Open Pharma workshop at the 2025 Researcher to Reader Conference

More power to the reader: how can we improve research communication by making content more readable?

25–26 February 2025

Post-event report

More power to the reader

How can we improve research communication by making content more readable?

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Objectives

In a crowded online world, we need **clear**, **concise**, **reliable scientific information** to make decisions about our research, environment and health.

Transparent reporting and plain language can **help non-specialists understand and use** scientific and medical research information and help **time-poor specialists** to keep up to date with developments in their field.

In this workshop, we will:

- explore the **value of readable research content** from multiple perspectives, with a focus on **plain language**
- explore the **barriers to implementation and dissemination** of plain language content
- co-create **recommendations to improve accessibility, readability and understandability** of research content for all readers
- identify **research gaps** that should be addressed.

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Facilitators

Joana Osório
Communications Team Leader
Oxford PharmaGenesis

Laura Dormer
Co-founder and
Editorial Director
Becaris Publishing

Sarah Thomas
Publications and
Communications Senior Manager
Ipsen

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Agenda

Tuesday 25 February | 10:30–11:30

The ‘why’: the need for understandable research content, with a focus on plain language

Aim: to explore the needs of different information seekers, how they engage with scientific literature, and the importance of plain language content to meet the United Nations Sustainable Development Goals.

Tuesday 25 February | 17:00–18:00

The ‘how’: implementation and dissemination of research summaries in plain language

Aim: to discuss minimum standards for plain language synopses; how to meet reader needs; and barriers to developing and publishing plain language content.

Wednesday 26 February | 10:00–11:00

The ‘what next’: reaching the readers

Aim: to co-create recommendations for how best to use plain language and other understandable research content formats to serve the needs of readers, highlighting research gaps that must be addressed to achieve this goal.

Wednesday 26 February | 16:00–16:30

Workshop feedback

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The ‘why’

The need for understandable research content

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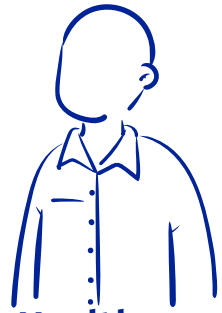
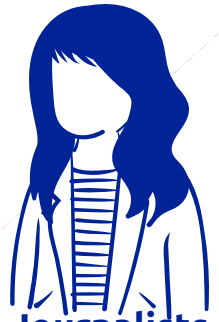
Activity 1 | Understanding needs

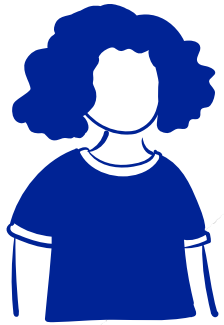
Each group will adopt the persona of a different information seeker.

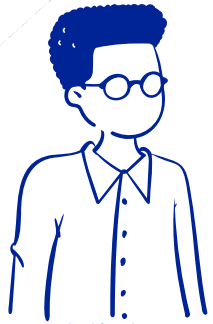

Policymakers


Authors and researchers


Healthcare professionals


Journalists


Patients and caregivers


Publishers

Over the next **30 minutes** you will consider the following questions:

1. **Why** do I need to be able to read and understand reliable scientific information?
2. **How** can I access reliable scientific information?
3. Which information formats are **most useful** for me?
4. What are the **consequences** if I can't read and understand reliable scientific information (related to UN SDGs)?

Each group will be asked to provide a summary of your discussions at the end of the activity.

SDGs, Sustainable Development Goals; UN, United Nations

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Activity 1 | Understanding needs
Summary of workshop discussions (1/4)

Patient/caregiver

Why do I need to be able to read and understand reliable scientific information?

- To know WHY – informed perspective on clinical advice and ability to judge
- To have confidence that advice is the best given available knowledge

How can I access reliable scientific information?

- Trusted sources
- Clear lay summaries
- Expert guidance – community regulated?

Which information formats are the most useful?

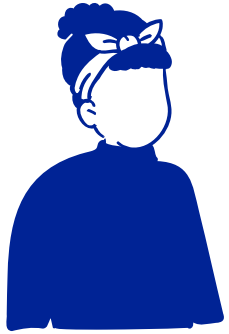
- TikTok
- Consumable
- Consumer-attractive formats
  - Video
  - Audio

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

- Language inaccessible
- Imbalanced conversation on health globally
- Life and death
- Inability to participate in decisions; over-reliance on doctors
- Lack of access to the best care
- Not educated in what I need

SDGs, Sustainable Development Goals

Activity 1 | Understanding needs
Summary of workshop discussions (2/4)



Author/researcher

Why do I need to be able to read and understand reliable scientific information?

- Not duplicating work that's already been done – building on it instead
- For 'novel' work, you need to know where to publish it (because there are gaps!)
- 'Shortcuts' can lead to lower processing/less understanding in the long term (e.g. AI summaries)

How can I access reliable scientific information?

- Institutional access to journals, books, and reports (grey literature)
- Indexes or bibliometric tools, e.g. Dimensions, Scopus, Web of Science
- Problems/challenges:
  - AI tools – summarizing research; question about the reliability element
  - OA licences – lack of knowledge
  - It should start earlier! Students are relying on a good supervisor, and you don't get that until Masters level.
  - Knowing where to look and understanding what citation can mean

Which information formats are the most useful?

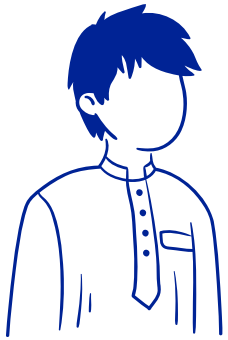
- Citable and findable resources, e.g. with a DOI
- Huge range of options – it's got to be flexible! (e.g. HTML – accessibility/optimized, PDF, print, video/audio)
- Datasets, figures – requirement for detail

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

- Misinformation!
- Slower progress towards the goal
- Lack of understanding can perpetuate in future generations of researchers

AI, artificial intelligence; DOI, digital object identifier; OA, open access; SDGs, Sustainable Development Goals

Activity 1 | Understanding needs
Summary of workshop discussions (3/4)



Policymaker

Why do I need to be able to read and understand reliable scientific information?

- Need to make research understandable to the public
- Versioning and retracting – how to track this
- Finding evidence to support policy making

How can I access reliable scientific information?

- Websites and trust markers for various publishers
- Open access – no direct subscriptions
- Direct contact with researchers: various points during process
- Indirect: team of researchers, partnerships or advisors
- Reviews and articles
- Wide range of research across the area – validate whole picture

Which information formats are the most useful?

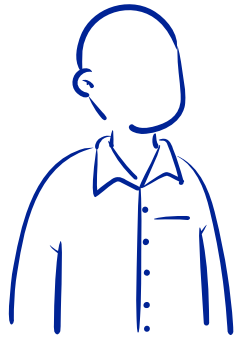
- Differentiate analysis and references
- Primary source versus summaries
- Data sets
- Plain language summaries – no jargon

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

- Not linking research to broad picture
- Delayed policy making
- Misinformation and poor policy decisions (e.g. if retracted/ out of date)

SDGs, Sustainable Development Goals

Activity 1 | Understanding needs
Summary of workshop discussions (4/4)



Healthcare professional

Why do I need to be able to read and understand reliable scientific information?

- To do my job better
- So I don't kill anyone!
- So I can progress my career
- To offer better advice to patients and to colleagues

How can I access reliable scientific information?

- Language barriers – spoken and technical
- Discovery, especially anything that is not indexed
- Paywalls/registration walls
- How do I know what is 'reliable'?
- How do I find stuff in journals and not in journals?
- It is not just science, it is also policy, regulation and social science
- Time to absorb the information
- Journal article itself a barrier to anyone who's not an academic
- Via trusted influencers: peers, manager, librarian, professional association, influences on social media

Which information formats are the most useful?

- Ability to listen and watch on any device, including a phone
- Summaries and intros

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

- I can't do my job

SDGs, Sustainable Development Goals

The ‘how’

Implementation and dissemination of research summaries in plain language

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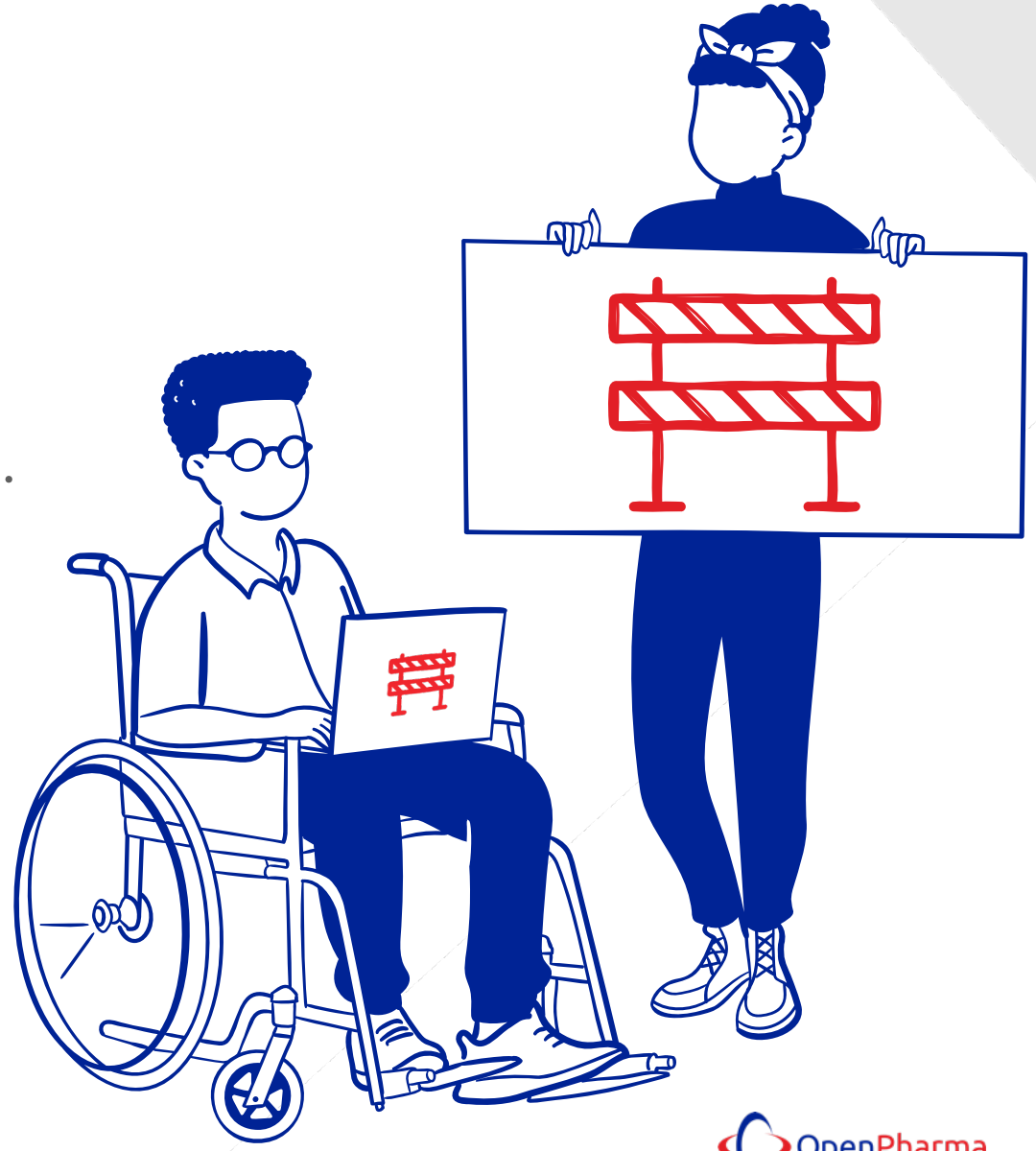
Activity 2 | Identifying barriers

Review the persona you developed this morning.

Spend the next **30 minutes** identifying **barriers** that could be preventing this reader group from **reading and understanding** scientific information.

Each group will be asked to provide a summary of your discussions at the end of the activity.



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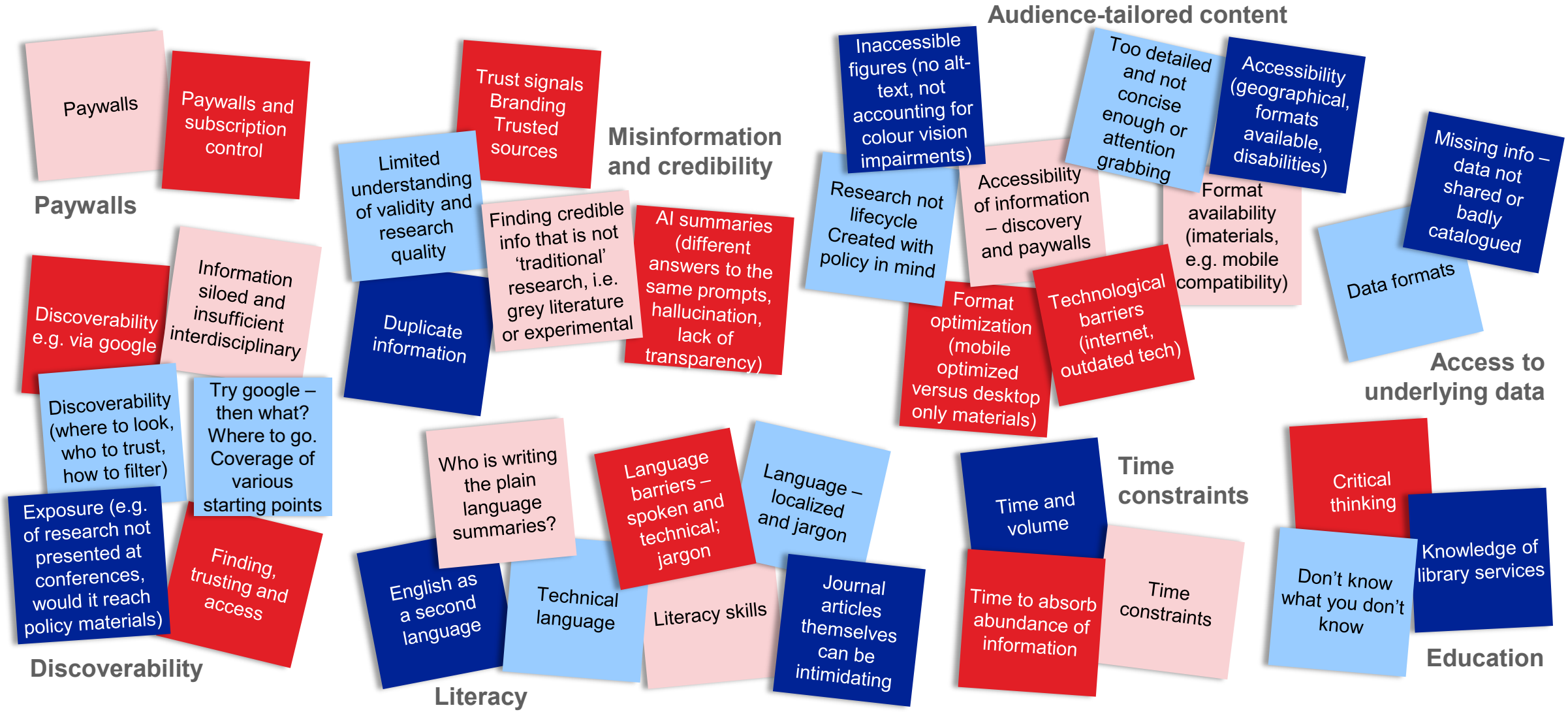
Activity 2 | Identifying barriers
Summary of workshop discussions



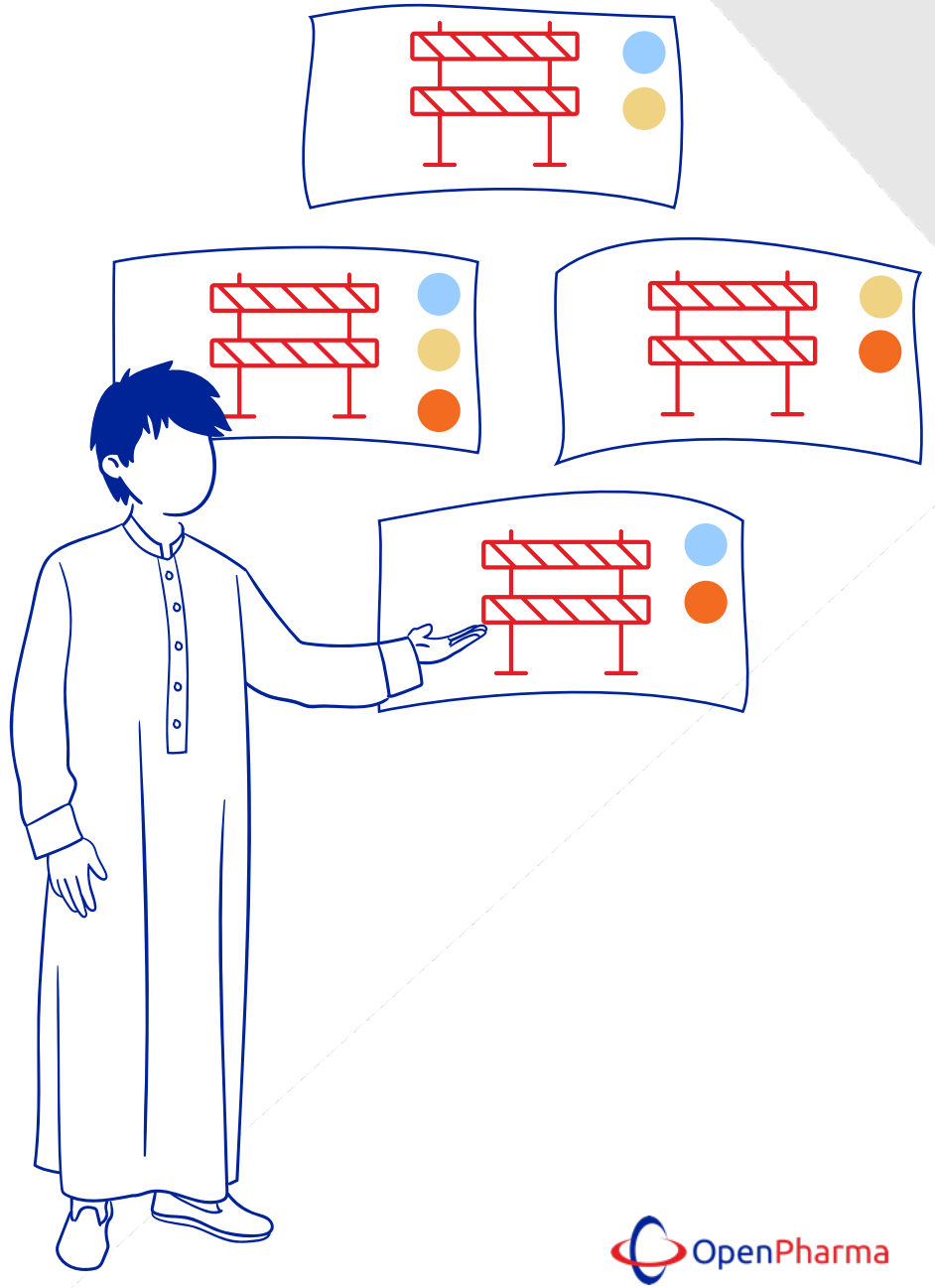
Activity 3 | Prioritization

Consider the barriers we identified during Activity 2.

You have **5 minutes** to identify the **three barriers** that you believe have the **greatest limiting effect** on the **implementation, dissemination and usage** of research information in plain language.

Use the three coloured stickers you have been given to place your votes.

We will consider solutions to the barriers with the most votes during tomorrow's session.



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Activity 3 | Prioritization
voting results

Misinformation and credibility

Audience-tailored content

Literacy

Discoverability

The ‘what next’

Reaching the readers

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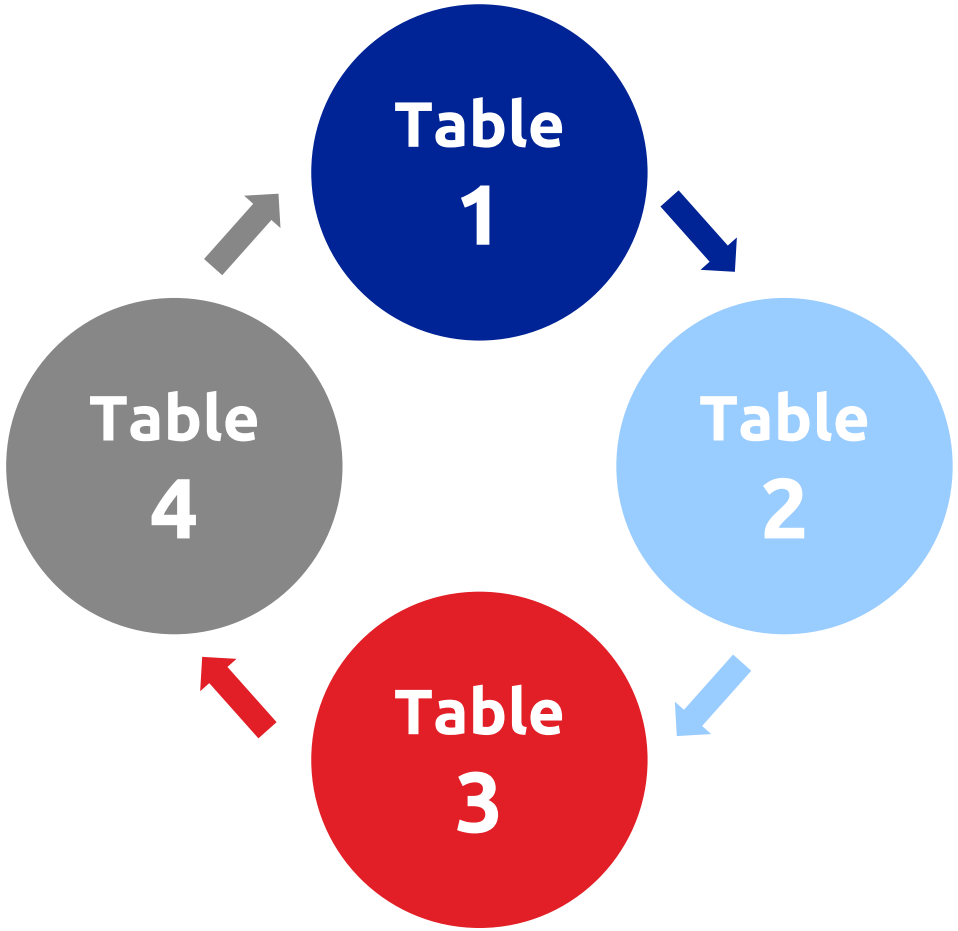
Activity 4 | Identifying solutions



4 tables

10 minutes discussion per table

1. Which stakeholder groups are affected by this barrier?
2. How could we address the barrier?
   a. Are any resources required to help address this barrier?
   b. Do any research gaps need to be addressed?
3. How can the solution best meet the needs of stakeholders?

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Activity 4 | Identifying solutions
Summary of workshop discussions (1/4)

Misinformation and credibility

1. Which stakeholder groups are affected by this barrier?

- Patients and caregivers
- Policymakers
- Healthcare professionals

2. How could we address this barrier?

- Peer-review of lay summaries
- Mandate data
- Information, literacy and training
- Support systems for non-professionals
- Traffic–light system; something clear and consistent to immediately convey trust
- Institutional logos/trust markers
- Researcher ‘TrustPilot’
- Public peer reviews – open processes and transparency
- Seeing the citations – who is referencing it and why?
- Pubpeer – post-publication reviews
- Link to related resources – community scrutiny
- Context for citations; historic or new, agree or disagree

a. Are there any resources required to help address this barrier?

- Critical thinking education
- Early education (high school) including questioning sources, etc.
- Training of publishers and editors to spot it at the start
- Sharing of problematic papers between publishers prior to publication

b. Do any research gaps need to be addressed?

- Transparent author records with good and bad info

Activity 4 | Identifying solutions
Summary of workshop discussions (2/4)

Audience-tailored content

1. Which stakeholder groups are affected by this barrier?

- Authors and researchers
- Policymakers
- Patients and carers
- Healthcare professionals
- Journalists

2. How could we address this barrier?

- Repurpose existing content into new formats and media
- Adapts authoring for lay summaries
- Different kinds of formats, i.e. podcasts (helps the time poor)
- Translations (e.g. spoken and technical, reliability)
- Older materials to be adapted as well as new research

a. Are there any resources required to help address this barrier?

- Education for researchers – what is done with research and how will it be used
- Creation of research in different formats and education about this
- Summarising sections relevant to the stakeholder

b. Do any research gaps need to be addressed?

- Data availability
- What works best for different people? Can different formats be created automatically?

3. How can the solution best meet the needs of stakeholder?

- Researchers: methods, data and references
- Policymakers: conclusions and next steps

Activity 4 | Identifying solutions
Summary of workshop discussions (3/4)

Literacy

1. Which stakeholder groups are affected by this barrier?

- All to varying extents, e.g. depending on familiarity with topic/jargon
- Patients and caregivers
- Policymakers
- Journalists (higher needs – less expertise in niche areas)

2. How could we address this barrier?

- A representative of the group sense checking on behalf of stakeholders
- Visualization and clear charts/graphs/infographics – easy for non-specialists
- Video formats – easier to digest info in short, clear snippets
- Plain language summaries and auto-tools
- Automatic translations
- Linkage to related resources and articles

a. Are there any resources required to help address this barrier?

- Early education on reliability of resources (information literacy)
- Advice for authors, e.g. knowing your audience
- Resource to automate and validate credibility

3. How can the solution best meet the needs of stakeholder?

- Multiple formats
- Versioning of content for different audiences, with automated views based on the user and the option to switch views
- Multiple language translations

Activity 4 | Identifying solutions
Summary of workshop discussions (4/4)

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Discoverability

1. Which stakeholder groups are affected by this barrier?

- All stakeholders

2. How could we address this barrier?

- Better metadata (to surface in search engines like google)
- Summaries available outside paywalls (with trust markers)
- Trust markers
- Better filtering systems
- Subject digest with informed and unbiased curation
- Linking out to other sources from the article
- Recommendations – systems, alerts and community newsletters
- Easy sharing tools (e.g. social media)
- Persistency – does the item still exist?
- Citation trails – keyword driven to surface content

a. Are there any resources required to help address this barrier?

- Metadata taxonomies
- (Crowdsourced) quality assurance index without regional bias

b. Do any research gaps need to be addressed?

- Engagement with search engines and indexes
- Cultural differences in perceptions of trust
- Educating readers on how to identify trustworthy sources

3. How can the solution best meet the needs of stakeholder?

- Use all kinds of search engines, not just google
- Meet needs for clarity and consistency
- Provider faster access to the information a reader needs (although risk of pigeonholing)

Key takeaways

To address the barriers identified, we need:

- **Critical thinking and education** around research information for non-specialists and about communication with multiple audiences for authors, publishers and editors
- Information in **non-technical language and languages other than English**
- A **variety of formats** tailored to different audiences and preferences (e.g. graphics, video, audio), and tailored to different information needs
- **Summaries** to help with information overload and online consumption of content
- **Peer review** of plain language summaries and other types of accessible content
- Improved discoverability through **better metadata** (including persistent identifiers), **indexing**, **clear versioning**, and **dissemination via non-scientific channels**
- **Trust markers**, transparency of peer review and retractions, clarity and consistency between publishers to counteract misinformation and promote credibility

Open Pharma would like to thank the organizers of the Researcher to Reader Conference 2025 for allowing us to host this workshop.
Thank you to Joana Osório (Communications Team Leader at Oxford PharmaGenesis), Laura Dormer (Co-founder and Editorial Director at Becaris), and Sarah Thomas (Publications and Communications Senior Manager at Ipsen) for facilitating the workshop.
We would also like to thank Ben Kaube, Cassie Bowman, Jade Koo, Jennifer Gibson, Michelle Herbert, Nazim Mohammedi, Riana Bahl, Ruth Miller, Sarah Mckenna, Sarah Stanley, Simon Inger and Toby Green for participating in this workshop and sharing their valued contributions.

Appendix

Why do I need to be able to read and understand reliable scientific information?

To know WHY

↳ Informed perspective on clinical advice

↓

ability to judge

To have confidence that advice is the best given available knowledge.

How can I access reliable scientific information?

clear lay summary

trusted sources-?

expert guidance - community regulated?

Patient/caregiver

Tik tok

consummable

consumer-attractive formats

→ video ←

audio

Which information formats are most useful for me?

Language inaccessible

imbalanced conversation on health globally

Life to death

Inability to partiapate in decisions; over-reliance on docs.

Lack of access to the best care

#3

#4 - not educated in what I need.

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

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Why do I need to be able to read and understand reliable scientific information?

- Not duplicating work that's already been done
  & building on it instead.
- For 'novel' work, you need to know where to publish it. (because there are gaps!)
- 'Short cuts' can lead to lower processing / less understanding long term.
  (eg. AI summaries)

How can I access reliable scientific information?

- Institutional access to
  - journals
  - books
  - reports (grey literature)

~~Citeable & findable~~

- Indexes or bibliometric tools
  eg. Dimensions, Scopus, WoS,

- Trust markers

Problems/challenges

- AI tools - summarising research.
  ↳ Q about the reliability element!
- OA licenses. - lack of knowledge.

(it should start earlier!! students are relying on a good supervisor, and you don't get that until MA level)

- knowing where to look.
- understanding what a citation can mean.

Author/researcher

- citeable & findable resources
  eg with a DOI.

- huge range of options - it's got to be flexible!
  - HTML → accessibility/optimised.
  - PDF → comfort? physicality.
  - print.
  - video/audio?

- datasets, figures, - requirement for detail.

Which information formats are most useful for me?

- misinformation!
- slower progress towards the goals.
- lack of understanding can perpetuate in future generations of researchers.

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)?

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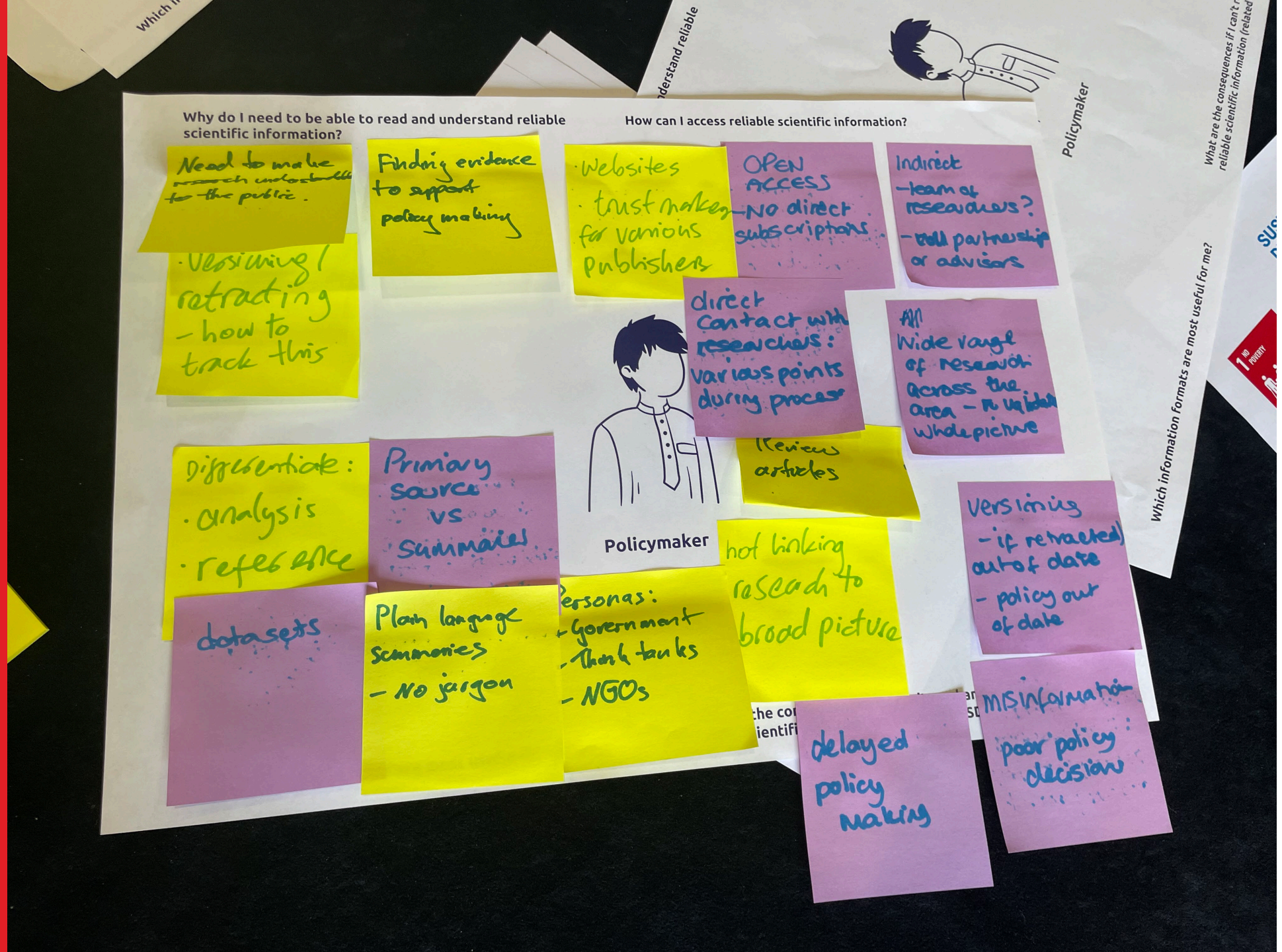
Why do I need to be able to read and understand reliable scientific information?
How can I access reliable scientific information?
Policymaker
Policymaker
Which information formats are most useful for me?
What are the consequences if I can't
reliable scientific information (related
Need to make
to the public.
Finding evidence
to support
policy making
Websites
· trust marker
for various
Publishers
OPEN
ACCESS
– No direct
subscriptions
Indirect
– team of
researchers?
– build partnership
or advisors
· Versioning/
retracting
– how to
track this
direct
contact with
researchers:
various points
during proces
Wide range
of research
across the
area – to validate
whole picture
Review
articles
Differentiate:
· analysis
· reference
Primary
source
vs
Summaries
Versioning
– if retracted/
out of date
– policy out
of date
datasets
Plain language
Summaries
– No jargon
Personas:
– Government
– Think tanks
– NGOs
not linking
research to
broad picture
delayed
policy
making
MISinformation
poor policy
decision

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Why do I need to be able to read and understand reliable scientific information?

- to do my job better
- so I don't kill anyone!
- so I can progress my career
- to offer better advice — to patients / to colleagues

How can I access reliable scientific information? + barriers

- language barriers — spoken / technical
- discovery? esp. anything that's not indexed
- are there paywalls / registration walls
- how do I know what's "reliable"
- how do I find stuff in jnls / not in jnls
- it's not just science, it's also policy/regulation & social science
- time to absorb the information
- journal article itself a barrier to anyone who's not an academic
- via trusted influencers — local: peers, manager, librarian; non-local: prof assoc, influencers on social media

Healthcare professional

I can't do the above

- read
- listen
- watch
- on any device incl. phone

- summaries
- intros

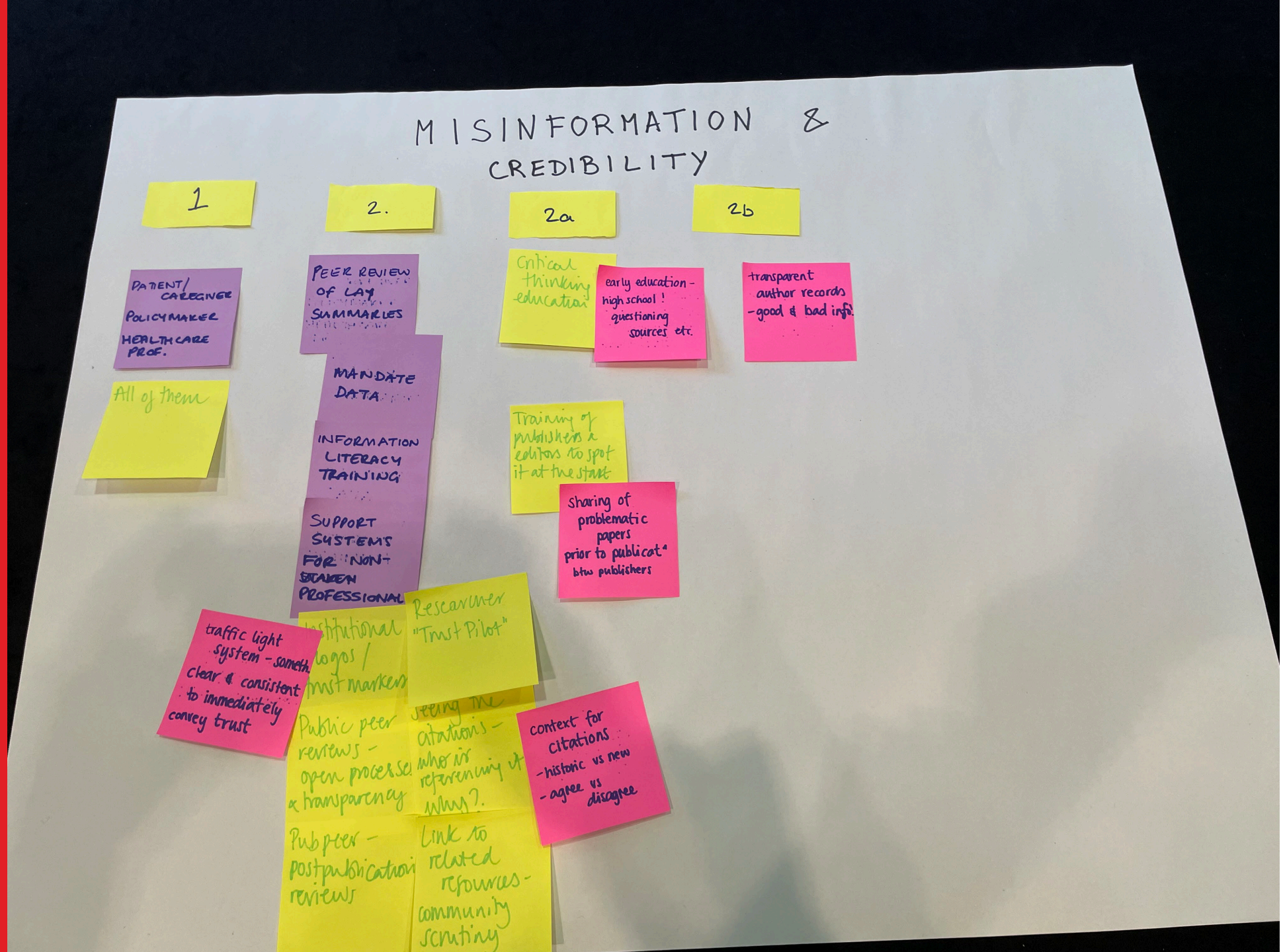
it's contextual

Which information formats are most useful for me?

What are the consequences if I can't read and understand reliable scientific information (related to SDGs)? — not relevant

Which information formats are most useful for me?

reliable scientific information


MISINFORMATION & CREDIBILITY
1
2.
2a
2b
PATIENT/ CAREGIVER
POLICYMAKER
HEALTHCARE PROF.
All of them
PEER REVIEW OF LAY SUMMARIES
MANDATE DATA
INFORMATION LITERACY TRAINING
SUPPORT SYSTEMS FOR NON-TRAINED PROFESSIONAL
Critical thinking education
early education - high school ! questioning sources etc.
transparent author records - good & bad info
Training of publishers & editors to spot it at the start
Sharing of problematic papers prior to publicat° btw publishers
traffic light system - someth clear & consistent to immediately convey trust
Researcher "Trust Pilot"
Public peer reviews - open processes & transparency
context for citations - historic vs new - agree vs disagree
Pub peer - postpublication reviews
Link to related resources - community scrutiny

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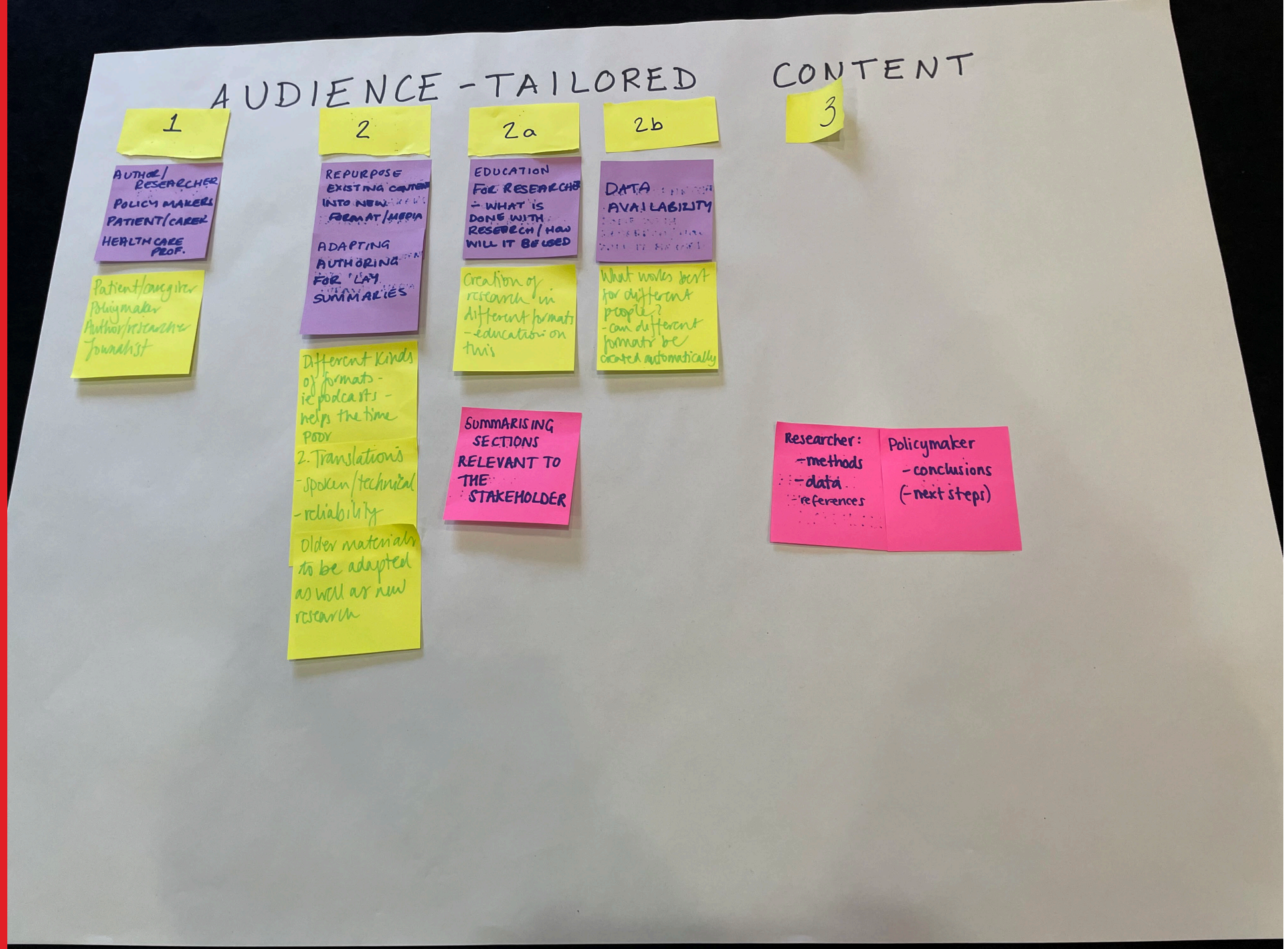
AUDIENCE-TAILORED CONTENT
1
AUTHOR/ RESEARCHER
POLICY MAKERS
PATIENT/CARER
HEALTH CARE PROF.
Patient/caregiver
Policymaker
Author/researcher
Journalist
2
REPURPOSE EXISTING CONTENT INTO NEW FORMAT/MEDIA
ADAPTING AUTHORING FOR 'LAY SUMMARIES'
Different kinds of formats - ie podcasts - helps the time poor
2. Translations - spoken/technical - reliability
Older materials to be adapted as well as new research
2a
EDUCATION FOR RESEARCH - WHAT IS DONE WITH RESEARCH / HOW WILL IT BE USED
Creation of research in different formats - education on this
SUMMARISING SECTIONS RELEVANT TO THE STAKEHOLDER
2b
DATA AVAILABILITY
What works best for different people? - can different formats be created automatically
3
Researcher: - methods - data - references
Policymaker - conclusions (- next steps)

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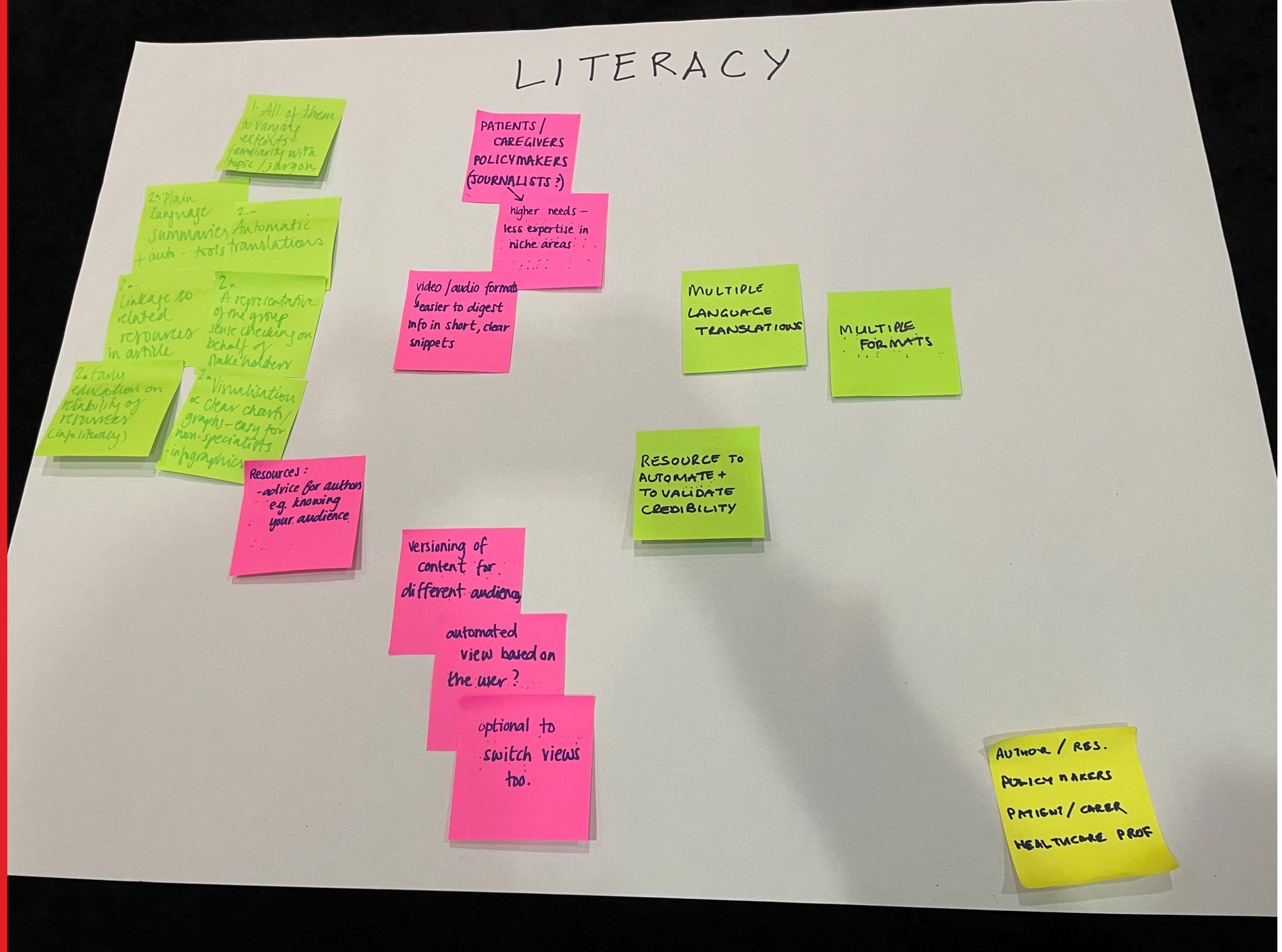
LITERACY
1. All of them to varying efforts - familiarity with topic / jargon
2a Plain language summaries + auto - tools
2a Automatic translations
2a Linkage to related resources in article
2a A representative of the group sense checking on behalf of stakeholders
2a Early education on reliability of resources (info literacy)
2a Visualisation & clear charts / graphs - easy for non-specialists - infographics
Resources: -advice for authors e.g. knowing your audience
PATIENTS / CAREGIVERS POLICYMAKERS (JOURNALISTS ?)
higher needs - less expertise in niche areas
video / audio formats easier to digest info in short, clear snippets
MULTIPLE LANGUAGE TRANSLATIONS
MULTIPLE FORMATS
RESOURCE TO AUTOMATE + TO VALIDATE CREDIBILITY
versioning of content for different audiences
automated view based on the user ?
optional to switch views too.
AUTHOR / RES.
POLICY MAKERS
PATIENT / CARER
HEALTHCARE PROF

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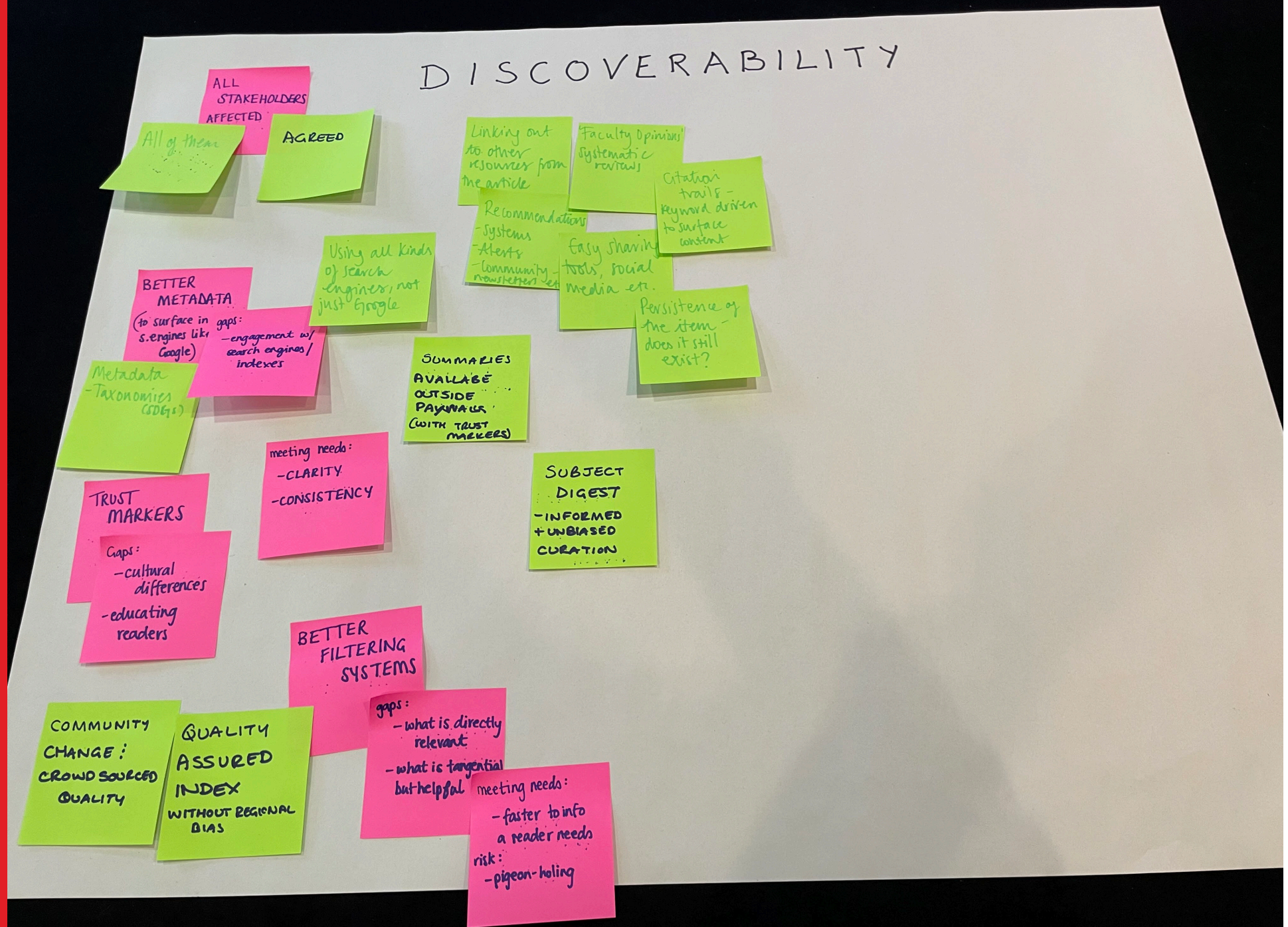
DISCOVERABILITY
ALL STAKEHOLDERS AFFECTED AGREED
All of these
Linking out to other resources from the article
Faculty Opinions' systematic reviews
Citation trails - keyword driven to surface content
Recommendations - systems - Alerts - Community - newsletters
Using all kinds of search engines, not just Google
Easy sharing tools, social media etc.
BETTER METADATA
(to surface in s.engines like Google)
gaps: - engagement w/ search engines / indexes
Persistence of the item - does it still exist?
Metadata - Taxonomies (SDGs)
SUMMARIES AVAILABLE OUTSIDE PAYWALL (WITH TRUST MARKERS)
meeting needs: - CLARITY - CONSISTENCY
SUBJECT DIGEST - INFORMED + UNBIASED CURATION
TRUST MARKERS
Gaps: - cultural differences - educating readers
BETTER FILTERING SYSTEMS
gaps: - what is directly relevant - what is tangential but helpful
COMMUNITY CHANGE: CROWD SOURCED QUALITY
QUALITY ASSURED INDEX WITHOUT REGIONAL BIAS
meeting needs: - faster to info a reader needs
risk: - pigeon-holing

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