

# CTSA Translational Impacts (TI) Working Group

## Zenodo Communities Quick Start Guide

### Getting started with the **Translational Impacts Repository**

Translational Impacts Zenodo Community

<https://zenodo.org/communities/ti/>

May 2026

# Table of Contents

## PAGE TOPIC

3. What are the benefits of sharing evaluation resources?
4. Making your resources FAIR
5. Upload decision flowchart
6. Understanding the “stop and decide” points
7. TI Zenodo community: record creation guide
8. TI Zenodo community: record review checklist
9. Suggestions for describing records
10. Standard keywords are essential...
11. Examples of good translational keywords
12. Good practices for choosing keywords
13. Good practices for writing the “Description” field
14. Sharing your work
15. Accessibility
16. Scope | Credit | Additional Zenodo resources

# What are the benefits of sharing evaluation and impact resources?



Encourages more connection and collaboration across different roles in translational medicine



Enables reproducible methods which leads to better evaluation methods and understanding



Essential for building transparency and public trust, enabling informed decision-making, and accelerating scientific and societal progress

## What Are the Benefits of Using A Repository to Share?



Items shared in repositories are **more easily discoverable, accessible, and reusable**



Repositories support **reproducibility** and **reanalysis**



Repositories help with preservation and **keep your outputs safe and accessible**



Repositories assign a unique identifier so **your file is easier to cite, and you can be given credit**



Repositories allow you to **meet funder and institution data sharing requirements**

## What Is FAIR?

FAIR Principles make data and other research materials easier to share and reuse.

**F**

**Findable:** Data and metadata should be easily located by people and machines using unique identifiers and rich, searchable descriptions.

**A**

**Accessible:** (meta)data should be retrievable through standard protocols, with metadata available even if the data are restricted

**I**

**Interoperable:** (meta)data should use standard formats and vocabularies to enable integration and exchange across systems.

**R**

**Reusable:** (meta)data should have clear licensing and provenance and follow community standards to support future reuse.

Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* **3**, 160018 (2016). <https://doi.org/10.1038/sdata.2016.18>

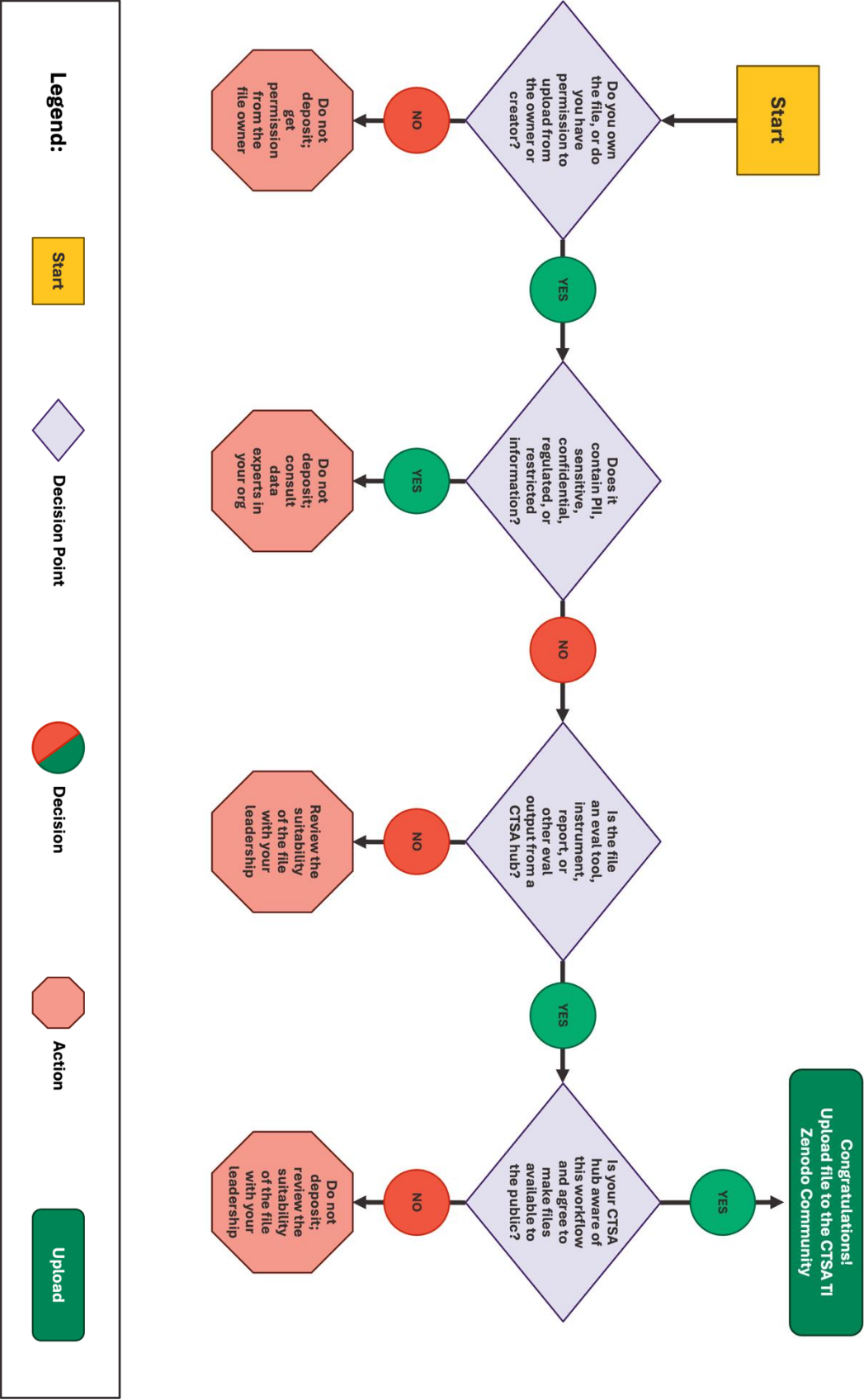
# Making your resources FAIR

Guidance developed by GO FAIR, a community initiative focused on implementation of the [FAIR data principles](#)

<b>F</b> Findable	<a href="#">F1. (Meta)data are assigned a globally unique and persistent identifier</a> <a href="#">F2. Data are described with rich metadata (defined by R1 below)</a> <a href="#">F3. Metadata clearly and explicitly include the identifier of the data they describe</a> <a href="#">F4. (Meta)data are registered or indexed in a searchable resource</a>
<b>A</b> Accessible	<a href="#">A1. (Meta)data are retrievable by their identifier using a standardized communications protocol</a> <ul style="list-style-type: none"><li>▪ <a href="#">A1.1 The protocol is open, free, and universally implementable</a></li><li>▪ <a href="#">A1.2 The protocol allows for an authentication and authorisation procedure, where necessary</a></li></ul> <a href="#">A2. Metadata are accessible, even when the data are no longer available</a>
<b>I</b> Interoperable	<a href="#">I1. (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.</a> <a href="#">I2. (Meta)data use vocabularies that follow FAIR principles</a> <a href="#">I3. (Meta)data include qualified references to other (meta)data</a>
<b>R</b> Reusable	<a href="#">R1. (Meta)data are richly described with a plurality of accurate and relevant attributes</a> <ul style="list-style-type: none"><li>▪ <a href="#">R1.1. (Meta)data are released with a clear and accessible data usage license</a></li><li>▪ <a href="#">R1.2. (Meta)data are associated with detailed provenance</a></li><li>▪ <a href="#">R1.3. (Meta)data meet domain-relevant community standards</a></li></ul>

Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* **3**, 160018 (2016). <https://doi.org/10.1038/sdata.2016.18>

# Upload Decision Flowchart



**Remember:** Uploaded files (e.g., pdf, ppt) can be modified or deleted after publishing, and they can be replaced with updated versions. Metadata for records can be modified as needed (e.g., update title, description, keywords, etc.).



# Understanding the “stop and decide” points

**Do you own the file, or have permission to upload from the owner or creator?**

The file owner or creator must approve a deposit to the TI Zenodo Community to ensure they retain control over how their work is shared and used, protecting intellectual property, privacy, and compliance with funder or institutional policies. Their approval also verifies that the file is accurate, complete, and suitable for public release, helping maintain repository integrity and user trust. Remember, if this work evolves, it is always possible to deposit a new version of the file from the record page of the original file.

**Does it contain PII, sensitive, confidential, regulated, or restricted information?**

It is critical to identify whether a file contains PII, sensitive, confidential, regulated, or restricted information before depositing it into a generalist repository to prevent legal, ethical, and security risks such as privacy breaches or regulatory noncompliance. At the institutional level, this requires following established data governance policies, consulting compliance or IRB offices as needed, and applying safeguards like de-identification, access controls, or restricted repositories when appropriate.

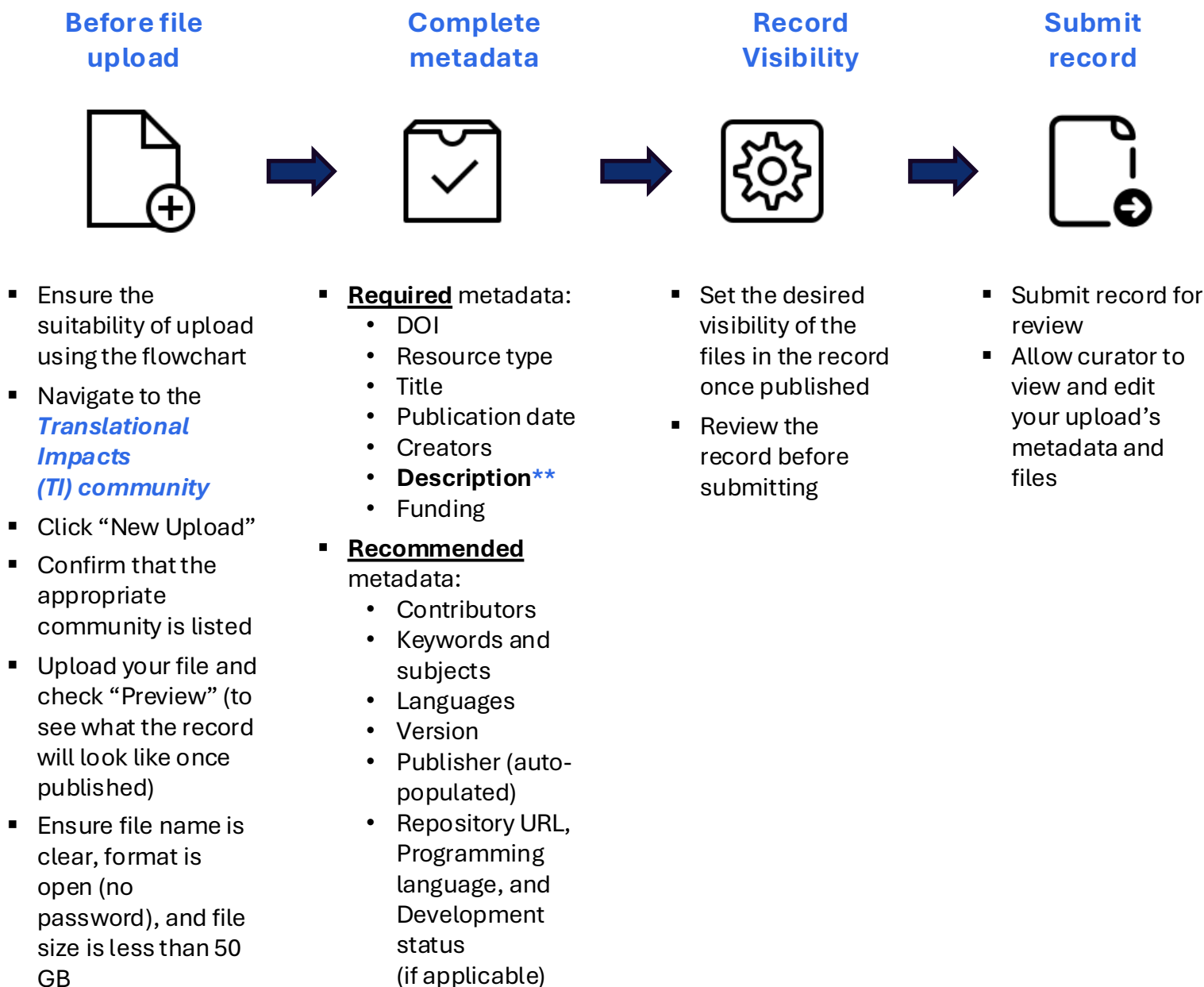
**Is the file an impact tool, instrument, report, or other output from a CTSA hub?**

It is important to deposit a file that is in scope for the TI Zenodo Community. This ensures that the file is preserved, discoverable, and reusable in the context of CTSA evaluation, maximizing visibility and impact, and promoting responsible stewardship of the output. If your file does not align with the scope of the TI Zenodo Community, consider reaching out to your library about depositing to your institutional repository, or consider depositing directly to Zenodo at <https://zenodo.org/> or working with your hub to establish your hub's own dedicated Zenodo Community for your CTSA outputs.

**Has your CTSA hub leadership agreed to make the file available to the public?**

In some circumstances, you may want to discuss deposit with hub leadership to ensure alignment with project goals, compliance with funder and institutional policies, and protection of sensitive or unpublished information. Approval also helps avoid conflicts over ownership, release timing, or intellectual property. When navigating these conversations, emphasize that depositing outputs boosts visibility, accessibility, and impact, while fulfilling open science and compliance requirements. Depositing project outputs can help support scientific collaboration, demonstrate transparency and productivity to funders, and increase citations and downstream use.

# TI Zenodo community: record creation guide



*\*\* The Description field is an ideal place to add important context such as information about how and when a resource is used.*

Uploaded files (e.g., pdf, ppt) can be modified or deleted after publishing if needed, and they can be replaced with updated versions. It is always best to confirm details prior to upload.

Metadata for records can be modified as needed (e.g., update title, description, keywords, etc.).

# TI Zenodo community: record review checklist

## Review the record



- ☐ Ensure the record is being submitted to the correct community
- ☐ Ensure file name is clear, format is open (no password), and size is <50 GB file
- ☐ Prior to approving the record, ensure the uploaded resource & record content align with current program and hub priorities. Direct questions to your CTSA hub leadership.
- ☐ If necessary, download the file for a final manual check to ensure there is no sensitive data

## Review the metadata



- ☐ Edit the metadata as necessary
- ☐ Check **required** metadata including:
  - DOI
  - Publication date
  - Record title
  - Resource type
  - Creators (use ORCID autocomplete)
  - Record description
  - Funding (search and filter)
- ☐ Check **recommended** metadata:
  - Keywords and subjects
  - Version
  - Language
  - Contributors
  - Dates, etc.

## To accept or decline



- ☐ If accepting the submission, you may add an optional message to the submitter
- ☐ If declining the submission, add a message to the submitter so they may fix the issue and resubmit

Remember, if there is any doubt about the suitability of the content, please communicate with your CTSA hub's leadership for further guidance.

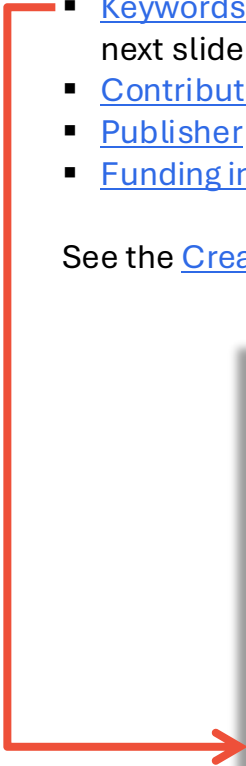
# Suggestions for describing records

From Zenodo Documentation (<https://help.zenodo.org/docs/>)

## Detailed descriptions for each field available in the deposit form:

- [Resource types](#) — Select the right resource type.
- [Digital Object Identifier \(DOI\)](#) — How to reserve a DOI for inclusion in files before publication.
- [Titles](#) — How to add main title and additional titles.
- [Publication date](#) — Learn to use date ranges or imprecise dates.
- [Creators](#) — Learn how to add creators/authors for your record. Leverage Zenodo's integration of ORCID.
- [Descriptions](#) — Learn how to add abstracts and notes.
- [Licenses and rights](#) — Learn to choose a license for your record.
- [Keywords and subjects](#) — Learn to choose keywords and subjects for your record. (see next slide for Translational Impact keyword recommendations)
- [Contributors](#) — Learn to add persons/organizations that do not appear in the citation.
- [Publisher](#) — Learn to use date ranges or imprecise dates.
- [Funding information](#) — Learn to choose a funding for your record.

See the [Create new upload](#) for an overview of creating a new upload.



Docs / Deposit / Describe records / Keywords and subjects

## Keywords and subjects

The **keywords and subjects** field can be used to associate a record to custom tags or to controlled vocabularies. Providing such information helps making records more discoverable.

A keyword/subject can be either a:

- Controlled vocabulary term
- Custom keyword/subject

Keywords and subjects

Use a **controlled vocabulary term** if the term is covered by one of our currently supported controlled vocabularies:

- [European Science Vocabulary \(EuroSciVoc\)](#)
- [Medical Subject Headings \(MeSH\)](#)
- [General Multilingual Environmental Thesaurus \(GEMET\)](#)

Use a **custom keyword/subject** otherwise.

# Standard Keywords are essential....

*To increase discovery of our TI Zenodo Community records!*

## Improved searchability

- Direct matches allow users to find records by matching search queries with the terms used in the record's metadata.

## Relevance ranking

- Specific keywords help narrow down search results, making it easier for users to find exactly what they are looking for.

## Categorization and filtering

- Keywords help in categorizing records into themes or topics, which can be used for filtering search results.

## Enhanced metadata

- Keywords enrich the metadata of a record, providing more context and detail about its content.

## User experience

- Keywords make it easier for users to discover relevant records without needing to know the exact title or author.

# Examples of good “translational” keywords

*Remember that these recommended examples are non-exhaustive and are subject to change. If appropriate, consider supplementing this list with a specific term that helps to best describe your deposited file*

## A - H

- Artificial Intelligence
- Biostatistics
- Case Study
- Clinical Trial
- Communications
- Community Academic Partnership
- Community-Based Participatory Research
- Data Collection
- Data Science
- Decision Theory
- Epidemiology
- Ethics
- Evaluation Study
- Health Communication
- Health for All
- Health Services

## I - Q

- Implementation Science
- Informatics
- Informed Consent
- Information Theory
- Interdisciplinary Research
- Learning Health System
- Logic Model
- Machine Learning
- Mentoring
- Organizational Innovation
- Organizational Model
- Population Health
- Precision Medicine
- Program Evaluation
- Public Health
- Qualitative Research
- Quantitative Research

## R - Z

- Research Design
- Research Method
- Statistical Model
- Systems Theory
- Team Science
- Theoretical Model
- Training and Education
- Translational Impact
- Translational Medical Research
- Workforce Development
- [.....]

# Good practices for choosing keywords

*Using best practices for keyword selection ensures that deposits in generalist repositories are easier to find, understand, and reuse. Well-chosen keywords improve discoverability across disciplines and support long-term research impact.*

## Relevance:

- Choose keywords that are directly related to the main topics of your record
- Think about what terms someone might use to search for your record. For example, “NUCATS” or “Data Sharing”

## Specificity:

- Use specific terms. For example, instead of “Faculty Survey,” use “KL2 Faculty Survey” or the theme of the discussion (“Mentoring Early Career Scholars”)

## Synonyms and Variants including acronyms:

- Include synonyms and different forms of the same word. For example, “AI,” “Artificial Intelligence,” and “Machine Learning”

## Common Phrases:

- Include common phrases or terms used. For example, “Public Health”

## Audience and Usage:

- Consider who will be searching for your record and what terms they might use
- Include keywords that reflect the practical applications or implications of your work. For example, “Health Information” or “Clinical Guidelines”

## Tools and Techniques:

- Mention any specific tools, techniques, or methodologies used in your work e.g., “TSBM” or “ANOVA”. This can also be added in the description.

## Typing Keywords

- Capitalize the first letter of each word. For example, “Health Literacy” or “Program Evaluation”
- Capitalize acronyms. For example, “CTSA” or “NCATS”
- Use singular noun. For example, “Hackathon” or “Townhall”

# Good practices for writing the “Description” field

*Think of your descriptive content as a bridge: it should give enough context for a researcher, a policy maker, or community member to understand what’s inside the files, why they exist, and how they can be used, while also embedding structured metadata that makes the files easy to discover, cite, and reuse. A good way to do this is to describe the file as if you are communicating with a colleague who would like to adapt your work for their setting. Consider the following suggestions, as appropriate, to describe your file.*

## Be Clear, Concise, & Contextual

- **Plain language first:** Use non-technical summaries before technical jargon.
- **State the purpose:** Why was the evaluation or report created? What question or problem does it address?
- **Audience awareness:** Describe content in a way that makes sense both to biomedical researchers and to broader audiences (policy makers, funders, community groups).

## Describe the File Contents Clearly

- **File type and purpose:** Explain whether it is a dataset, narrative report, tool, framework, or supplementary material.
- **Structure:** If multiple files are deposited, explain how they relate (e.g., “File A is raw data; File B is the coded dataset; File C is the final report summarizing results”).
- **Evaluation focus:** Specify evaluation type (process, outcome, economic, implementation, impact).
- **Ethical review:** If applicable, note IRB/ethics board approval or waiver.

## Document Methodology & Limitations

- **Methods overview:** Briefly describe study design, data collection, and analytic approach (survey, RCT, meta-analysis, qualitative interviews, etc.).
- **Limitations:** State constraints, biases, or boundaries of the evaluation so re-users don’t over-interpret results.

## Provide Reuse Guidance

- **Intended use cases:** Indicate how others might reuse the files (e.g., to inform systematic reviews, policy evaluations, program replication).
- **Practical guidance:** Provide context to describe how to use the file, under what conditions, timing, populations, likely IRB/ethics board approval or waiver, etc.
- **Related resources:** Link to publications, protocols, or registered reports.

## Use Persistent Identifiers and Linking

- Include DOIs for publications, ORCID IDs for authors, and funder identifiers if available.
- Link datasets, code, and reports so users can navigate between them easily.

## Write for Machine & Human Readability

- Use consistent terminology across files and metadata.
- Favor structured formats when possible (tables, bullet lists in abstracts).
- Make sure descriptions are detailed enough for discovery engines, but readable for humans.

# Sharing your work

*Once you have deposited a file to the community, you can easily share and cite the file.*

**Every uploaded file receives a persistent Digital Object Identifier (DOI).**

- Grab a direct link to the record landing page:  
<https://zenodo.org/record/1234567>

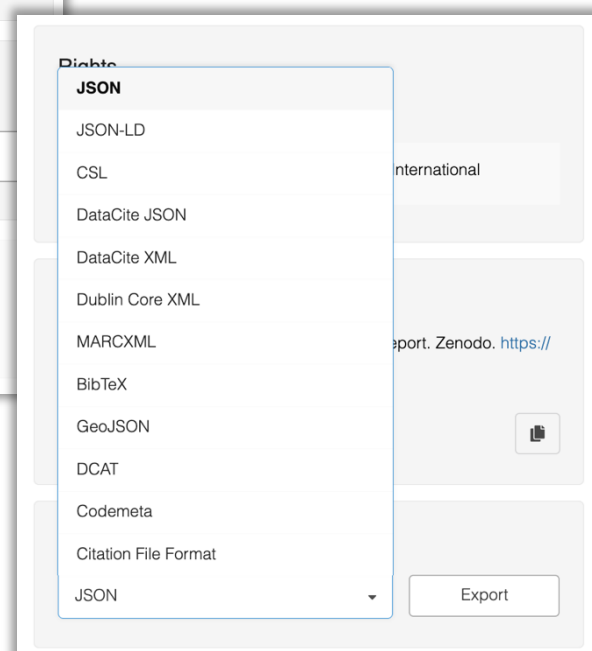
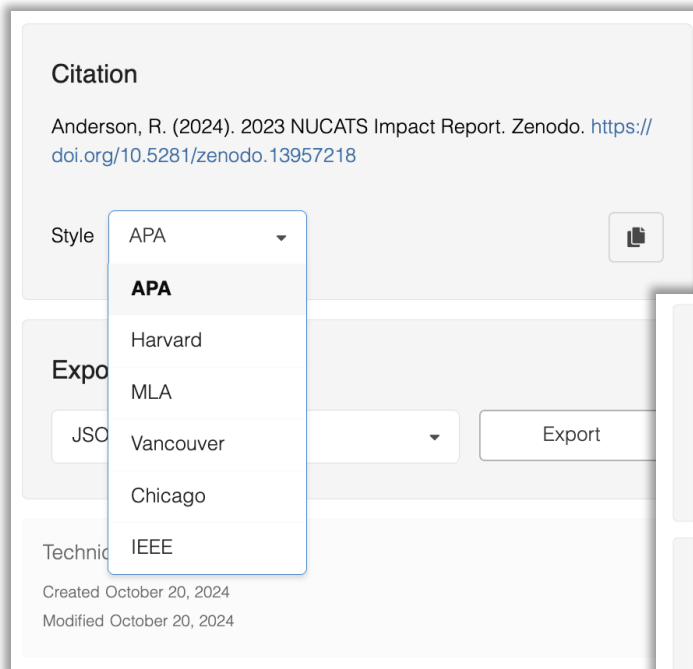
**Zenodo auto-generates citations in multiple formats:**

- APA, Harvard, MLA, Vancouver, Chicago, IEEE formats available for copy-paste
  - APA: Doe, J. (2025). Dataset Title. Zenodo.  
<https://doi.org/10.5281/zenodo.1234567>
  - MLA: Doe, Josephine. "Dataset Title." Zenodo, 2025,  
[doi:10.5281/zenodo.1234567](https://doi.org/10.5281/zenodo.1234567)
- BibTeX, EndNote, RIS, JSON, etc. records available for export to add to your citation management software or export into local systems.
- Embeddable widgets for websites or repositories.
- GitHub integration: cite software from releases.

Tracking and reporting metrics

- Views
- Downloads
- Citations

Useful for grant reporting and research impact assessment.



# Accessibility

There are two components of digital accessibility that are relevant: the accessibility of Zenodo (the repository itself), and the accessibility of the records and associated files that users deposit. **Accessibility requirements primarily follow the research outputs, not the repository.** This means that while Zenodo does not enforce accessibility, depositors are responsible for making their records and associated files as accessible as possible.

## Zenodo platform accessibility

Zenodo as a platform gets most of its digital accessibility components from the InvenioRDM software, which is WCAG 2.1 compliant. They are working toward WCAG 2.1 AA compliance. Neither the NIH Public Access Policy nor the Data Management and Sharing Policy require a repository to be Section 508 certified.

- Interested in reading more about accessibility in the software? InvenioRDM accessibility guide for developers: <https://inveniordm.docs.cern.ch/community/code/best-practices/accessibility/>

## Accessibility of deposited files

Because accessibility compliance follows the research outputs and not the repository, it's up to the user to make the outputs as accessible as possible. Zenodo Community users are expected to ensure their uploaded files and records meet accessibility best practices, and in some cases, additional steps may be necessary to ensure meaningful access. Best practices for accessibility (e.g., providing complete metadata, alt text, tagged PDFs, sufficient color contrast, and accessible document structures) should be applied to all records and files uploaded to Zenodo.

A few resources that might be helpful to guide these activities are listed below. For any additional concerns and questions, please refer to the resources below or consult resources on your campus for further guidance.

- Section508.gov: <https://www.section508.gov/create/>
- WebAccessibility in Mind (WebAIM): <https://webaim.org/resources/>

# Scope

The TI Repository is intended to be a resource for evaluation tools, methods, instruments, and other resources which can support evaluation methods and impact assessment at the local Clinical and Translational Science Award (CTSA) hub level. It also serves as a place to share examples of evaluation products such as reports, impact analyses, case studies, data visualizations, or other examples of evaluation work.

## **Sharing evaluation resources offers several strategic and practical benefits:**

- Making these materials openly available supports transparency, accountability, and trust
- The TI Repository offers long-term access; the common and centralized location promotes efficient workflows and avoid duplicative work
- Tools can be adapted and reused, promoting consistent, standard practices
- Resources in the TI Repository can be cited, and evaluators can receive credit for their work
- Sharing in the TI Repository helps meet funder open science requirements with minimal setup or burden

# Credit

*This Zenodo Communities Quick Start Guide is based off original work produced by Pearl Go (project lead) and other team members of the Generalist Repository Ecosystem Initiative (GREI) and Network of the National Library of Medicine National Evaluation Center (NNLM-NEC). The Zenodo Community subgroup of the Translational Impacts Working Group adapted the materials to the specific context of the CTSA hubs and the Translational Impacts Zenodo Community. We are grateful to Ms. Go and her team for developing the original work these materials are based upon. We are also grateful to Matt Carson for providing accessibility information.*

- NNLM National Evaluation Center U24LM013751 (NIH/NLM)
- Zenodo and the Generalist Repository Ecosystem Initiative 3OT2DB000013-01S1 (NIH/ODSS)

# Additional Zenodo resources

## **About**

- [About](#)
- [Policies](#)
- [Infrastructure](#)
- [Principles](#)
- [Roadmap](#)

## **Blog**

- [Blog](#)

## **Support**

- [Help](#)
- [FAQ](#)

Zenodo Help: <https://help.zenodo.org/>