CJASN Visual Abstract Primer

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CJASN Visual Abstract Editors
Goals:

1. To introduce the concept of visual abstracts to authors and provide background for why they are useful; and
2. To provide guidelines, templates and advice to authors on how to create visual abstracts in the style of CJASN.

Introduction / Rationale

While there are many axes by which to measure the impact of science, one of them is certainly awareness in the broader scientific community outside of the author’s immediate peers. Both science and social media strive for impact and impact requires spreading information to the targeted audience. One method of doing this is via social media. However, communicating science on social media has inherent contradictions. Science values nuance, detail, and precision. Social media values simplicity, speed, and emotion. Despite these inherent conflicts, social media and recognition in the lay press is now formally recognized to judge the value of scientific publication in the form of Altmetrics.

Effectively using social media to increase impact requires crafting a message that is native to the medium. Imagine the foolishness of taking a frame from a television advertisement and using that as a billboard advertisement. On the other hand, running a magazine ad as a 30-second television spot. Each medium demands a native message and social media is no different. Visual abstracts are the best way to promote a study in social media. According to Twitter’s own guidelines on improving social media impact, the single most effective thing you can do to increase the impact of a tweet is to include a picture. This increases sharing by 35%. This is better than quotes, videos or links.

Unfortunately, the figures that make up scientific manuscripts are poorly suited to the short attention spans of social media consumers and the small screens they are using to browse this content. A Western blot cannot compete with Kanye West post and a Kaplan-Meier curve is a bit dull next to Mike Meyer.

In 2017, Dr. Andrew Ibrahim, a surgical resident at the University of Michigan popularized a novel idea to solve this problem called the visual abstract. The visual abstract is designed to rapidly, visually, and memorably communicate the core concept of the study. The visual abstract is a single-page, multiplane, visual explanation of the study’s story.

For visual abstracts to succeed they filter out nuance and detail in order to let the broad strokes of a study to emerge. It is essential that removing detail does not change the conclusions. It is still important that visual abstracts, like all science publishing, draw the narrowest, most limited conclusions from the data.

Visual abstracts are not opportunities to go beyond the data in the name of promotion. One of the difficult things about creating a visual abstracts is letting go of the beautiful details that make a paper important. Often the difference between rejection and publication in CJASN is all of the decisions on details about execution and writing. Those details are important, in fact, they are essential, for good science, but the visual abstract is not the time to call attention to them. You need to cull the story of the study to only the essential points and communicate those in a few words and pictographs.
The elements of a Visual Abstract

Use a template
CJASN has several PowerPoint and Keynote templates (figure 1) available to create your visual abstract [PowerPoint | Keynote]. Choose the one that best fits your study design.

Do not change the template color scheme or font when creating your visual abstract.

For clarity and consistency, the CJASN visual abstract team may modify your visual abstract.

Figure 1: Example of CJASN template

The template has six parts that need to be completed:
1. Title
2. Cohort
3. Intervention
4. Outcomes
5. Conclusions
6. Reference

Here is a guideline for completing each section

Title
In the top, add the title of your study.

Characterize your study population/cohort
This is not exhaustive. Try to capture what is essential about your population. CKD? Patients admitted for surgery? Representative population of France? Limited to a certain age range? (All cohorts have age restrictions, be circumspect here. Over 18? Not interesting. Age >70? Important). Use icons to clearly depict your population characteristics (Figure 2). Be sure you have permission to use any icons that you include in the visual abstract. A number of sources for icons are available online and inexpensive subscriptions are available to allow their use including thenounproject.com and Iconfinder.
Describe your intervention

This is self-evident in an interventional trial. In an observational study, this is where you define how your comparison groups were defined:

- Patient with normal 25 OH D versus low 25 OD D
- Patients who developed atrial fibrillation versus those who did not
- In women who develop preeclampsia those with previous AKI versus those without previous kidney disease

Findings

The primary findings go in the right-most panel. *The fewer conclusions, the better.* Whether it is positive or negative you need to cover the primary outcome. If the findings are negative, definitely put in confidence intervals with/without P values. For positive findings, this is less important. If there is an additional secondary outcome that is particularly interesting, you can include that if there is space.

Use icons or figures to visually demonstrate your results. Large tables of data are not well suited for visual abstracts. *Also, do not use the central figure from your manuscript in the visual abstract.* That information can always be communicated more simply by abstracting the information in the figure to a simplified figure that concedes detail for clarity. *Do not try to include all of your results.* If people are interested in your topic and intrigued by your visual abstract, they will go to the full manuscript for more information.

Conclusions

Limit to a single sentence, often you can use the exact sentence from your abstract here.

Reference

Add the authors and title here. We will add the doi and other reference information.

Some Notes on a successful visual abstract

The Central Figure is not for the visual abstract

Do not use the central figure from your manuscript. That information can always be communicated more simply by abstracting the information in the figure to a simplified figure that concedes detail for clarity.
Intellectual Property

*Good artists borrow, great artists steal*
—Pablo Picasso

*Visual Abstract designers do not borrow or steal.*
—CJASN Visual Abstract Guidelines

Do not steal. You need to have permission to use all of the figures and images in your visual abstract. We suggest using The Noun Project as the source. It is a searchable database of icons.

**Less is more**

Even among Visual Abstract designers, there is a tug of war between more information and less information. Since the full manuscript is only a click away, we feel that the right choice is less detail, more white space and greater clarity.

**Completed examples**

[Insert published examples using new template]