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HOW TO MAKE A SCIENTIFIC POSTER

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What we will cover

- What makes a good poster
- Tools to develop a poster
- Promoting and presenting your poster

What is a poster?

A poster is a visual abstract of your research, project, organisation or initiative…

It's not a bottomless pit where you dump everything about a given topic or piece of work!

Posters of congress abstracts

Pediatric Rheumatology 2017, **15**(Suppl 2):65 Page 141 of 191

Introduction: Childhood-onset rheumatic and musculoskeletal diseases (RMDs) can influence multiple aspects of a young person's life. The journey towards adulthood spans several years, where young people develop a set of tools to cope with new situations. Self-management is an integral part of this process, and smartphone applications (apps) represent an innovative and efficient method of promoting self- and shared-management of RMDs.

Objectives: This scoping review aims to understand how existing smartphone apps have been developed and evaluated for young people with RMDs.

Methods: Eligible studies published between 2000 and 2017 were identified through a comprehensive search of four bibliographic databases. The search strategy included MeSH subject headings and free-text search terms relating to young people, digital technology and RMDs. The quality of included studies were assessed using the Mixed Methods Appraisal Tool.

Results: The combined bibliographic searches identified 576 articles. Once duplicates were removed, 441 titles and abstracts were were screened, 19 of which were eligible for a full-text review. Following full-text review, 11 articles were suitable for inclusion. Of these, three articles were peer-reviewed journal articles, while eight were conference proceedings. Out of 11 included articles, eight studies were described: six involving juvenile idiopathic arthritis (JIA) and two involving systemic lupus erythematosus (SLE). All eight studies focused on educating young people with RMDs about their conditions. Three studies had developed apps to record and communicate pain experiences associated with JIA, while others focused on wider self-management skills. The heterogeneity in the design, evaluation and delivery of apps was noticeable, with clear similarities in the needs of young people with different RMDs. Common findings from all studies included the need to develop apps across multiple platforms and devices which do not require wireless or cellular data to be functional. There were, however, some shared styles to developing apps among the included studies. Some method of user testing and iterative cycle of designing and refining the apps was observed. The Assessment, Design, Development, Implementation and Evaluation (ADDIE) model was used in one study, while four studies used an iterative process of designing and refining, based on the hermeneutical circle concept. A collaborative concept-generating and requirements- gathering methodology was used in another study, while the Medical Research Council's framework for the development and evaluation of complex interventions was used in another.

Conclusion: This scoping review highlights that there is little empirical evidence published which describes the development of smartphone apps for young people with RMDs. Of the available evidence, approaches appear fragmented and pragmatic, suggesting the need for standardisation to facilitate the convoluted and demanding processes required to develop apps.

Disclosure of Interest
None Declared.

P268
Developing, evaluating and implementing smartphone applications for young people living with rheumatic and musculoskeletal diseases: a scoping review of empirical research
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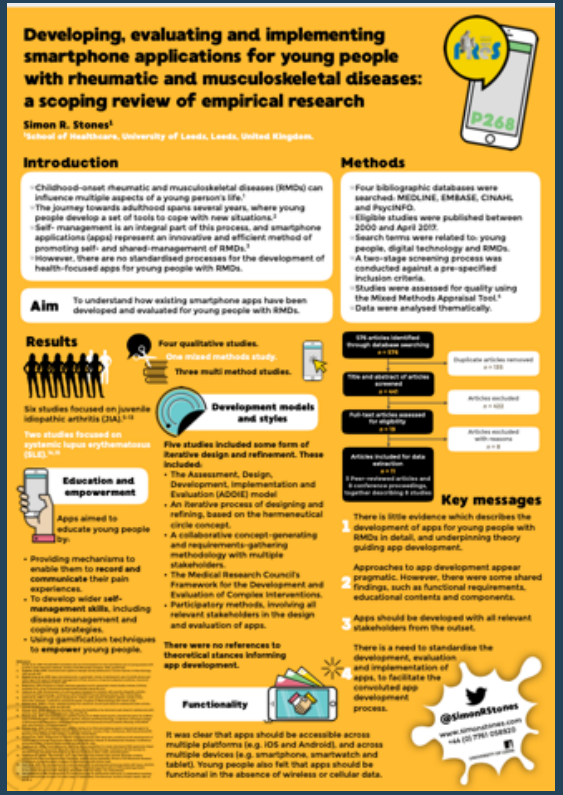


Advantages and disadvantages of poster presentations

Advantages

Enables **two-way dialogue** about a particular topic.

Great for **networking**.

Visual communication.

Disadvantages

Can be **time-intensive** to design and expensive to print.

Can be considered **less formal/professional** than oral presentations.

Can be difficult to **transport**.

A four-stage process

Setup and sizing

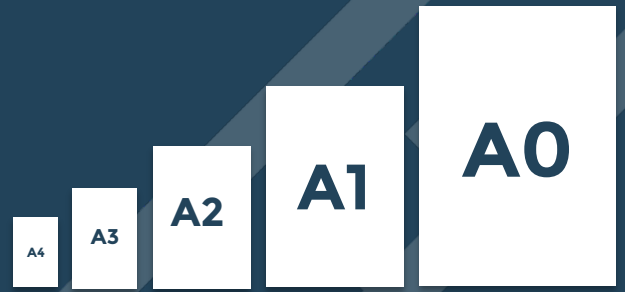
Design

Core ingredients

Review and next steps

1. Setup and sizing: Poster size

- Check for available presenter guidelines.
  - Poster **hanging** board size.
  - Poster **size** (typically A0/A1) and **orientation** (portrait or landscape).
    - A0 841 x 1189 mm
    - A1 594 x 841 mm
    - A2 420 x 594 mm
    - A3 297 x 420 mm
    - A4 210 x 297 mm



1. Setup and sizing: Poster size

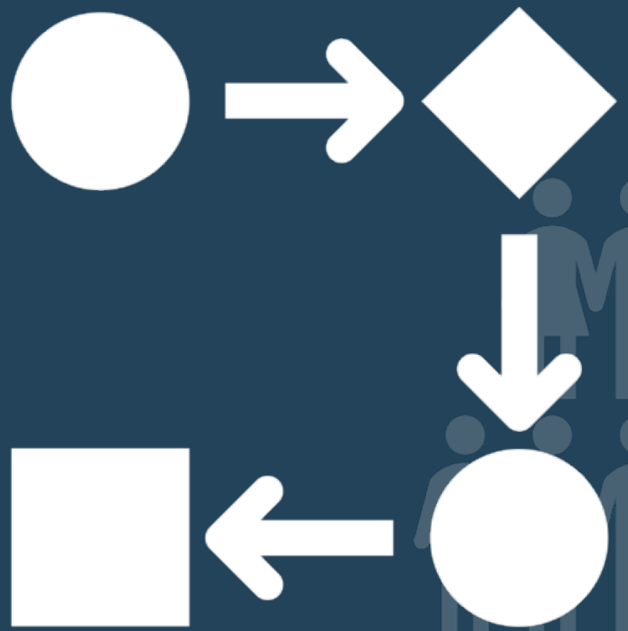
- Identify an existing **template**, or create your own.
- Ensure the document is the **correct size** at the outset.
  - Setting up posters in A4 ‘normal’ paper size, and then attempting to print at A0 will result in a poor resolution – with the poster looking ‘unclear’ and ‘pixelated’.

2. Core ingredients: Know your audience

- Patients/carers
- Academic/ healthcare professionals
- Policy makers
- *Multiple audiences*

2. Core ingredients: Contents

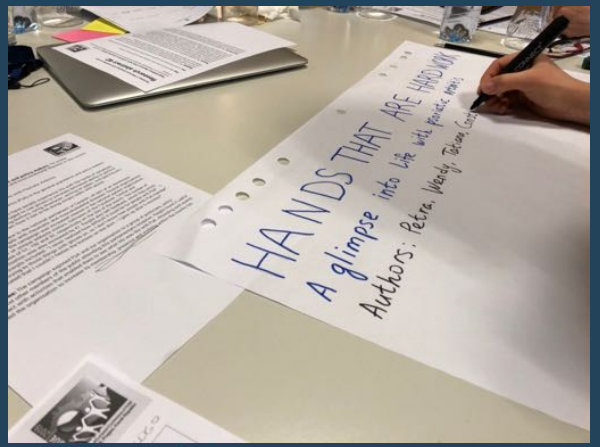
- Title
- Author(s) and affiliation(s)
- Introduction
- Aims/objectives
- Materials and methods
- Results
- Conclusions
- Acknowledgments



2. Core ingredients: Storyboarding

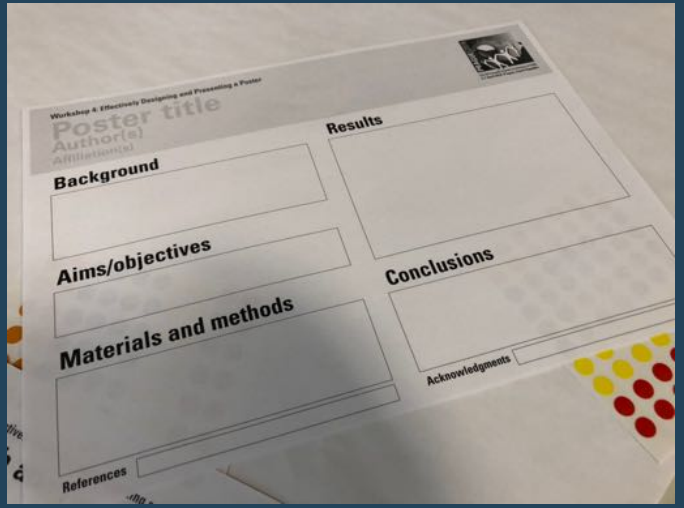
To start off, begin with pen and paper! Design the first, rough visualisation of your poster.

- There's no need for content/data at this stage.
- Rather, visualise dimensions and where you want to place things.

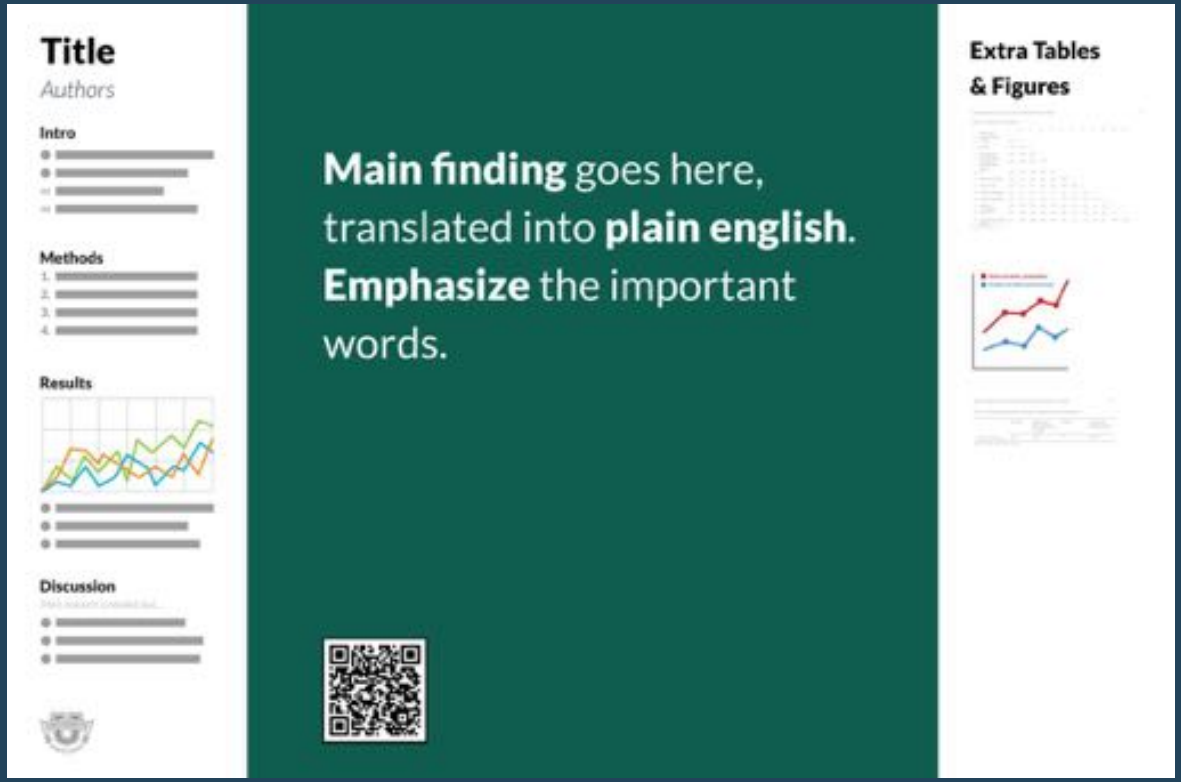


3. Design: Layout

- **Let it breathe**
  - Don’t overload the poster.
- **Keep things aligned**
  - Invisible grids help to provide a professional look.
- **Guide the reader**
  - People’s natural tendency is to read from left to right, then top to bottom.



3. Design: Layout (#betterposter)



Source: YouTube/Mike Morrison

3. Design: Proportions and sizes

- The proportions of each section of the poster will depend on the need for the poster, as well as the content.
- In general, the **results and conclusions** are key sections of any poster – particularly the **take home messages.**

3. Design: Fonts

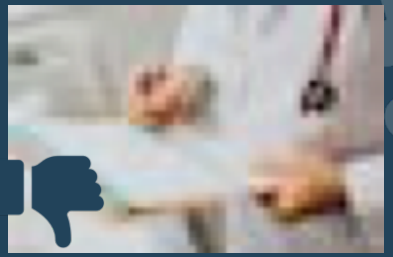
- **The largest possible fonts**
  - A rule of thumb is that 30 pt is visible from 1.8 metres.
- **Good or bad fonts can make or break a poster**
  - Be consistent.
  - Use two complementary fonts.
  - Avoid word art.

3. Design: Colours

- Don’t be afraid of using **background colours**, with text in boxes – colour can help to attract people to the poster.
- **Font colour must contrast** highly with its background.
  - Consider people who may not be able to distinguish between colours, and those who have dyslexia (e.g. light but not white background).
- Beware of **subconscious messaging** with the colours you select (e.g. red can induce anxiety, green can convey relaxation).

3. Design: Visuals

- Use good quality images with the correct permissions
- Use consistent colours and fonts with graphs and figures
- Visuals should enhance the poster message



4. Review and next steps

Critiquing a draft → Printing → Travelling and presenting

- Send your poster to colleagues for comment.
- Print out your poster (on A4) to spot easy mistakes.
- Find a printing service to print your poster (if face-to-face).
  - Think about paper type (e.g. gloss, matte, laminated, fabric).
  - Look around for the most cost-effective/convenient option.
- Use a cardboard/plastic tube to transport your poster, or use fabric for a more convenient option.

Find what works for you

Microsoft PowerPoint	**Pros:** Popular program, user-friendly tools, accessible on Mac/PC. **Cons:** Expense if organisation doesn't provide the program.
Pages	**Pros:** User-friendly interface and tools. **Cons:** Accessible only to Mac users.
Canva	**Pros:** User-friendly interface and tools, accessible across multiple platforms, online storage, templates, free options. **Cons:** Limited tools on the free package, requires internet access.

Other examples include: Adobe InDesign, Adobe Illustrator and Scribus.

Top tips for presenting

Poster sessions are great places for **networking**, so take business cards or leaflets with you in person, and make sure to be ‘by your poster’ if the conference is online.

Know your poster! You only have a small amount of time to engage people. Keep it concise, but informative, and don’t forget to **emphasise your key messages!**

Provide **handouts of your poster or a QR code** for people to access the poster after they walk away (physically or virtually)!

Think about online promotion too, storing on your organisation website, or repositories like ResearchGate and FigShare.


“Even perfection has room for improvement.”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