terms or words within the guidance, or they may understand them differently to how the developers intended. Some items (or entire guidelines) might be new concepts. E.g. SQUIRE guidelines written at a time where Quality Improvement was still a new concept to many people, and some items (e.g. Context, Study of the intervention) were less familiar than others. Researchers may have nowhere to turn for help should they not understand something.

Behavioural Driver: Capability

Recommendations:

[Make RGs easy to understand](#sec-easy-understand)

[Create discussion spaces](#sec-create-spaces)

[Reporting Champions](#sec-reporting-champions)

[Additional teaching](#sec-support)

## 8: What benefits to expect

Researchers may not know what benefits to expect from using a reporting guideline. These benefits may include:

* improved completeness of reporting which readers use your research and reduces research waste.
* improved flow and less “waffle” in writing
* facilitated discussions between collaborators, especially at the design or protocol stage
* publishing and passing peer review more efficiently
* increased publisher acceptance rates
* efficient, confident writing
* increased impact of manuscript, as the article is easier to search for and information within the article is easier to find.

Behavioural Driver: Capability

Recommendations:

[Display value statement](#sec-value-statement)

## 9: Why are items important?

Researchers may not know why an item is important, or who it is important to.

Behavioural Driver: Capability

Recommendations:

[Display value statement](#sec-value-statement)

[Item content](#sec-item-content)

[Additional teaching](#sec-support)

## 10: Researchers may not know how to do an item

Researchers might not know how to do something (e.g., a sample size calculation)

Behavioural Driver: Capability

Recommendations:

[Item content](#sec-item-content)

## 11: Researchers may not know how to report an item in practice

Researchers may not understand how to report a particular item in practice

Behavioural Driver: Capability

Recommendations:

[Item content](#sec-item-content)

[Additional teaching](#sec-support)

## 12: Researchers may not know what to write when they cannot report an item

Researchers may not know how to report an item that they did not do (deliberately or as an oversight), or an item that they are unable to report for external reasons (e.g., IP, or data was missing from primary studies).

Behavioural Driver: Capability

Recommendations:

[Item content](#sec-item-content)

## 13: Researchers have limited time

Guidelines take time to find, read, understand, and apply. Sometimes they may require time and work from multiple co-authors. Researchers & guideline developers may underestimate the time required for writing, and time is often most limited at the point of submission as grant funding may have run out.

Checklists take time to complete, and completing them with page numbers or pasted content can be annoying if future edits necessitate updating the checklist too. Checklists also generate work for editors and peer-reviewers who must cross check page numbers or pasted content with manuscript content.

Behavioural Driver: Opportunity

Recommendations:

[Budget for reporting](#sec-budget-and-fund-reporting)

[Information architecture TODO](#sec-information-architecture)

[RG introduction content](#sec-rg-introductions)

[Keep guidance short](#sec-keep-short)

## 14: Researchers need guidance at a stage where they are able to act on it

Some RG items require work that has to be done within a certain time windows such as:

* during planning or designing
* before or during data collection
* when other colleagues are available
* during the duration of a grant

Behavioural Driver: Opportunity

Recommendations:

[Create guidance for earlier stages of work](#sec-create-early-guidance)

[Create ways to catch authors earlier](#sec-early-acquisition)

[Create tools](#sec-create-tools)

[Additional teaching](#sec-support)

## 15: Researchers may need guidance in a language they can understand

Researchers may not understand the language guidance is written in. A lot of research comes from countries where English is not the first language, as do a lot of EQUATOR website visitors. Even if a researcher speaks English as a second language, language may be an additional barrier.

Behavioural Driver: Opportunity

Recommendations:

[Make RGs easy to understand](#sec-easy-understand)

## 16: Researchers may need to keep writing concise

Following a guideline can result in **lengthy, bloated reports** which are **unpleasant** to read and **breach journals’ word limits**. Researchers may not know how to **keep writing fluid and concise** or **where they can report an item** (e.g., what section, in the text or in a table or figure, in the manuscript or in supplementary material).

Behavioural Driver: Opportunity

Recommendations:

[Avoid Prescribing Structure](#sec-avoid-prescribing-structure)

[Item content](#sec-item-content)

## 17: Researchers may need tools for the job at hand

Researchers use reporting guidelines for different tasks and want tools to make that job easier. Researchers report using reporting guidelines for:

* **Planning** research
* **Designing** research
  + Researchers want items presented in the order in which decisions need to be made
  + Researchers want links to resources
* Whilst **collecting data**
  + Researchers want items ordered in the order they are done
  + Items embedded into data collection tools
* **Drafting** manuscript
  + templates
* **Checking** manuscripts
* **Demonstrating compliance**
  + Checklists embedded into submission workflows
* **Reviewing** the reporting of other people’s manuscripts
* **Appraising** the quality of other people’s manuscripts

Behavioural Driver: Opportunity

Recommendations:

[Create guidance for earlier stages of work](#sec-create-early-guidance)

[Create tools](#sec-create-tools)

## 18: Guidelines can become outdated

Guidelines can become **out of date** compared to other guidance or compared to current research standards.

Behavioural Driver: Opportunity

Recommendations:

## 19: Researchers may need to reconcile multiple sets of guidance

Researchers must adhere to journal guidelines, multiple reporting guidelines (e.g., PRISMA + PRISMA-Abstracts + PRISMA-S) and other best practice guidelines (like NIH principles). Using multiple guidelines **increases complexity and costs**, and guidelines can **contradict each other**.

Behavioural Driver: Opportunity

Recommendations:

[Avoid Prescribing Structure](#sec-avoid-prescribing-structure)

[Do not duplicate guidance](#sec-avoid-proliferation)

## 20: Researchers may be asked to remove guideline content

Researchers may be **asked to remove** guideline content by co-researchers, editors or reviewers.

Behavioural Driver: Opportunity

Recommendations:

[Item content](#sec-item-content)

## 21: Researchers may need prompting to use guidelines at earlier research stages

Having been told to complete a checklist upon journal submission, some researchers may continue to **only ever use RGs as pre-submission checklists** if not told otherwise. Some researchers report **wanting to be told** to use reporting guidelines earlier in their research.

Behavioural Driver: Opportunity

Recommendations:

[Create ways to catch authors earlier](#sec-early-acquisition)

## 22: Easy to Find

Researcher should be able to easily find guidance and resources that they believe to exist. However:

* **search functions** can be hard to find or use,
* researchers may not know **which search terms** to use,
* websites may be hard to **navigate**,
* **guidance can be buried** within articles,
* resources may not be **optimised for search engines**,
* and resources may not be **in the same place**.

Behavioural Driver: Opportunity

Recommendations:

[Ensure resources are easy to discover and find](#sec-findable-resources)

## 23: (In)accessible resources

Researchers may be unable to access guidance published in **subscription journals**. Journal websites can feature **broken links**.

Behavioural Driver: Opportunity

Recommendations:

[Accessible resources](#sec-accessible)

## 24: (Un)usable formats

Resources differ in how easy or readily usable they are. For example, some checklists are published as PDF tables that cannot be filled or copied. Some guidance can be dense, unstructured text that is hard to digest or navigate; whereas some researchers will read the guidance sequentially, others may dip in and out whilst writing, and unstructured text can make information harder to find.

Behavioural Driver: Opportunity

Recommendations:

[Ready to use resources](#sec-ready-to-use)

## 25: Researchers may feel afraid to report transparently

Researchers may feel afraid or uncertain when trying to report something that they didn’t (or couldn’t) do.

Behavioural Driver: Motivation

Recommendations:

[Keep RGs agnostic to design choices](#sec-design-agnostic)

[Use persuasive language and design](#sec-persuade)

[Testimonials](#sec-testimonials)

## 26: Researchers may feel restricted if reporting guidelines prescribe design

Advice or assumptions about design choices narrow the scope of the guidance and can make checklists appear prescriptive. Sometimes design assumptions can be implicit. For example, in requiring authors to report the method used to assess risk of bias, PRISMA is implying that authors should have designed their review to assess risk of bias.

Behavioural Driver: Motivation

Recommendations:

[Keep RGs agnostic to design choices](#sec-design-agnostic)

## 27: Researchers may feel patronized

Researchers can feel patronized by checklists.

Behavioural Driver: Motivation

Recommendations:

[Create discussion spaces](#sec-create-spaces)

[Use persuasive language and design](#sec-persuade)

[RG introduction content](#sec-rg-introductions)

## 28: Researchers may not believe stated benefits

Researchers may not believe that using a RG will affect their acceptance rate or publication speed, that using a RG will help them write, or improve the quality of their manuscript.

Behavioural Driver: Motivation

Recommendations:

[Citing RGs](#sec-citation)

[Create Rewards](#sec-create-rewards)

[Use persuasive language and design](#sec-persuade)

[Endorse and enforce](#sec-endorse-enforce)

[Evidence benefits](#sec-evidence-benefits)

[Make RGs appear as a priority](#sec-apparent-priority)

[Reporting Champions](#sec-reporting-champions)

[Testimonials](#sec-testimonials)

## 29: Researchers may not care about the benefits of using a RG

Researchers may understand that RGs aim to reduce poor reporting, but may not feel that poor reporting matters. Instead of hypothetical benefits or benefits to others, researchers report caring more about personal, immediate benefits like feeling confident, efficiency, and job performance.

Behavioural Driver: Motivation

Recommendations:

[Item content](#sec-item-content)

[Make RGs appear as a priority](#sec-apparent-priority)

[Testimonials](#sec-testimonials)

[Additional teaching](#sec-support)

## 30: Researchers may expect the costs of using a RG to be higher than they are

Researchers may feel that the costs of using a RG - the time and work required and the added manuscript length - outweigh the benefits.

Behavioural Driver: Motivation

Recommendations:

[Information architecture TODO](#sec-information-architecture)

[Keep guidance short](#sec-keep-short)

[Testimonials](#sec-testimonials)

## 31: Researchers may feel that checking reporting is someone else’s job.

Researchers report feeling that completing a reporting checklist should be the job of the editor or peer reviewer, not the author. Editors and reviewers may also disagree about whose role it is.

(NB. researchers, editors and reviewers could *all* check for reporting quality, but this research focusses only on researchers).

Behavioural Driver: Motivation

Recommendations:

[RG introduction content](#sec-rg-introductions)

## 32: Researchers may not consider writing as reporting

Researchers may need to change their approach to writing or what they consider writing to be.Researchers differ in their writing process. Teams that follow a structured approach to writing - planning, outlining, drafting and editing with discussion at each stage - may find it easier to incorporate RGs into their workflow. Other authors write without an established process and without discussing with other team members.

Some authors may approach writing as a creative process with the desire to tell a story. To these authors, *reporting* using a RG may feel like a different approach with a different end-goal (transparency vs. narrative). Reporting using a RG also requires a different process; authors must consider the written article at the very start of their research, and may need to compose their manuscript around a skeleton of reporting items as opposed to writing from start to finish.

Some experienced researchers may be used to a way of working and reluctant to change, and some inexperienced researchers may be unaware of alternative writing processes. Not all researchers have access to help within their institution, such as writing training, research integrity training, or a publications coordinator.

Behavioural Driver: Motivation

Recommendations:

[Budget for reporting](#sec-budget-and-fund-reporting)

[Additional teaching](#sec-support)