INTELLIGENCE HANDBOOK

Guidance and tools to support systematic intelligence gathering activity in health and care

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Think about how you stay up-to-date with the latest evidence in your area of interest, or how decisions being made in your organisation are informed by knowledge of what’s happened before, is happening now, and could happen in the future. How do you determine what evidence is relevant? How do you find exactly what it is you need, assess it and distil the key points? This process is what we’re calling ‘systematic intelligence gathering.’

Intelligence comes to us in many forms and often on a daily basis – a notification in the email inbox of a new report or paper, patient and carer feedback on their experience, a Tweet from an organisation about the latest research, or an interesting article passed on by a colleague during a meeting.

No matter the project or topic, this handbook aims to guide you through the process of finding, filtering and understanding what you learn from secondary sources, to get the most value from them. Approaches to intelligence gathering are often individual and finding what works best for you is important. Anticipating that one size does not fit all, a wide range of tools have been included and sign-posted within this handbook, accompanied by guidance on things to consider and think through.

If you haven’t started gathering intelligence yet, we recommend working your way through the sections of the handbook in the order of the contents list. If you’re up and running, we suggest you make use of the interactive functions to jump quickly to the sections you need.

"What can be asserted without evidence can be dismissed without evidence.”
Christopher Hitchens

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“Intelligence without ambition is a bird without wings”
Salvador Dali

Why are you gathering intelligence?

Having clear aims and end goals in mind will help keep you on track and also help others understand what you’re trying to achieve. Finding your focus is a good starting point before diving in, but keeping your focus is just as important. You should regularly review whether you’re moving in the right direction.
Getting specific about the topics you’re looking at goes hand-in-hand with defining clear aims. There’s no right and wrong about where to start and what might come first.

A key benefit to narrowing down the area of interest into topics is that it will help you decide where to begin searching for the intelligence you need. Topics can also give you a framework to start sorting the intelligence you find.

What do you know about the area of interest already?
Pulling together relevant documents you already have (explicit knowledge) and writing down what you know from experience (tacit knowledge) is a useful starting point. To complete this systematically consider using a ‘before action review’ which is detailed in our Learning Handbook.
Do colleagues have knowledge of this area they can share with you?
Collecting documents is part of this (explicit knowledge), but it’s also about learning from others’ experiences (tacit knowledge) for which there’s a wide range of tools you can use that are in our Learning Handbook, e.g. speed geeking, thinking council. You might also want to consider methods such as working out loud.

Have you considered the knowledge of patients and carers?
As part of a commitment to ‘no decision about me, without me’ careful consideration of patients and carers views and experiences as a rich and valuable source of intelligence is advised. You might find it useful to access NHS England’s guidance on Transforming Participation in Health and Care as a starting point.

What don’t you know?
Identifying what you still don’t know and what questions you have is a useful way to target your intelligence gathering to help fill in the gaps. It is a good idea to keep a log throughout your project to always keep in mind what ‘knowledge gaps’ remain and emerge from beginning to end.
Being clear about the aims

Whether working independently or gathering intelligence for someone else, having a clear understanding of what your work aims to achieve can help keep you focused. There’s so much intelligence out there, understanding why you’re doing the work will help you decide what is and isn’t relevant.

- **Are you trying to understand what’s happened previously?**
  When completing ‘background research’ consider how far back your gathering will stretch, to help you decide what intelligence is ‘outdated’ and also whether to use grey literature.

- **Are you trying to identify what gaps exist in the intelligence available?**
  For research that involves a ‘gap analysis’, keeping track of questions that go unanswered in the intelligence you find will help direct your searches and also quicken analysis in the end.

- **Are you trying to answer a particular question?**
  If there is a very specific focus for your work try breaking this down into a list of smaller questions that can be tackled one at a time to reach the answers you need.
Mapping stakeholders

Learning about your stakeholders and understanding more about their requirements will help throughout the whole process of intelligence gathering. Understanding the priorities and interests of each stakeholder group in relation to your work will help you decide on the most effective approaches to gathering, storing, interrogating, analysing and reporting.

- **Do you understand the impact your work might have on different stakeholder groups?**
  Carrying out a stakeholder mapping exercise will help you think through how your work could benefit some while challenging others, and highlight those you need to consider engaging at an early stage to involve them in shaping the aims. You may also wish to access Evidence for Success from the Knowledge Translation Network which focuses on using evidence to influence.

- **How can you deliver a valuable resource to stakeholders?**
  The type of intelligence you gather might vary depending on how the findings will be used by others, for example using statistics and / or narrative to influence change will vary depending on who the stakeholders are and what you anticipate their interest and level of understanding to be already.
Adjusting to practicalities

The time you have to complete intelligence gathering can be a key factor in deciding the approach you take. Planning out this activity step-by-step will help you identify limitations and give you an opportunity to either work with them or change your approach to minimise them further.

■ **How far ahead are you planning?**
  Developing a project plan / schedule to plot the stages of intelligence gathering against deadlines could help you forward plan and adapt your approach quickly if needed.

■ **Where can you afford to be flexible?**
  Intelligence gathering is an ongoing process with no clear ending, so considering where there is flexibility can be helpful to know when to keep going or when to stop.

■ **What’s your plan b?**
  Whether this includes narrowing the topic, asking others to help or buying in expertise to deliver, thinking through the support you might need at an early point will help minimise risks.
“It is harder to conceal ignorance than to acquire knowledge”

Arnold H. Glasow

How will you find intelligence that’s timely and relevant, while filtering out what you don’t need?

There’s a mass of data, reports, papers, articles and much more out there, so getting organised and having a strategy can save a great deal of time and effort. Being thorough while efficient can be challenging and making the most of tools to gather and filter intelligence can save you time, energy and effort.
Where to search

Although the internet is now often a quick and easy starting point to gather intelligence, hard copy sources can still prove to be valuable. Taking time to consider what kind or format of intelligence you need can help you then decide where to look for it as a next step. There are a number of different ways you can search for intelligence and where you search will be strongly determined by the type of resources you are searching for.

Is the intelligence you need linked to a particular event?

When gathering intelligence that is about or connected to a conference for example, it is useful to consider information cycles to target searching at the right times and in the right places.
Do your stakeholders value certain forms of intelligence over others?
If your stakeholders place high value on intelligence that has been peer reviewed for example, this will narrow down where to start your search as you would likely use journals as opposed to blogs or opinion pieces. A great place to start in regards to trusted guidance and systematic reviews is NICE evidence search.

Can you use a snowball approach to gather the intelligence?
Should you find intelligence that is very relevant, following up the references it draws on from its bibliography is a quick and easy way to track down other sources to review.

Will you access what you need using your Athens account?
All health and care organisations have access to the OpenAthens portal which connects staff to hundreds of academic journals. Contact your organisation’s OpenAthens administrator to gain access.
Where to search

**What access does your organisation have to libraries?**
Check to see if your organisation has a library system where books purchased using corporate budget can be borrowed. If you are an NHS staff member you may find that your local university library or university hospital library will grant you open access and also allow you to loan resources. For a full list of health service libraries, see the Health libraries and information services directory.

**Do you need to access the latest statistical evidence?**
There are a number of publically available databases that you could access as a starting point to search for relevant data, such as the UK Data Centre, Data.Gov, HSCIC or the BCBV indicators.

**Are there key organisations to keep an eye on?**
Thinking of public, private and voluntary sector organisations, and the professional and regulatory bodies that operate in and around your topic of interest can give you a starting point by viewing websites, linking through social media, signing up to receive alerts and notifications. Here’s a list useful resources to start you off.
How to search

Once you’ve decided on the type of intelligence you need and where you will search for it, finding it amongst a mass of what you don’t need can be time consuming without careful planning and a strategy in mind. Knowing how to search effectively for intelligence can save you valuable time, energy and effort.

■ How will you decide on the search terms to use?

Intelligence that is either stored online or catalogued electronically, can be accessed swiftly if the right search terms are used. Create a list of search terms based on your topic and common themes, and take inspiration from intelligence as you find it, drawing on key concepts or phrases used. Keep adapting your list throughout the project so each time you find a new resource you run through the most effective search terms to make sure nothing is missed.
**Who is well-known as a specialist in your area of interest?**

If you’re aware of a particular person known to specialise in the topic area, begin by searching their name and, if intelligence is found that includes co-authors, begin searching for intelligence using their names too and take a snowball approach.

**Do you plan to use search techniques?**

Using Boolean techniques, you can search very specifically to include or exclude certain intelligence. Our Boolean Search video can help you to develop narrow search terms by connecting and combining phrases using NOT and OR for example. See our Boolean search help for more detailed guidance.

**Are you familiar with searching in the OpenAthens Portal?**

You can use our OpenAthens guidance to set up alerts as well as using the search functions to find relevant academic publications.
There are a number of reasons why you may not be able to find relevant intelligence, and understanding the roots of your challenge can help you decide on what to do next.

- **Is the topic cutting edge?**
  If this is a new area or topic and little can be found in traditional places, you might need to think outside the box and search for grey literature.

- **Are you confident you understand the topic fully?**
  Returning to your aims and objectives to focus the intelligence gathering can be an important step to refresh thinking and possibly reframe the activity. Retracing the steps you’ve taken so far can save time in the long run, so refer back to the ‘focus’ section.
Have you found a genuine gap in the intelligence available?
If you retrace your steps and make sure your approach has been thorough but still struggle to find the intelligence you need, it may be that you have uncovered a genuine gap that can only be fulfilled through primary research. It may be useful to try crowdsourcing or carry out learning activities in your organisation and with stakeholders, as a next step. Further details can be found in our Learning Handbook.
“By failing to prepare, you are preparing to fail”
Benjamin Franklin

How can you store and organise intelligence so that it’s easy to retrieve?

Taking account of copyright, the way you store intelligence will vary by type and source. It’s also worth thinking through a system that takes into account storage of hard copy as well as electronic formats; a range of file sizes; a category structure aligned to topics or themes; and who else might need access, when and how.
Making sure you’re up to date on your organisation’s guidance for where to store intelligence is important so that it is accessible to others who might need it and find it useful. Most organisations have a shared drive for example, and will be able to provide their staff with a policy on information governance that will be useful in helping you put your intelligence in the right place.

It’s also a good idea to check the copyright law that’s relevant to the intelligence you gather, as some formats and publications will have restrictions upon them in terms of what you can copy, store or share with others.
### Storing different types of intelligence

**Organising intelligence**

**Referencing**

#### How will you store intelligence from physical resources (e.g. books, magazines)?

If you have borrowed books from your organisation’s library or a local university library, they will be able to provide you with guidance on relevant copyright law so you know if you are allowed to scan, photocopy or photograph the intelligence, and find out about rules on the number of pages you’re allowed to take a copy of for instance.

#### How will you store intelligence from online resources (e.g. journal articles, blogs, websites)?

Copyright laws will vary based on the publication and so it is always advisable to check this before sharing an intelligence resource (e.g. on a shared drive, through printed copy). If in doubt it is a good idea to store only on a personal drive for your own access and to share just a web link to the resource with colleagues and stakeholders. Keeping a resource ‘master list’ of links can be useful to circulate in a team if several people are gathering intelligence on the same topic.
Organising intelligence

If you collect a lot of intelligence, thinking through how you will organise it into categories for example, will save you time when it comes to retrieving it at a later date. You could develop a folder system, tag the intelligence, or make use of software to organise it by topics, or by intelligence type. You might even develop a system based on the search terms you used to find the intelligence.

Have you considered using RSS feeds?

To save you trawling websites for news and updates, subscribing to an organisation’s RSS feed and using an RSS feeder, means the intelligence will come to you as and when something new is published. This can save you time and help you store and organise the intelligence in a tailored way to suit your needs. There is a range of free RSS feeders to use.
Do you plan to use bookmarking tools?
If you come across intelligence online that you don’t have time to review there and then, use a bookmarking tool to save the intelligence in a central place where it is easy to access, and to allow you to build up your own virtual library. There is a range of free bookmarking tools to use.

Will you use other content curation tools?
To help you find and also share the intelligence you have gathered with selected others, you might want to explore content curation tools such as Evernote, Zotero or Microsoft OneNote. There is a range of free content curation tools to use.
Referencing the intelligence you have gathered is a way to acknowledge the work of others and signpost readers of your work to the sources you have used. This is a very important way for your work to be verified and its credibility and reliability to be assessed. Making sure that you fully and correctly reference the intelligence you use in your work will ensure you avoid unintentionally plagiarising the intellectual property of others.

Do you know when it is appropriate to use references?
Good practice would be to reference general points and ideas, as well as direct quotes, charts, diagrams, statistics and tables that are drawn from the work of others.

When do you plan to begin collecting references and keeping track?
All intelligence you plan to use should be referenced, and it saves time to do this throughout your project by keeping a list of everything you have accessed.
Do you know how to reference correctly?
There are different styles of referencing and your organisation might have a preferred approach, but the most common styles found are Harvard, Vancouver and MHRA – clicking the links will take you to referencing guidance created by Leeds University. You may also want to use the Queens University Belfast reference generators for Harvard, Vancouver and MHRA.

Do you need support to store and manage your references?
There are a number of referencing software packages that can help you to store and manage your references while creating a full bibliography / reference list at the same time, e.g. EndNote, Mendeley, RefWorks, Cite This For Me.
“Beware of false knowledge; it is more dangerous than ignorance”
George Bernard Shaw

How do you know the intelligence you’ve found is reliable and trustworthy?

What counts as evidence in one context might not stand up to scrutiny in another, so it’s important to be clear about what you will and won’t use as an evidence base for your work. Being aware of the limitations of the intelligence you plan to use will help you prepare for analysis and reporting.
Reflecting on the type of intelligence you have gathered will help you to make a judgement as to how reliable it is, which can inform a decision about how it can be used in your work, if at all.

**Different types of intelligence**

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**Will academic intelligence stand up to scrutiny?**

Typically an article or report published by a journal or an academic body such as a university has undergone a peer-review process and used rigorous methodology to strengthen its credibility. Its limitations are usually highlighted within the intelligence itself to make sure anyone reading it is aware of areas of weakness. Academic intelligence is often a valuable and reliable source of evidence you can trust.
Different types of intelligence

Reliability

How reliable is intelligence from the internet (e.g. blogs, websites)?
The reliability of online intelligence is often judged on the source. A blog post or an opinion piece is often personal and lacking in reference to evidence, however, if published by a reputable organisation such as The Kings Fund, it stands to be credible in relation to a comparable publication from an unknown organisation.

Should blog posts and opinion pieces be included as intelligence?
As indicated it is important to consider the source when deciding whether or not to use intelligence like this. It is good practice that any statements or ‘facts’ shared in the publication are verified by checking references listed. If you do decide to use this kind of intelligence in your work it is important to make clear its limitations and let the reader know you are aware of them and have used it with caution.
Are books always reliable as they’re published?
Books can be subjective too, so again it’s about considering the author and the book’s intended purpose, e.g. is it written to inform or to persuade the reader. If using books in your work, it is advised that the most recent edition is sought to ensure it is the most up-to-date version available; while updates to each edition are usually minimal, this will help you make sure you don’t reference out-of-date intelligence.
Reliability

This is a very tricky task and relies not on a set list of dos and don’ts we can all agree on, but on your judgement. Filtering the intelligence as you find it can be useful as its source may give clear signs of whether or not it is trustworthy.

Do you know the signs of untrustworthy intelligence?

Individual signs might not be a cause for concern, however a number of signs in combination would raise important questions about the reliability of intelligence. For example, if the finished product appears unprofessional and poorly developed; if the intelligence lacks references or its references cannot be verified; if the intelligence uses language to persuade rather than to inform.
If the organisation isn’t familiar, should the intelligence be used or discarded?

Some of the most valuable intelligence can come from unexpected sources, so if you’re not familiar with the organisation publishing it, try asking colleagues about it or finding out what you can through other channels. There are tools available that can help you verify a source, including citations and metrics, which will help you see what impact the organisation / intelligence has had already in the area of interest.
How will you make sense of intelligence and identify the key insights that are most relevant?

There are a number of analysis approaches you can take depending on the type of intelligence. It’s likely that this process is lengthy and while there may be no short cuts, you can make sure your approach is thorough yet effective and condense a mass of intelligence into key insights that are easy to understand.

“Research is to see what everybody else has seen, and to think what nobody else has thought”
Albert Szent-Gyorgyi
Making sense of it all

Having found and filtered intelligence so you know it’s relevant, you’re ready to make sense of it and get into the detail of what you’ve found. A lot of time will likely be spent reading and re-reading, making notes and annotations, to understand the key insights.

**What can you do if intelligence is contradictory?**

Interrogating the intelligence again is one way to determine which source you consider to be most reliable and credible, and therefore most trustworthy. Considering the dates of the intelligence can be important, as well as the author / organisation that has published it. It is important to keep questioning the intelligence as you review it until it makes sense; however it is often a valid finding in itself that intelligence currently available on a topic is inconclusive. The most valuable outcome could be a set of unanswered questions.
Is it too late to reflect back on aims, objectives and approach?
It’s never too late to refer back to your aims and objectives to make sure they still give focus to your work, and even at the analysis stage it might be appropriate to search for further intelligence as new topics / themes / insights generate new search terms, for example.

Does analysis have to be completed by one person?
If your topic and / or objectives are distinct and easy to separate from one another, analysis can be split, although it is advised that a consistent approach is taken and agreement is made in how analysis will be recorded and shared by everyone involved. Even if no one is carrying out analysis with you, calling upon colleagues / experts to help you make sense of intelligence can be beneficial, e.g. card-sorting, crowdsourcing.
**Making sense of it all**

**What analysis approaches are there?**
Finding what works best for you is more important than choosing an approach and sticking it out to the bitter end. Depending on your reading, critical thinking and organisational skills, you might work best with a formal or informal approach to your analysis.
“Having knowledge but lacking the power to express it clearly is no better than never having any ideas at all”

Pericles

How will you report back to others your findings in an engaging and accessible way?

If you’ve established clear aims, gathered, stored, interrogated and analysed the intelligence, the task at hand is how to approach reporting in a way that is engaging and meets stakeholder requirements to make sure the findings have impact. Reviewing your aims is also a key step to make sure the hard work pays off and the outcomes are valued.
Tailoring to your audience

Keeping in mind the different audiences that will access and be interested in your reporting documents is important before you decide on the format, to ensure it is not only accessible but also engaging. Language and tone are also important to consider, making sure your work is easy to understand and is clear.

What do you know about your audience already?

A stakeholder mapping exercise will help you think through how your work needs to be communicated to a range of different audiences with varying needs and requirements. This IHI video might spark ideas for how to engage different audiences.
Sharing

How can I inform and engage at the same time?
There are so many ways you can communicate your work, that even a detailed written report can be engaging with considered design. There is a range of free software available online for you to explore and consider different sharing formats that will help you engage, such as infographics, interactive presentation, animations and apps.

Are there good practices to keep in mind?
Working in health and care, a good rule of thumb is to ensure that your work is widely accessible by using Plain English, avoiding jargon, complicated language and abbreviations. A good question to keep in mind is whether or not a member of the public would understand it clearly. It’s also good practice that you ask someone with ‘fresh eyes’ to proof read your work and check all of your referencing. You may also find this Jargon Buster useful.
Sharing

Sharing what you have learnt with others interested in the same area as you has many benefits. The health and care system is so vast that connecting to others and sharing intelligence gathered can save organisations considerable time, energy and effort, and also avoid duplicating work you’ve already done. Openly and widely sharing your work within and outside of your organisation will encourage others to do the same.

How could I share intelligence inside my organisation?

Many organisations have an intranet facility, regular newsletter or bulletin, and some even have collaboration software or platforms to help colleagues connect and share, e.g. Yammer, SharePoint. It’s a good idea to check your organisation’s communications policies to make sure you share your work in the most effective way.
How could I share intelligence outside of my organisation?

Using social media to share intelligence has the benefit of reaching a wide range and number of stakeholder groups at the same time. It is a quick and easy way to increase the audience for your work in a snowball manner. Twitter, Slideshare, YouTube and LinkedIn are examples you could use. For example, on Twitter you could share your work and target certain professionals or organisations you anticipate to be interested by tagging them in your Tweet. Should they then share that with their followers, with one Tweet the reach of your work will grow hugely. It’s also good to know that depending on what you use, you can track and measure the reach of your work using social media metrics. In addition, consider linking to key organisations that share your area of interest and will extend your reach to patients and carers, such as a royal colleges, professional body or charities.

There are also a number of content curation platforms you can use to showcase the materials you have found on the internet or while using social media. These include Flipboard, Paper.li and Summify.
Many of the tools referenced within this handbook have been inspired by a number of online freely accessible resources. Where relevant we have highlighted ‘further reading’ within the tools so that you can trace back to the original sources. As we’ve sign-posted to many other sites and organisations, should you notice a hyperlink that is no longer working please do let us know: knowledgemanagement@nhsiq.nhs.uk
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Improving health outcomes across England by providing improvement and change expertise

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