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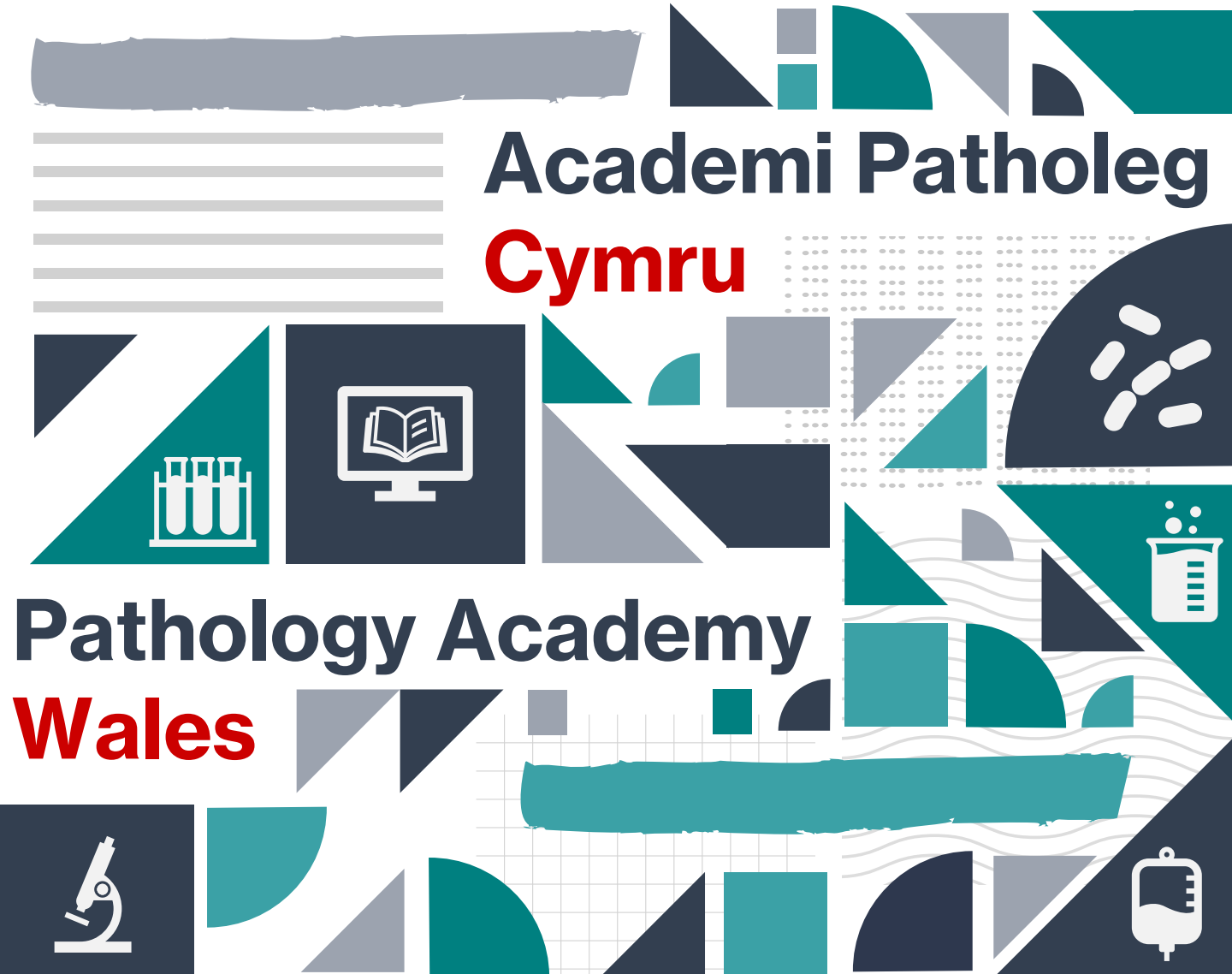
Pathology Academy Wales

# Guide to Sharing and Publicising Research and Innovation Work



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# Foreword/Executive summary

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Pathology continues to represent one of the fundamental pillars of modern healthcare, underpinning clinical decision making, advancing diagnostic accuracy, strengthening patient safety, and driving innovation across our health systems. Across our laboratories, clinics, research environments, communities and primary care services, healthcare scientists make an extraordinary contribution every day, applying scientific expertise that directly improves population health outcomes.

As healthcare evolves in response to new challenges and opportunities, it is increasingly important that we cultivate a culture that values research, embraces innovation, and promotes the sharing of best practice across the profession. By learning from one another and highlighting the breadth, quality and impact of our collective work, we strengthen not only our scientific community, but also the effectiveness, consistency and sustainability of the services we deliver. The evidence is clear that research active organisations achieve improved patient outcomes and experiences, while also supporting more resilient and sustainable healthcare systems.

This publication provides a framework for sharing the exceptional work being undertaken across pathology and the wider healthcare science profession, reflecting the expertise, commitment and ambition of our scientific workforce. It illustrates the transformative impact of collaboration, evidence based practice, research and innovation in shaping and improving healthcare delivery at both local and national levels.

Importantly, it also recognises the invaluable contribution of healthcare scientists, a profession that remains one of the NHS's greatest strengths and one of its most significant drivers of innovation, improvement and transformation. Championing and supporting this work is essential if we are to inspire the next generation of scientists, foster professional development, and continue advancing health and wellbeing through scientific leadership, discovery and excellence.

I would like to extend my sincere thanks to all who have contributed to this publication, and for their ongoing dedication in improving health and wellbeing through research, innovation and scientific excellence.

Professor Chris Hopkins
President, Academy for Healthcare Science

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Academy for Healthcare Science

# Contributors

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The development of this resource has benefited from the support of colleagues working across healthcare science, pathology, research, and innovation.

The time, experience, and professional insight shared during discussion sessions have helped inform the guidance presented in this resource. The practical insights and experiences shared by the colleagues listed below are greatly appreciated.

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# Why Sharing Work Matters

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Routine work such as audits, service evaluations and improvement projects gives us important insights into our service effectiveness and helps us drive developments. However, these findings often remain confined within individual departments or organisations.

So, why is it important to share?

One of the biggest motivators for sharing our work is linking it back to improving patient care and experience. If something has worked successfully or even if it hasn't, this information can then provide others with the guidance they need to do the same or differently.

Our routine work generates knowledge. This knowledge is particularly important for healthcare systems as we are often faced with similar challenges and issues. Understanding what has and hasn't worked for others allows us to efficiently develop a service based on this prior knowledge without duplicating work.

Many areas of pathology and wider healthcare science contribute a substantial portion of the innovation and improvement work that happens in the NHS, but we're largely unseen or overlooked. The more we share, the more we can demonstrate the value of our professions.

Your experience shouldn't be the endpoint of research and innovation. By sharing, we develop a community which allows for further enhancements by the sharing of ideas, which will lead to further efficiency and accelerated improvements.

Sharing work benefits your personal development. Building your communication skills. You may gain recognition that supports career progression and presents new opportunities.

# What Counts as Shareable Work

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## Shareable work is wider than many people realise

It is a common misconception that only formal academic research is worth sharing. Many assume that only large-scale research or statistically significant studies are suitable for dissemination.

Across pathology and healthcare science a large amount of valuable knowledge is generated through everyday service activity. Work produces learning insights and improvements, and these can be shared even if it was not originally planned to be research.

**The question to consider is whether your project has generated useful information or experience that others could learn from?**

Shareable experiences can come from:

- Clinical audits
- Service evaluations
- Quality improvement projects
- Method validation or verification studies
- Implementation of new technologies or tests
- Lessons learnt reports from projects
- Training or education initiatives
- Pathway redesign or service change
- Case studies or unusual findings
- Incident reviews that lead to learning
- System improvements
- Undergraduate projects

**There is no single definition of what is shareable. The key is finding the appropriate audience or medium to share the practical learning experience.**

# Different Ways to Share Your Work

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There are many ways to share work, and formal publications in a journal is only one option.

Many people struggle to identify where their work could be shared. This is rarely because opportunities do not exist, but because they are not always visible, clearly signposted, or labelled as “publishing”. Recognising the range of available routes is key, as is realising sometimes all you need to do it take the first step.

Selecting a dissemination route depends on the target audience, and purpose of your work. In practice, start by talking to your colleagues (line manger – site manager – clinical leads) about your idea or experience and say that you think it could be worth sharing or developing so you start sharing locally.

Who are the intended audience?
Consider who needs to know or may benefit from your learning. Local teams may benefit from brief reports, posters or presentations, whereas a wider clinical or academic audience may require a peer-reviewed article.

What's the purpose of your work?
Are you looking to share to improve the practice of others, to get feedback on your work, to find potential other collaborators, or to contribute to the evidence base?

What resources and support do you have?
Writing journal articles requires time, mentorship and sometimes funding. Consider what time, resources and support you have, to make your information presentable.

What format are you considering?
Some projects are best suited to posters, short articles or specialist journals. Selecting an appropriate type and following the recommended format helps with efficiency in avoiding rejection and reaching the correct audience.

# Different Ways to Share Your Work

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## Choosing How to Share Your Work

**Local forums and meetings:**
Present your results at staff, standardisation or quality meetings; these can be effective for sharing service improvement projects for others to follow. Meetings have a hierarchical structure in the NHS, start local with the people you know and work up to build confidence. The attendees at your meetings will likely need to attend others and be able to recommend coming to others with wider audiences.

**Posters:**
The most practical and accessible starting point for sharing your work beyond your immediate team. They allow you to present in a clear and accessible way for others to learn from and apply.
Once created, they can be reused across multiple meetings, events, and conferences, making them a high-impact efficient option. Visual formats help people engage with your work and understand it quickly.
Posters are useful if you are less confident presenting.

**Short articles and newsletters:**
Your local department will likely have some form of news dissemination method and many professional bodies and organisations like the IBMS publish short practice articles or "how we did it" pieces. They will often be looking for good news or to showcase what is happening. You can start with these before aiming for peer-reviewed journals.

**Case reports and audit papers:**
For smaller innovations or service improvements, consider publishing short reports or case studies. These can be accepted by some journals or special issues like the British Journal of Biomedical Science's Special issues articles.

# Different Ways to Share Your Work

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## Choosing How to Share Your Work

**Communications and media outreach:**
Your Health board or organisation will have a communications or public-relations team. Similarly, they are also looking for good news type stories and small-scale projects, or service improvements are more relatable to service users than the traditional medical research and are helpful for the awareness of your role or department. The Communications team can help with the who, what, where and why to make the article or post relevant for non scientific publishing. Timing articles to coincide with awareness weeks or national events can increase engagement.

**Conferences:**
Presenting at conferences is an effective way to share your work beyond your organisation. This can take the form of a poster, oral presentation, or abstract submission, depending on the event and your level of experience. Presenting also supports networking, as it shifts you from attending to actively engaging, with others coming to you to discuss your work.

There are multiple opportunities, from local health board research events and healthcare science conferences to larger meetings such as IBMS Congress, BBTS or Manufacturer user groups, in addition to the larger national conferences. Smaller conferences like manufacturer user groups are often more accessible and welcome practical experiences of using their systems, making them a good starting point for your smaller scale projects  before progressing further.

**Peer-reviewed journals:**
Journals remain important for disseminating rigorous research. However, publishing in high-impact journals isn't the only way and dissemination through other channels is also valuable, particularly if publishing specialist data tailoring the journal to the tagged community is advised.

# Different Ways to Share Your Work

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## Choosing How to Share Your Work

**Online repositories and open access:**
Platforms such as Zenodo and ResearchGate allow you to share work more openly, including posters, presentations, reports, and publications. These are useful for increasing visibility and making your work accessible to a wider audience without going through the full peer review process.

They can be a good option for sharing outputs that may not fit traditional publication routes. However, the same level of care around sensitive information and organisation governance policies should be considered when using.

**Using Professional Networks (e.g. LinkedIn):**
Professional networking platforms such as LinkedIn can be a useful way to share ideas, raise awareness of your work, and connect with others working in similar areas. While these platforms are not a substitute for formal dissemination routes, they can help create early visibility and momentum. You can share items such as your posters or news articles to help extend its reach beyond the original audience.

Posts should respect confidentiality, reflect organisational values, and it is recommended that governance approval is obtained before sharing via a social media site.

**Award nominations:**
Submitting work for awards can provide another way to share. Nominations lists often include a summary of the project and can help broaden awareness and interest in the work. Examples include the IBMS awards, Advancing Healthcare Awards UK and Wales, and the NHS Wales Awards, which all include categories focused on innovation.

# Different Ways to Share Your Work

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Summary of Sharing Methods

| Format | Time Commitment | Typical Impact | Suitability For Routine Work | Collaboration Requirement | Approval / Governance |
|---|---|---|---|---|---|
| Poster | Low–Medium | Local/regional networking; “signal” of activity | High | Solo | Local departmental |
| Oral presentation | Medium | Higher engagement; Q&A opportunity for dissection<br>Can lead to further sharing opportunities | High | Optional collaboration | Local departmental |
| Short article (professional magazine/blog) | Low–Medium | Accessible; profession-facing; good for confidence and wider awareness | High | Required collaboration<br>(Editorial editing) | Local departmental<br>Health Board / Organisational communication teams<br>Editorial |
| Journal paper | High | High credibility / citability; influences wider evidence base | Medium<br>(best for robust work) | Required collaboration<br>(Mentorship, Editorial advice and peer review) | Formal governance (R&D, ethics) |
| Social media – Internet post / article | Low | Discovery / attention; drives traffic to “real” output | Medium<br>(best as amplifier) | Required collaboration<br>(Health Board / Organisational communication teams) | Health Board / Organisational communication teams |

# Turning Routine Work Into a Shareable Output

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Many everyday working activities can have the potential to be shareable outputs. Routine work becomes shareable when framed as:

**1. Problem**

**1. Identify the change.** What problem are you addressing? This may guide in scale and complexity. Spot potential innovations or improvements in your service. For example, a new testing protocol, an efficiency measure or an improved patient pathway.

**2. Baseline**

**2. Collect the baseline data.** Ensure sufficient information is available to establish your comparative base.

**3. Change**

**3. Document the process.** Describe the intervention and record outcomes. Follow the local structured governance documentation required for a change as some of this will naturally be required.

**4. Measure**

**4. Post implementation collation.** Gather feedback in addition to the same data as outlined in the comparative bases to review.

**5. Review**

**5. Evaluate the impact.** Compare baseline and post-change data to assess what difference the intervention made. This could include performance measures, outcomes, efficiency, user feedback. Clear evaluation strengthens the credibility and shareability of your work.

**6. Learning**

**6. Reflect on lessons learned.** Highlight what worked, challenges encountered and how barriers were overcome. Making mistakes is part of the learning process and are valuable points of refinements and learning points for others.

This process can be looked at as a retrospective activity at project completion or as a project timeline to follow.

Practically it's easier to do looking forward given a common pitfall is not capturing the baseline data for a comparison and subsequently not being able to measure clear outcomes after the fact when reviewing retrospectively.

# Turning Routine Work Into a Shareable Output

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Once you've decided that your work is worth sharing, the next step is choosing how to communicate it clearly and effectively:

**7. Format**

**7. Choose an appropriate dissemination route.** Different types of work suit different routes. Local posters, presentations or internal bulletins are good starting points for internal sharing. As confidence grows, you may consider submitting a case study or short article to a professional journal.

**8. Scale**

**8. Match the route to the scale of the work** The scale and reach of the project should guide how it is shared. For example: Single-site audits or evaluations often suit posters or local publications. Multi-site projects or repeated cycles may be suitable for journal submission. Educational or training initiatives may fit professional magazines or conference sessions.

**9. Support**

**9. Collaborate and Acknowledge.** Use the support of who you have around you to proofread, critically review and refine. Recognise colleagues and other service users who supported the project.

**10. Expand**

**10. Plan for scalability.** For audits and service evaluations, consider expanding the project across multiple departments or health boards to generate more data. Was the impact the same or are there any differences in experience. Broader multi-site studies are more publishable, whereas single-site audits may be better suited to posters or local magazines.

# Writing a Poster

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Posters are a practical and accessible way to share work.
They should focus on a clear message and present information in a structured way, typically including background, methods, results, and conclusions.

A well-designed poster should be easy to understand quickly and should guide the reader through the key points.

Practical steps:
**Structure:** Focus on one key message for the poster.
Use sections such as Aims, Introduction, methods, results, conclusions, next steps and references. Arrange the sections logically with differentiation between, use of boxes for example.
**Visual design:** Use charts, diagrams and bullet points rather than long paragraphs. Ensure text is large enough to read at a distance and kept to a minimum.
**Narrative flow:** Guide readers logically through the project story.
**Orientation:** Centralise your important information at eye level and review the specifications for the conference, some may insist on portrait. Set PowerPoint slide to match the recommended dimensions for the poster

Common pitfalls: Dense text; unexplained abbreviations; unclear conclusion; overclaiming generalisability.

**Practise your pitch:** At conferences you may need to present your poster. Be ready to summarise your poster in 1–2 minutes for attendees or competition judges. Posters are an opportunity to network and gather feedback.

Typically, you will have completed your project before making a poster. But a methodology-only poster can still generate interest and establish future collaborations when presented at conferences

# Writing a Poster

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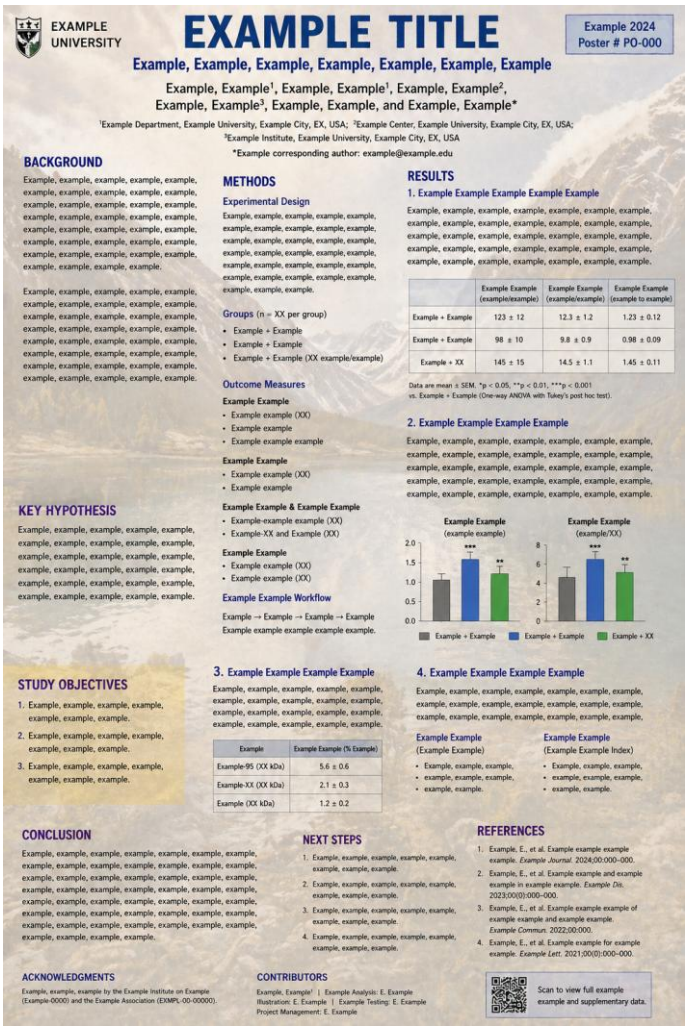
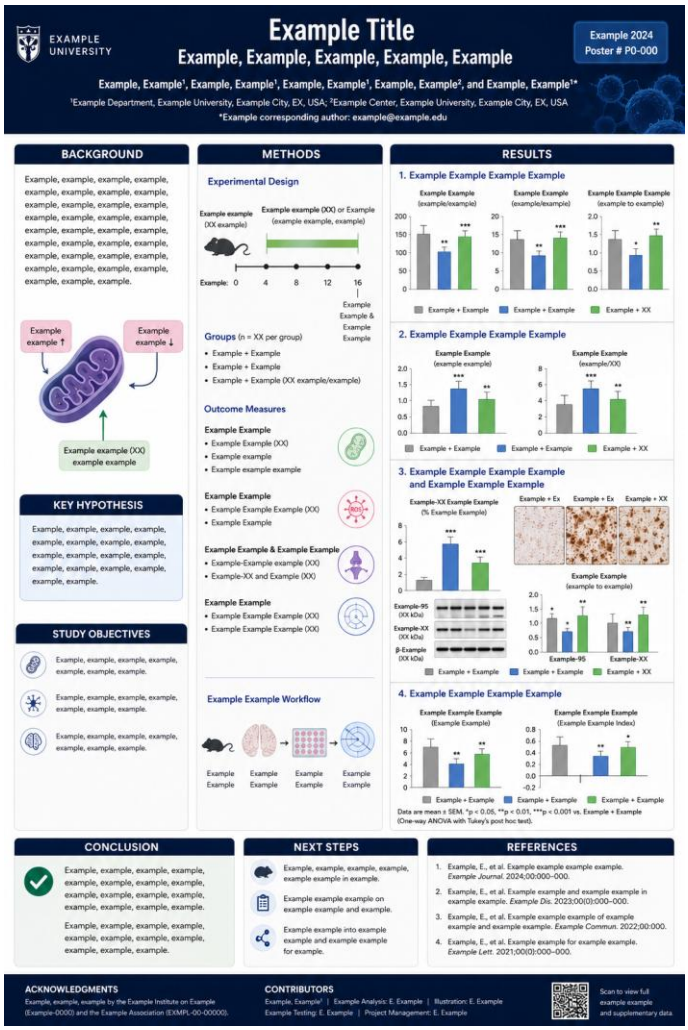
## Poor example




## Strong example




- Large blocks of text make it difficult to scan quickly.
- Busy or unclear background reduces contrast and readability
- Too much information competes for attention
- Weak visual hierarchy makes it hard to identify key points
- Layout does not clearly guide the reader through the story
- Important messages and impact are easily missed

- Clear visual hierarchy makes the key message easy to find.
- Limited text allows quick scanning at a distance.
- Strong contrast between text and background improves readability.
- Visuals support the message rather than distracting from it.
- Logical flow guides the reader from background to conclusions.
- Clean layout makes the poster easy to follow and engaging

# Delivering an Oral Presentation

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Oral presentations allow you to tell the story of your work in a more engaging way than a poster and gives you more opportunity to highlight the key details of the experience and outcomes.

When presenting your work:

**Know your audience and time limit:** Tailor your content to their level of expertise and keep within the allotted time. If you're presenting at a meeting, you may have a few minutes and at a conference you may be given a longer 20–50-minute slot for example. Consider how much background information is needed to ensure sufficient understanding on your topic.

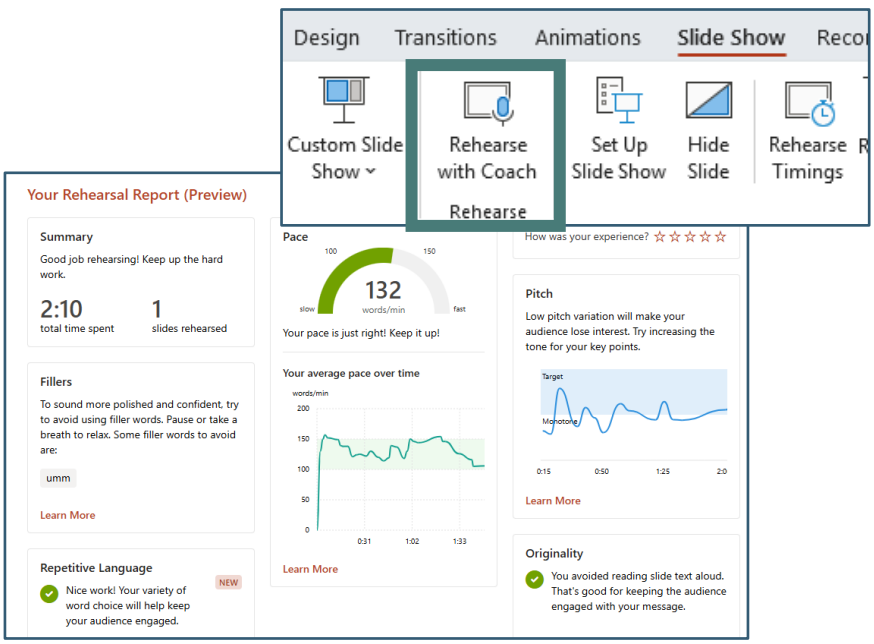
**Tell a story:** Introduce the problem, explain what you did, present the results, and focus on explaining the impact of your work. Clarity and enthusiasm are more important than exhaustive detail.

**Visuals:** Slides should support your narrative rather than duplicate what you say. Keep slides uncluttered. Use for Key graphics and supportive figures. Keep text on the slides to a minimum, details should be on your notes.

For your slides use a template set if available for your organisation and avoid dark backgrounds with heavy design.

Common pitfalls: focusing on process rather than impact, include too much technical detail, and fail to clearly communicate why the work matters. Hiding behind your slides, it’s natural to seek protection behind slides, but early audience engagement gives you a feedback loop and keeps them focused on you, they want to hear you not just read the slide.

**Practise:** Rehearse and seek feedback. Speaking at local meetings or professional forums builds confidence before presenting to larger groups. Use the rehearsal coach within PowerPoint for private practice first.



# Writing a Short Article

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Short articles or practice pieces are accessible ways to share innovations. A short article is often the fastest route to build publishing confidence. You can write for professional magazines (not necessarily peer reviewed), websites, or internal newsletters and use the same base article on multiple platforms.

**When developing a short article:** Engage with the editor, communications team, or platform owner early. This allows you to pitch your idea, understand formatting requirements, and ensure your content is suitable for their audience. Having a summary or abstract ready can support this initial conversation before progressing to full article.

**Take inspiration:** Take time to review what is already published on the platform. Look at existing articles, for example in professional magazines or your organisation's intranet, to understand the style, tone, and types of stories that are typically featured. This will help you align your content and identify what works well.

**Content:** The length and style will vary depending on the platform, but most articles will typically be around 500 to 1,000 words. Focus on one clear message, structured around what was done, what changed, and what the impact was. Visual elements are important, so include simple graphs, images of your data, or photos of the working environment or project subject to make the article more engaging and relatable. Provide references to guidelines, templates or further reading.

Common pitfalls: Avoid approaching this as a formal academic exercise. These articles are often intended for a broader audience, so keep the language clear and accessible, and simplify complex content where needed. As with all forms of sharing, ensure that confidentiality and governance considerations are maintained.

# Writing a Journal Paper

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Journal writing is a different genre from reports/essays. Journal papers require a more formal structure and level of detail.
They typically follow a structured format, including introduction, methods, results, and discussion.

Be realistic about where to submit. Starting with more accessible journals can help build experience. Collaboration and mentorship are particularly valuable at this stage of sharing.

**Understand the format:** Review the "instructions for authors" and build your outline to match. Review other publications within the journal to identify common traits
**Choose your journal early:** Select one or more target journals before you start writing so you can follow their word count, formatting and thematic requirements.
**Academic writing style:** Writing academically is challenging and as with all skills it's one that develops with practice. Being concise is important, but you must also provide sufficient detail.
**Seek mentorship:** Experienced researchers or R&D offices can guide you through choosing a journal, structuring your paper and navigating peer review. Work with mentors and collaborators to decide whether you have enough data to publish and to align your methodology with journal expectations. Collaboration improves study design, writing quality and resilience when facing reviewer comments.
**Be realistic:** Select journals appropriate for your audience and project scale. Don't be discouraged if it's not a high-impact journal.
**Budget for publication:** Some journals charge article-processing fees; check these costs beforehand. BJBS is free for IBMS members.
**Prepare for rejection:** Rejections are normal, most submissions do not pass on the first try. Incorporate reviewers' feedback and resubmit.

# Ethics, Governance and Approvals

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## Understanding governance requirements is essential

Different types of work require different levels of approval. Research involving patients, data, or samples may require formal ethical approval, while audits and service evaluations can often follow local governance processes without the need for wider approvals.

Ethics and governance often feel intimidating. Uncertainty about what approvals are needed can stop people sharing work that is entirely appropriate to disseminate. It is important to seek advice early, particularly from R&D departments, to ensure the correct processes are followed.

A large proportion of pathology outputs are typically not classed as research, including audits, service evaluations, quality improvement projects, validation and implementation work. These activities are part of routine professional practice and are frequently shared without requiring formal research or ethics approval.

It is often more helpful to be clear about the purpose of the work, who it is intended to benefit whether it is improvement, evaluation or research. Starting with clarity avoids unnecessary escalation and helps ensure the right level of governance is applied.

To work out if you need ethics approval start with the **Is my study research?** Tool: Is my study research? (*https://www.hra-decisiontools.org.uk/research/)* then complete the **Do I need NHS REC review?** Tool: Do I need NHS Ethics approval? (*https://www.hra-decisiontools.org.uk/ethics/index.html)*

From the Medical Research Council, Regulatory Support Centre Health Research Authority, these tools will advise what information you many need to check collate and indicate what approval may be required.

# Ethics, Governance and Approvals

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## Speak to local R&D department

R&D departments are experts in ethics and approvals; they support you through documentation and IRAS submissions. Prepare a clear project outline and have the **Is my study research?** and **Do I need NHS REC review?** results available for review.

**ABUHB:** Research & Development – Home

**BCUHB:** Research and Development – Home

**C&VUHB:** Research & Development – Home

**CTMUHB:** Research and Development

**HDUHB:** Hywel Dda Research, Innovation & Value – Home

**PHW:** Research and Development Office

**SBUHB:** Research & Development – Home

**Velindre:** Research, Development and Innovation

Tools such as National Institute For Health And Care Research (NIHR) Integrated Research Application System (IRAS) templates for research proposals and information sheets will help streamline submissions.

Homepage | NIHR | Integrated Research Application System

Obtaining ethics and regulatory approval can take longer than expected, particularly if your project crosses regulated categories. Allow sufficient time and resubmit if your application is initially rejected.

Common pitfalls: Assuming internal work is automatically “service evaluation”; publishing without confirming governance and compliance with GDPR. Undertake Data Protection Impact Assessments as an initial assessment.

Ethics and governance is there to support safe, effective and compliance research for the patient's interests - not to stop it or prevent sharing.

# Working with R&D Department

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R&D Departments exist to support safe, high-quality research and development work. When relationships work well, they can help clarify governance routes, strengthen projects and open doors to wider dissemination and collaboration. Early engagement with R+D departments can facilitate appropriate project support and project progression.

Many pathology projects begin as audits, service evaluations or improvement work. These do not routinely require early R&D involvement. The experiences can be shared at professional forums (user group events, IBMS congress posters and articles) with local governance oversight only.

When you think there is scope to share your finings wider, and you have patient involvement or opportunity to grow your project it may be worth approaching the R&D Department to discuss for advice. Make sure the project proposal is clear, to ensure your project is categorised appropriately as research, service improvement or evaluation.

R&D Department should be able to help facilitate:
**Expert advice:** They know the processes for ethical approval, study sponsorship and funding applications. Many report that NHS ethics is “really achievable” with R&D support.
**Project planning:** R&D staff can help you refine your question, identify the appropriate approval route and prepare documentation.
**Funding and grants:** They can signpost grants (e.g., Health & Care Research Wales grants). Small-grant committees prioritise clinically relevant projects and building clinical research capacity.
**Mentoring and training:** The Healthcare Science R&I strategy proposes implementing clinical researcher and innovator roles across health boards and trusts to guide early researchers and co-create mentorship and training schemes. R&D department can signpost you to individuals who can provide support.
**Clarify project classification:** Discuss whether your project is research, service evaluation or quality improvement with the R&D department at the start.

# Overcoming Common Barriers

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Most people who share their work encountered barriers along the way. They can be both internal (capacity/workforce issues; culture; visibility) or external (system; process; approvals). Recognising that these challenges are common and that support is available is an important first step.

## "I don't have time"

Sharing work is often seen as extra, rather than part of the job. Without protected time, writing and reflection are the first things to be dropped when services are busy.

What helps:

- Break the task into smaller, manageable steps.
- Treat sharing as part of CPD, not an additional project.
- Discuss the project and why sharing would be good for you. and the department with your line manager to identify priorities.
- Start with formats that require less time, such as posters
- Schedule short, regular writing slots rather than waiting for large blocks of time.

## "I don't know where it would go"

Uncertainty about how to share;  journals, conferences or other routes can stop people starting at all.

What helps:

- Decide the audience that would benefit first (like laboratory managers), then choose the format
- Use posters and presentations as an entry point
- Ask others like line managers where they have shared similar work
- Suppliers and manufacturers are often looking for speakers and projects to showcase
- Accept that not all work needs to become a journal paper

# Overcoming Common Barriers

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## "I don't write like an academic"

Academic language can feel unfamiliar or inaccessible, particularly for those working mainly in service roles.
What helps:

- Write clearly and practically rather than academically
- Match the style to the format, not to a journal by default
- Remember that many audiences value clarity over academic tone
- Edit later — getting words down matters more than how they sound at first.

## "What if it gets rejected?"

Fear of rejection can feel personal and can stop people submitting anything at all.
What helps:

- See rejection as part of the process, not a judgement of ability.
- Use feedback to improve the work rather than abandoning it.
- Start with less competitive formats to build resilience.
- Remember that many shared outputs are not peer-reviewed journals.

## "I don't have support"

Working alone makes sharing harder and can amplify self-doubt.
What helps:

- Ask – this doesn't need to be restricted to just a line manager.
- Include other colleagues in the project rather than working in isolation.
- Use informal peer review before formal submission.
- Seek mentors who have shared work before or R&D departments.
- Join or create small writing or sharing groups.

# Overcoming Common Barriers

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## "It's not really research"

Audit, evaluation and improvement work is often undervalued because it does not look like traditional research.
What helps:

- Recognise that generating learning is worth sharing
- Choose formats designed for service-based work
- Focus on transferable insights rather than generalisability
- Remember that impact does not require statistical significance

## "Someone more senior should do this"

There is a belief that sharing work is reserved for senior staff, PhD projects or academics.
What helps:

- Remember that practitioner-led work is valuable
- Experience from similar peers is valued
- Start sharing early rather than waiting for seniority
- View sharing as part of your professional development
- Recognise that many people wish they had started earlier

## "Lack of visible role models"

Seeing few practising biomedical scientists publish can reinforce the belief that "people like me don't do this". Visibility matters.
What helps:

- Share examples of practitioner-led work
- Celebrate posters and small outputs, not just papers
- Encourage peer-to-peer sharing
- Normalise dissemination as part of everyday practice

# Overcoming Common Barriers

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## " You need a PhD project to do research"

There is a widespread perception that research is only for people with higher degrees or academic posts. This belief discourages early-career staff from getting involved and sharing their work.

What helps:

- Recognise that research and improvement happen at all levels
- Start with audits, evaluations and small projects
- Learn by doing rather than waiting for qualifications
- Remember that many experienced researchers started informally and started with smaller projects and gained PhD by publication.

## "High impact journals"

Success is often equated with publication in prestigious journals, which can make anything else feel less important. This mindset undervalues local, professional and practice-focused dissemination.

What helps:

- Match the output to the audience, not the impact factor
- Value posters, professional magazines and service forums
- Recognise impact in practice, not just citations
- See high-impact journals as one option, not the default

## "It's to small to share"

If the work solved a problem, improved a process, it is likely relevant to someone else. Impact is more important that project scale.

What helps:

- Select an appropriate format for the information based on the work
- Consider whether other local sites could replicate the work
- Small projects are often easier for others to replicate
- Not all dissemination requires large datasets or complex statistics

# Fear of Rejection

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Fear of rejection is one of the most significant reasons people do not submit work. It particularly affects early-career staff, but also impacts experienced professionals, and it often appears just as confidence in writing begins to grow.

Rejection will often feel personal, when it isn't. When work is closely tied to personal effort and professional identity, feedback or rejection can feel like a judgement on ability. In reality, rejection is usually about fit, scope, format or audience, not quality or value.

Rejection is part of sharing, not a sign to stop. Rejection is a routine part of dissemination across journals, conferences and professional publications. Most people who publish regularly have experienced multiple rejections along the way.

Comments from reviewers or editors aim to improve clarity, focus and impact. Editors will aim to make your work more appropriate to the target audience of their publication. Even when work is not accepted, the feedback can strengthen future submissions or help identify a more suitable outlet. Valuable work often finds the right home on a second or third attempt.

Each submission, accepted or not, builds familiarity with the process. Over time, rejection will feel less threatening and more like a normal step in sharing work. Discuss the feedback with local colleagues, who can help determine whether the comments are relevant and proportionate, and ensure that any responses or revisions remain professional, constructive, and appropriate.

# Building Writing Confidence

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**Writing is a skill. As with all skills, proficiency and confidence develops over time and with practice.**

Many people who regularly share or publish their work describe starting with uncertainty and recall developing by doing. Waiting until you feel confident often means never starting. Writing itself is what builds writing confidence.

Early drafts are meant to be rough and unfinished. It's important to consider that when you read something in a journal, article or any other media, it's the finished article which has undergone review and many revisions. That's far from the first draft.

Try to consider your writing as writing for people like you, writing feels easier when the audience is clear. Writing for peers, colleagues or people working in similar services reduces the pressure and helps keep language practical and accessible.

Use familiar formats first. Confidence grows faster when starting with formats that feel achievable like posters, short reports, presentations or reflective pieces. These formats help develop writing skills without the pressure of long, formal papers.

Trying to perfect sentences while drafting will likely stall your progress. Writing flows more easily when drafting and editing are treated as separate stages. Getting ideas down matters more than how polished they sound initially. Many writers employ a "*get it written first and get it good later approach".*

Academic writing is a learned skill and is not intuitive. It improves with exposure and practice. Review examples of academic writing on topics aligned with your project. Constructive feedback is vital. It helps normalise writing as a shared activity, rather than a solo task. Informal peer review builds confidence and improves clarity before work is shared more widely.

# Peer Review

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Peer review is a key part of the publishing process

Peer-reviewed journals assess methodological rigour, ethical standards and originality. Peer review is designed to improve work, not to judge the person who wrote it. Many people find it intimidating until it's experienced first-hand.

Peer review is a dialogue, not a verdict. Many people expect peer review to end in a binary acceptance or rejection. In reality, most submissions receive comments asking for clarification, changes or further explanation. This is a normal part of the process.

**Step 1: Before you submit**
Most experienced authors emphasise that the peer-review process starts before submission. Taking time at this stage prevents avoidable delays later.
Key actions at this stage include:

- Carefully reviewing the author guidelines
- Checking scope, format and word limits
- Confirming reference style and structure
- Discussing the draft with colleagues who have submitted before

**Step 2: Submission**
Once submitted, the manuscript is usually checked by a central editor or editorial team. This initial check is often about fit and completeness, not content quality.
At this point, work may be:

- Sent out for peer review
- Returned for minor technical changes
- Declined because it does not match the outlet's scope

**Step 3: Peer reviewers assess the work**
Peer reviewers read the work and provide comments. These comments often focus on clarity, justification, structure and relevance, rather than rewriting the work for you.
Reviewers typically ask questions that readers would ask after publication — peer review brings those questions forward.

# Peer Review

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**Step 4: The editor reviews the feedback**
Reviewer comments are usually filtered through an editor, who considers whether feedback is reasonable, appropriate and consistent. Not all reviewer comments are automatically passed through unchanged.
The editor then decides whether the work should:

- Be revised and resubmitted
- Undergo further review
- Or progress towards acceptance

**Step 5: Feedback is returned to you**
Feedback often arrives as a set of numbered comments. This can feel overwhelming at first, particularly if comments are direct or technical. Many participants describe this as the most emotionally challenging stage.

**Step 6: Responding to the feedback**
Responding well to peer review is a learned skill. Experienced authors recommend:

- Responding calmly and taking time before replying
- Discussing feedback with colleagues who have experience
- Addressing each comment clearly and respectfully
- Not all suggestions need to be accepted and changed, if necessary, outline why you disagree with the feedback, ideally with supportive evidence.
- Explaining what has changed and why

**Step 7: Revising and resubmitting**
After revisions, the work is resubmitted. It may return to the same reviewers or be checked by the editor alone. This cycle can happen more than once and is a normal part of the process.

Several participants reflected that peer review often improves the final output by addressing questions before publication rather than after. This strengthens confidence and credibility once the work is public.

Consider becoming a peer reviewer yourself. Some participants described becoming peer reviewers as a turning point. Reviewing others' work helped them understand expectations, reduced anxiety about feedback, and improved their own writing.
Benefits include:

- understanding how decisions are made
- recognising common issues early
- gaining confidence in your own submissions

# Demonstrating impact

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When it comes to sharing or deciding if your project is of sufficient quality to share you should consider impact. Impact is consistently described as the most important element of sharing work. Demonstrating the impact of your work helps others understand why the work matters and how it contributes to patient care, service improvement and/or professional practice. This is ultimately the factor that will encourage others to act on your shared learning.

Impact is often assumed to mean large-scale outcomes or statistically significant results. In practice, impact can be demonstrated from smaller, local changes that improve how services work or how patients experience care.

Impact can include:

- Improved turnaround times or workflow
- Changes to practice or processes
- Improved safety, quality or consistency
- Enhanced patient experience or access

Start with the problem that matters. Demonstrating impact begins with clearly articulating the problem or need that prompted the work. This will frame why the work was undertaken and why it mattered to the patients or services.

Impact is strengthened when it is supported by evidence. This does not need to be complex, but it should be clear and credible. Examples of evidence could be audit data, service metrics from before-and-after comparisons, feedback from staff or users or the observed changes in practice.

Learning itself can be a form of impact. Understanding what did not work, or why change was challenging or ineffective can be valuable to others facing similar issues and looking for solutions.

Impact is demonstrated by showing what changed because of the work. Learning and awareness are valid early indicators, but stronger impact is shown through changes in behaviour. The greater the spread of those changes across teams, services or systems, the greater the scale of organisational and patient-focused impact.

Ask yourself what behaviours have changed as a consequence of your work?

# Using AI and Large Language Models

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Artificial intelligence (AI) and large language models (LLMs) are increasingly embedded in everyday working life. For those involved in research and sharing learning, they can feel like helpful enabling tools and uncertain pitfalls at the same time.

While AI can help people start writing, organise ideas improve clarity and support neurodivergence, it also brings new responsibilities around how work is developed. Understanding both the benefits and the limits of these tools is now an important part of professional conduct and publishing practice.

**AI tools do not understand clinical context, organisational nuance or professional accountability.**

**Responsibility for accuracy, interpretation and meaning always remains with the author.**

**All AI-generated outputs requires critical review, particularly where clinical, ethical or professional implications are involved.**

AI tools should never be used with identifiable, sensitive or confidential information. This includes patient data, staff details, internal service information or unpublished organisational material. Safe use depends on anonymisation, discretion and adherence to local information governance requirements.

Large-language models can hallucinate facts and may inadvertently disclose sensitive information. See Generative AI in Education Policy for Pathology in Wales

When used carefully, AI tools can help reduce some of the practical and cognitive barriers that prevent people from writing and sharing work. Used appropriately, AI particularly LLM tools can support clarity, structure and accuracy without changing authorship or other systems can support early information gathering for literature reviews, to summarise papers and to manage or generate your references.

If you use AI, acknowledge it in your work. Identify what was used and how. See references for example.

# Tools and Templates

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For many people, the hardest part of sharing work is moving past the blank page. As with enzyme activation, a small input of energy is often needed to trigger progress. Once that threshold is crossed, ideas begin to connect and writing becomes easier. Tools and templates exist to support this early stage by helping people begin.

Step 1 - **Research & Innovation quick guide:** Provides an overview of the governance pathways, skills development and example activities for different career stages. It includes signposting to resources across NHS Wales.

Step 2 – **Templates:** R&D offices supply project-outline templates, consent forms and risk-assessment tools. Use these early to clarify your project and expedite ethics applications.

Step 3 – **Check you plans:** Use the **Is my study research? Tool -** Is my study research? And then if needed the **Do I need NHS REC review? Tool -** Do I need NHS Ethics approval?, then is needed the Integrated Research Application System (IRAS) provides standard templates for research protocols, participant information sheets and consent forms. Using these resources can expedite ethics approvals and simplify submission.

Step 4 – **Online tools:** Depending on the task there are numerous tools that can help with given tasks.
The list on the next page are examples of some available tools and not a recommendation for a given task. There may be free and paid versions of the software available with different capability. As mentioned previously tools are there assist and not to replace. You are still personally responsible for assuring accuracy and validity.

Step 5 – **Review the authors guidance documents:** They will state the required formatting and structure expected
Example: British Journal of Biomedical Science | About / Publish with The Lancet Group. Similarity poster competitions or presenting guidelines will have instructions to follow on formatting, trimming etc.

# Tools and Templates

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| | |
|---|---|
| Academia.edu | Academia.edu is the platform to share, find, and explore research papers. |
| Anara | Anara helps you find, understand, organize and produce scientific documents |
| Connected Papers | Connected Papers is a visual tool to help researchers and scientists find academic papers relevant to their field of work. |
| EndNote | EndNote is a reference management tool |
| grammarly | Grammarly is a language writing assistant software tool to review the spelling, grammar, and other features |
| NotebookLM | NotebookLM can create an audio overviews and generate some graphics from your notes |
| Jenni | Jenni is an AI research and academic writing assistant that helps create essays, papers, and citations |
| quetext | Quetext is a Plagiarism Checker and AI Detector |
| scite_ | Scite is an AI-powered platform that helps researchers discover and evaluate scientific literature |
| GPTZero | GPTZero detects AI content and checks writing quality |
| zotero | Zotero is a tool to help you collect, organize, annotate, cite, and share research. |

**** Examples shown are of commonly used platforms and tools. Inclusion does not constitute endorsement of any specific product or service over another. Access to individual tools may be permitted or restricted by local health boards or organisations in line with local policy. Any software used should be used in line with local information governance procedures and policies.****

# Getting Started Checklist

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Before you start writing, presenting, or sharing your work, it is useful to pause and think through a few key points. This checklist will help you clarify your message, identify your audience, consider the most suitable format, and plan any next steps.

| | |
|---|---|
| **Identify your idea or improvement.** | What problem are you addressing? Is it audit, QI or research? This determines governance requirements. |
| **Engage stakeholders early.** | Discuss with colleagues, managers and, where appropriate, patients or service users. Determine who needs to be involved and recognise their contributions. |
| **Contact your R&D office.** | Prepare a brief project outline and ask about governance, ethics and available support. |
| **Plan your dissemination.** | Decide from the outset how you will share results – local meetings, posters, short articles or journal papers. Consider open-access repositories.<br>Consider which journals, conferences or magazines will suit your work and whether you need to plan around submission windows, article-processing fees or awareness events |
| **Set metrics.** | Define how you will measure impact and collect baseline data. |
| **Write and share.** | Use templates and guidelines to structure your reports or articles. Practise writing regularly and seek feedback. Engage communications colleagues early if your project has public or media relevance; they can help craft messages and timing.<br>Select one or two target journals before writing so you can follow their guidelines and word counts. |
| **Reflect and iterate.** | After sharing, evaluate feedback, adapt your project and plan your next dissemination step. Each cycle builds experience and confidence. |

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Most of the information, practical guidance, and viewpoints included within this resource are derived from discussions and interviews undertaken with contributors working across pathology, healthcare science, research, innovation, education, and communications roles, alongside the professional experience of the author. Additional supporting information, guidance, and background evidence were used to supplement and contextualise the content.


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