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NISO Business Information Topic Committee

This recommended practice is part of the portfolio of the Business Information Topic Committee. At the time the Topic Committee approved this recommended practice for publication, the following individuals were committee members:

[to be added by NISO after approval]

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Section 1: Background and Context

The NISO Alternative Assessment Metrics (Altmetrics) Initiative launched in 2013 with a grant from the Alfred P. Sloan Foundation to explore, identify, and advance standards and/or best practices related to new assessment metrics in the community. The first phase of this project exposed areas for potential standardization in usage based metrics, social media references, network behavioral analysis, and nontraditional research outputs. The second phase of this project work was accomplished by three working groups, each focused upon different aspects of the altmetrics space: definitions and use cases, persistent identifiers and alternative output types, and a code of conduct.

The NISO Persistent Identifiers and Alternative Outputs Working Group investigated alternative research outputs and application of persistent identifiers in the scholarly environment in order to clearly identify and track research outputs and their relationships. The composition of the Working Group was developed to represent a balance of parties that are interested in nontraditional research outputs and identifiers, with just under half of the 33 members coming from academic institutions and libraries. Publishers and other organizations in the scholarly ecosystem make up the majority of the rest of the group's membership. The organizations represented are drawn from bodies that have an interest in research output metrics.

Section 2: Alternative Outputs

The Alternative Outputs table is a current list of nontraditional research outputs. These outputs may fall within the scope of assessment when developing metrics to evaluate the impact of scholarly activity, with the acknowledgement that meaningful impact can go far beyond traditional publishing workflows and often involves the rich array of scholarly products that are created during the research process. These output types are alphabetized (second column) with a brief description and documentation of known current efforts (and by whom they are being undertaken). Relevant links are listed where available, and most entries have been assigned a focus area to group them by similar contextual uses. Focus areas include: Basic Sciences; Capacity; Code and Software; Communications; Data; Education and Training Materials; Events; Grey Literature; Images, Diagrams, and Video; Industry; Instruments, Devices, and Inventions; Methodologies, Publications; Regulatory, Compliance, and Legislation; Standards; and Other.

Section 3: Implications for Future Research

Future work in this area could include a more comprehensive inventory of output types and the coalescing of various research assessment models into a common framework. Work also remains to better assess the extent to which nontraditional research output types (such as those extending beyond a peer-reviewed publication) are not yet managed with persistent identifiers; this work is critical given that persistent identifiers are necessary for long-term management of access and relationships. Also of interest is the creation of a priority list for incorporating these output types into existing information systems; this effort could help guide development of comprehensive alternative metrics measures and methodologies. Ultimately, work must focus on these and other key areas to support the value of persistent identifiers to support interoperability and data exchange.

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TV Review, Radio Review	Grey Literature	Review of a performed play.	http://images.webofknowledge.com/WO KRS59B4/help/WOS/hs_document_type.html
Abstract	Publications	“Works consisting of lists of publications on a subject and that provide full annotated bibliographical information together with substantive summaries or condensations of the facts, ideas, or opinions presented in each publication listed.” ¹	https://www.nlm.nih.gov/mesh/pubtypes.html
Academic Dissertations	Publications	Works consisting of formal presentations that are usually made usually to fulfill requirements for an academic degree.	https://www.nlm.nih.gov/mesh/pubtypes.html
Algorithm	Code and Software	A procedure consisting of a sequence of algebraic formulas and/or logical steps to calculate or determine a given task.	CINAHL Headings
Annotation	Other	A brief note, usually no larger longer than two or three sentences, added after a citation in a bibliography to describe or explain the content or message of the work cited or to comment upon it.	http://www.abc-clio.com/ODLIS/odlis_a.aspx
Annual Report	Publications	Yearly statements concerning the administrative and operational functions of an institution or organization.	https://www.nlm.nih.gov/mesh/pubtypes.html
Application Program Interface (API)	Code and Software	A set of commands, functions, and protocols that programmers can use when building software for a specific operating system. The API allows programmers to use predefined functions to interact with the operating system, instead of writing them from scratch.	http://techterms.com/definition/api
Archival Finding Aid	Other	A guide to the materials in a collection of papers or other objects.	http://www2.archivists.org/usingarchives/appendix#.VvqeavkrJaQ
Article	Publications	A report of research on original works. Includes research papers, features, brief communications, case reports, technical notes, chronology, and full papers that were published in a journal and/or presented at a symposium or conference.	http://images.webofknowledge.com/WO KRS59B4/help/WOS/hs_document_type.html
Artistic Item or Work	Grey Literature	A work of art, artwork, art piece, piece of art, or art object is an aesthetic physical item or artistic creation. Apart from "work of art," which may be used of refer to any work regarded as art in its widest sense, including works from literature and music, these terms apply principally to tangible, portable forms of visual art: fine art such as a painting or sculpture, piece of jewelry, folk art, art installation, or conceptual art.	https://en.wikipedia.org/wiki/Work_of_art
Best Practice	Standards	A method or technique that has consistently shown results superior to those achieved with by other means, and that is used as a benchmark.	https://en.wikipedia.org/wiki/Best_practice
Bibliography	Publications	A list of books, articles, documents, publications, or and other items, usually on a single subject or related subjects.	https://www.nlm.nih.gov/mesh/pubtypes.html
Biography	Grey Literature	An account of the events, works, and achievements, personal and professional, of a person's life. The term encompasses articles on the activities and accomplishments of living persons as well as the presentation of an obituary.	https://www.nlm.nih.gov/mesh/pubtypes.html

¹ Library of Congress Subject Cataloging Manual

Biological Materials	Biologics and Life Sciences	Natural biocompatible materials that comprise a whole or a part of a living structure or biomedical device that performs, augments, or replaces a natural function	http://www.globalspec.com/learnmore/specialized_industrial_products/pharmaceutical_biotechnology/biotechnology/biological_materials
Blog	Publications/ Communications	A website that contains conversational personal reflections, comments, and sometimes links to other sites; typically run by an individual or small group. A blog (a truncation of the expression <i>weblog</i>) is a discussion or informational site published on the World Wide Web consisting of discrete entries ("posts") typically displayed in reverse chronological order (the most recent post appears first).	https://www.nlm.nih.gov/mesh/pubtypes https://en.wikipedia.org/wiki/Blog
Book Chapter	Publications	A monograph or publication written on a specific topic within a main division in a book.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Book Review	Publications	A critical appraisal of a book (often reflecting a reviewer's personal opinion or recommendation) that evaluates such aspects of the work as organization and writing style; possible market appeal; and cultural, political, or literary significance.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Business cases	Other	A business case is a structured plan outlining the feasibility of an idea that a person or company wishes to bring to market. In the academic setting, business cases allow professors to build or refresh the courses they teach.	http://proquest.libguides.com/proquestentrepreneurship
Cartographic Object	Data	Includes two- and three-dimensional maps and plans; nautical, aeronautical, and celestial charts; atlases; globes and planetaria; block diagrams, sections, and profiles; views; remote sensing images (including aerial photographs with cartographic purpose); cartograms; etc. Most cartographic materials are visual representations, but spatial data sets are a notable exception. In the bibliographic record representing a cartographic item, the characteristics of the material are described in the material specific details area (MSD).	http://www.abc-clio.com/ODLIS/odlis_c.aspx#cartographic
Case Report	Publications	Clinical presentations that may be followed by evaluative studies that eventually lead to a diagnosis.	https://www.nlm.nih.gov/mesh/pubtypes.html
Catalog	Other	"Works consisting of bibliographic records, created according to specific and uniform principles of construction and under the control of an authority file, which describe the materials contained in a collection, library, or group of libraries. Catalogs include also lists of materials prepared for a particular purpose, such as exhibition catalogs, sales catalogs, garden catalogs, medical supply catalogs." ²	https://www.nlm.nih.gov/mesh/pubtypes.html
Chemical Structure	Images, Diagrams, and Video	The graphical depiction of the arrangement of chemical bonds between atoms in a molecule.	https://en.wiktionary.org/wiki/chemical_structure ; https://www.force11.org/group/atributionwg
Chronology	Grey literature	A review of events on a specific topic or subject in their order of occurrence in time.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html

² ALA Glossary of Library and Information Sciences, 1983.

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Classical Articles	Publications	A current presentation of a previously printed seminal article marking a milestone in the history of medicine or science. It The article is usually accompanied by introductory remarks heralding its reprinting, often on the anniversary of its original publication or on an anniversary of the author's birth or death. It is usually reprinted in full, with complete bibliographical reference to the original publication.	https://www.nlm.nih.gov/mesh/pubtypes.html
Clinical Guidelines	Publications	A set of directions or principles to assist the health care practitioners with patient care decisions about appropriate diagnostic, therapeutic, or other clinical procedures for specific clinical circumstances. Practice guidelines may be developed by government agencies at any level, institutions, organizations such as professional societies or governing boards, or by the convening of expert panels. Guidelines can provide a foundation for assessing and evaluating the quality and effectiveness of health care by measuring improved health, reduction of variation in services or procedures performed, and reduction of variation in outcomes of health care delivered.	https://www.nlm.nih.gov/mesh/pubtypes.html
Clinical Research Protocols	Methodologies	A system of rules for testing something, e.g., a drug or medical device, for a specified condition or purpose, or may a review of previous studies or an account of record the history of a disease or condition.	http://www.niehs.nih.gov/about/od/ethics/protocols/
Clinical trial	Publications	A work that reports on the results of a clinical study in which participants are assigned to receive one or more interventions so that researchers can evaluate the interventions on biomedical or health-related outcomes. The assignments are determined by the study protocol. Participants may receive diagnostic, therapeutic, or other types of interventions. While most clinical trials concern humans, this publication type may be used for clinical veterinary articles meeting the requisites for humans.	https://www.nlm.nih.gov/mesh/pubtypes.html
Code/Software	Code and Software	Also called a <i>program</i> or simply <i>software</i> , this is a series of instructions that directs a computer to perform specific tasks or operations.	https://en.wikipedia.org/wiki/Software
Codes of practice	Standards	Aa set of rules about how people in a particular profession should behave in their work.	http://www.macmillandictionary.com/us/dictionary/british/code-of-practice
Coding	Standards	HCPCS (Healthcare Common Procedure Coding System), CPT (Current Procedural Terminology), and ICD (International Classification of Diseases) codes implemented as a result of a research study.	https://becker.wustl.edu/impact-assessment
Collaboration/ Partnership	Other	A working relationship resulting from a research study. These can be classified in a number of ways: type of collaboration; number of collaborations; number of disciplines represented; duration; type of partner (community, private or foundation, industry, university, government); geographic location of the partner; or type of partnership (multidisciplinary, transdisciplinary, interdisciplinary).	https://becker.wustl.edu/impact-assessment
Computer language	Code and Software	A programming language is a formal, constructed language system of communication designed to communicate impart instructions to a machine, particularly a computer.	https://en.wikipedia.org/wiki/Programming_language
Conference	Event	An event including themes and panels that are organized around a particular topic. Research study findings are cited in a presentations at the event.	http://www.abc-clio.com/ODLIS/odlis_c.aspx#conference

Conference paper	Grey Literature	An original paper article presented by the its author(s) at a formal gathering of peers, usually at the invitation of the group or organization sponsoring the conference, which may be subsequently published in the conference’s proceedings. In the sciences, groundbreaking research results are often publicly introduced in such presentations.	http://www.abc-clio.com/ODLIS/odlis_c.aspx#confpaper
Keynote Address	Other	A formal speech delivered at the beginning or on the first day of a conference, often by a prominent person in or from outside the profession, usually on a topic related to the overall theme of the conference. The keynote address is intended to stimulate thought and set the tone for subsequent discussion.	
Conference Poster Session	Grey Literature	A conference event at which one or more attendees visually exhibit the salient points of their research, practice, or experimentation on a series of poster-sized sheets mounted on a large upright board behind a table. The presenters make themselves available at the table during the display to answer questions, distribute handouts, and clarify the exhibit to other attendees who walk through. A juried review process is often used to select proposals from abstracts submitted in advance.	http://dictionary.casrai.org/ConferencePoster
Consumer Health Materials	Grey Literature	Publications written for the general public, and that synthesize research study findings.	https://becker.wustl.edu/impact-assessment
Continuing Education Materials	Education and Training Materials	Materials that help professionals keep current in their work, produced as part of a research study.	https://becker.wustl.edu/impact-assessment
Curated Digital Collection	Other	Digital curation establishes, maintains, and adds value to repositories of digital data for present and future use. This is often accomplished by archivists, librarians, scientists, historians, and scholars. Successful digital curation will mitigate digital obsolescence, keeping the information accessible to users indefinitely.	https://en.wikipedia.org/wiki/Digital_curation
Curriculum Materials	Education and Training Materials	Resources that enhance a particular program of study within a formal educational setting. Related materials are usually developed using guidelines that are issued by an educational organization or by an organization devoted to a specialized area of medicine or research. Some guidelines for curriculum materials include a listing of core competencies and skills that should be taught as well as essential areas of knowledge required to meet the standards of a particular program of study. Many curriculum guidelines refer to research studies as being significant or for use as recommended or recommend them as background readings for more information.	https://becker.wustl.edu/impact-assessment
Dance Performance Review	Grey literature	Critique of solo dance recitals, complete dance productions, dance programs consisting of several works, and other types of performed dances.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Database	Data	An online collection of data resulting from a research study.	https://becker.wustl.edu/impact-assessment
Dataset	Data	Organized collections of data, which have been stored permanently in a formalized manner suitable for communication, interpretation, or processing.	https://www.nlm.nih.gov/mesh/pubtypes.html

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Dictionary	Publications	A reference book containing a list of words—usually in alphabetical order—giving information about form, pronunciation, etymology, grammar, and meaning. A foreign-language dictionary is an alphabetical list of words of one language with their meaning and equivalents in another language.	https://www.nlm.nih.gov/mesh/pubtypes.html
Discussion	Publications	An article or paper that discusses considers questions in an open and usually informal debate.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Editorial Material	Publications	An article that gives the opinions of a person, group, or organization. Includes editorials, interviews, commentary, and discussions between individuals, post-paper discussions, round-table symposia, and clinical conferences.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Editorship / Community Leadership	Other	A person who prepares for publication the work(s) of one or more other authors. An editor may be responsible for selecting material included in a collection or for preparing manuscript copy for the printer, including annotation of the text, verification of the accuracy of facts and bibliographic citations, polishing grammar and style, and organizing front and back matter, etc.	http://www.abc-clio.com/ODLIS/odlis_e.aspx
Evaluation Study	Publications	An examination of studies determining the effectiveness or utility of a processes, personnel, and/or equipment.	https://www.nlm.nih.gov/mesh/pubtypes.html
Excerpt	Publications	A selection from or a fragment of a literary or musical work, which cannot stand as a separate work in its own right.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Exhibit	Other	A physical object placed on display in a museum, gallery, or other public place, usually because of its historical, cultural, or scientific importance or its aesthetic qualities, extraordinary characteristics, or monetary value. Libraries typically exhibit rare and valuable books, manuscripts, personal papers, and memorabilia associated with authorship, publishing, book history, and reading. Exhibits may be permanent or rotate periodically, depending on the availability of materials suitable for display and the policy of the library. Also refers to the event during which such objects are displayed.	http://www.abc-clio.com/ODLIS/odlis_e.aspx
FAQ list	Other	A text file available online or in print, containing answers to commonly asked questions about a specific topic, that may serve as a mini-help file for assist inexperienced users of a computer system or software program.	http://www.abc-clio.com/ODLIS/odlis_f.aspx
Fiction and Creative Prose	Publications	Works consisting of creative writing, not presented as factual.	https://www.nlm.nih.gov/mesh/pubtypes.html
Film Review	Grey Literature	A review critique of a motion picture.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html

Github Repository	Code and Software	Git is a version control system used in software development, and Github is a related, web-based Git repository hosting service. It offers all of the distributed revision control and source code management (SCM) functionality of Git, and adds its own features. Unlike Git, which is strictly a command-line tool, GitHub provides a Web-based graphical interface and desktop as well as mobile integration. It also provides access control and several collaboration features such as bug tracking, feature requests, task management, and wikis for every project.	https://en.wikipedia.org/wiki/GitHub
Graphics (Computing)	Data	The digital equivalent of a drawing, figure, schematic, visualization . This includes CAD (computer-aided design) drawings in GIS (geographic information systems), etc.	
Grey Literature Materials	Grey Literature	Non peer-reviewed journal articles, trade publications, supplemental materials/ governmental documents.	https://becker.wustl.edu/impact-assessment
Guidelines	Publications	A set of statements, directions, or principles presenting current or future rules or policy. Guidelines may be developed by government agencies at any level, institutions, organizations such as professional societies or governing boards, or by the convening of expert panels. The text may be cursive or in outline form, but it is generally a comprehensive guide to problems and approaches in any discipline or activity. This concept relates to the general conduct and administration of health care activities rather than to specific decisions for a particular clinical condition.	https://www.nlm.nih.gov/mesh/pubtypes.html
Handbook	Grey Literature	A concise reference work in which facts and information pertaining to a certain subject or field are arranged for ready reference and consultation rather than for continuous reading and study.	https://www.nlm.nih.gov/mesh/pubtypes.html
Hardware Review	Grey Literature	A critical appraisal of computer hardware (objects that you can touch, e.g., disk drives, keyboards, and printers), often reflecting a reviewer's personal opinion or recommendation.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Images	Images, Diagrams, and Video	Includes scanned images, 2-D photography, still images and graphics. In a broad sense, an image is any two-dimensional figure.	https://en.wikipedia.org/wiki/Image
Images (3D)	Images, Diagrams, and Video	A 3-D depiction of object is one that appears to have has three dimensions, i.e., width, height, and depth (length).	https://en.wikipedia.org/wiki/3D_modeling
Index	Other	"An open-end finding guide to the literature of an academic field or discipline (example: <i>Philosopher's Index</i>), to works of a specific literary form (<i>Biography Index</i>) or published in a specific format (<i>Reader's Guide to Periodical Literature</i>), or to the analyzed contents of a serial publication (<i>New York Times Index</i>). Indexes of this kind are usually issued in monthly or quarterly paperback supplements and , cumulated annually. Citations are usually listed by author and subject in separate sections, or in a single alphabetical sequence under a system of authorized headings collectively known as a controlled vocabulary, developed over time by the indexing service. Indexing can be either pre-coordinate or post-coordinate."	http://www.abc-clio.com/ODLIS/odlis_i.aspx

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Innovation	Other	Putting an invention into use or devising a new use for an existing invention. "Invention is the first step of innovation, but innovation often requires significant additional development activity beyond that first step in order to get new products and services to consumers."	http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/aug11_su_7_26f.authcheckdam.pdf
Invention (no patent)	Instruments, Devices, Inventions	An invention is a unique or novel device, method, composition, or process.	https://en.wikipedia.org/wiki/Invention
Invention disclosure	Grey Literature	Also called an invention disclosure report, this is a confidential document written by a scientist or engineer for use by a company's patent department, or by an external patent attorney, to determine whether patent protection should be sought for the described invention.	https://en.wikipedia.org/wiki/Invention_disclosure
Laboratory Manual	Grey Literature	Concise background information and directions for activities, including conducting experiments or diagnostic tests in the laboratory.	https://www.nlm.nih.gov/mesh/pubtypes.html
Laboratory Techniques and Procedures	Methodologies	Procedures used to accomplish particular tasks in a research environment. New methods or procedures may be developed as a result of a research study.	https://en.wikipedia.org/wiki/Category:Laboratory_techniques ; https://becker.wustl.edu/impact-assessment
Lecture (Conference, Meeting, Symposium)	Grey Literature	Gatherings that produce or present conference papers, conference posters, panel discussions, presentations, lectures, supplemental materials.	https://becker.wustl.edu/impact-assessment
Lecture Notes	Education and Training Materials	Notes taken at the delivery or reading of a speech before an audience or class, usually given to instruct. ³	https://www.nlm.nih.gov/mesh/pubtypes.html
Legislation/Regulation	Regulatory, Compliance, and Legislation	Enactment of federal, state, or local legislation or regulation.	https://becker.wustl.edu/impact-assessment
Letter	Grey Literature	Contributions or correspondence from the readers to the a journal editor concerning previously published material.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
License	Instruments, Devices, Inventions	A document that states that an outside party may use of intellectual property or inventions generated by a research study. Examples of licenses include: Evaluation and Option Agreement, Non-Exclusive License Agreement, and Exclusive License Agreement.	https://becker.wustl.edu/impact-assessment
License Agreements	Instruments, Devices, Inventions	A document governing the use by outside parties of intellectual property or inventions generated by a research study. Examples of licenses points addressed in a license include: number of licenses granted; requestor status; individual or organization; translations, if applicable; and adaptations, if applicable.	https://becker.wustl.edu/impact-assessment

³ Random House Unabridged Dictionary, 2d ed.

Lifestyle Intervention	Other	Identification of health or other personal recommendations.	https://becker.wustl.edu/impact-assessment
Linked Data	Standards	Links to existing concepts such as proteins, genes, concepts, astronomical objects, etc. that make data more useful.	https://www.force11.org/group/resource-identification-initiative , http://www.geosamples.org/aboutigns
Linked Data Resource	Data	Data, information, and knowledge that are exposed, shared, and connected on the Semantic Web using URIs (Uniform Resource Indicators) and RDF (Resource Description Framework protocols).	http://linkeddata.org
Logo	Industry	Aa symbol that is used to identify a company and that appears on its products.	https://www.force11.org/group/attributio nwg ; http://www.merriam-webster.com/dictionary/logo
Mass Media	Communications	“The mass media disseminate public information to the widest possible audience (and some would argue to the lowest common denominator) with a close eye on the profits to be made from advertising, as in the case of major commercial television networks. Although the producers of this one-way flow of information may use polling to reveal the characteristics of their listeners or viewers, the individuals who receive their message remain largely anonymous. The news media (newspapers, news magazines, news broadcasts, news Web sites, etc.) specialize in providing the latest information about current events, with or without commentary, usually without intending to entertain.”	http://www.abc-clio.com/ODLIS/odlis_m.aspx#media
Material Transfer Agreement (MTA)	Instruments, Devices, Inventions	A contract that covers the transfer of proprietary tangible property such as biological materials. Such contracts may cover materials coming into a university from academic or industrial sources, or may cover materials going out from the university to academic or industrial recipients. Negotiated terms of such agreements may cover the use of the original materials, progeny materials produced by self-replication of the original sample, and modifications of the original materials.	https://becker.wustl.edu/impact-assessment
Measurement Instruments	Other	Means of recording research outcomes.	https://becker.wustl.edu/impact-assessment
Media Resource	Images, Diagrams, and Video	A media resource includes many content types (video, television, etc.) at different levels of abstraction, for examplee.g., it can encompasses the abstract notion of a movie (e.g., <i>Notting Hill</i>) as well as the binary encoding of this movie (e.g., the MPEG-4 encoding of <i>Notting Hill</i> on a DVD), or any intermediate levels of abstraction (e.g., the director's cut or the plain version of the <i>Notting Hill</i> movie).	https://www.w3.org/TR/mediaont-10/#Terminology

Medical Device	Instruments, Devices, Inventions	An “instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is: recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them; intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes.”	http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Overview/ClassifyYourDevice/ucm051512.htm
Meeting Abstract	Publications	A general summation of completed papers that were or will be presented at a symposium or conference.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Meeting Summary	Publications	A paper that covers multiple meeting abstracts in a variety of subjects.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Mentorship	Capacity	“Mentorship is a relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person. The mentor may be older or younger, but have a certain area of expertise. It is a learning and development partnership between someone with vast experience and someone who wants to learn.”	https://en.wikipedia.org/wiki/Mentorship
Meta-Analysis	Publications	A study using a quantitative method of combining the results of independent studies (usually drawn from the published literature) and synthesizing summaries and conclusions that may be used to evaluate therapeutic effectiveness, plan new studies, etc. It is often an overview of clinical trials. It is usually called a meta-analysis by the author or sponsoring body and should be differentiated from reviews of literature.	https://www.nlm.nih.gov/mesh/pubtypes.html
Methodology	Methodologies	The systematic, theoretical analysis of the methods applied to a field of study.	https://en.wikipedia.org/wiki/Methodology
Mobile Application	Code and Software	A computer-based tool that can be used on devices such as cell phones and tablets and that is developed by the a research study is to be used by healthcare providers and/or consumers.	https://becker.wustl.edu/impact-assessment
Monograph	Publications	Any publication that is not a serial or integrating resource. In cataloging usage, <i>monograph</i> means an item that is usually on a single subject or related subjects and is complete in itself, whether constructed of chapters, sections, or parts. While any article encountered in indexing journals can be, strictly speaking, a monograph, as a publication type, a monograph will refer to a cataloging item.	https://www.nlm.nih.gov/mesh/pubtypes.html
MOOC	Education and Training Materials	A massive open online course (MOOC) is a model for delivering learning content online to any person who wants to take the course, with no limit on attendance.	https://library.educause.edu/topics/teaching-and-learning/massive-open-online-course-mooc

Music Performance Review	Grey Literature	A critique of a live musical performance (recital, concert, and opera).	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Music Program Notes	Other	This standard element of a concert where contemporary or classical music is being performed. Program notes serves two purposes: to provide historical and background information on the piece and, if necessary, the composer, and to give the audience some sense of what to expect when listening to the work. With the presentation of contemporary pieces, it is common for the composer to write his or her own notes.	https://en.wikipedia.org/wiki/Program_note
Music Score	Publications	Review of a bound musical composition or bound collection of musical compositions.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Music Score Review	Grey Literature	A transcript of the original and entire draft of a musical composition or an arrangement with the parts for the different instruments or voices written on staves one above another.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Musical Expression	Grey Literature	The intellectual or artistic realization of a work in the form of alphanumeric, musical, or choreographic notation, sound, etc., or any combination of such forms.	http://musicontology.com/specification/#term-MusicalExpression
Musical Item	Publications	This is in many instances a single physical object (e.g., a copy of a one-volume monograph, a single audio cassette etc.). There are instances, however, where the entity defined as item comprises more than one physical object (e.g., a monograph issued as two separately bound volumes, a recording issued on three separate compact discs, etc.).	http://musicontology.com/specification/#term-MusicalItem
New Cell Line Developed	Biologics and Life Sciences	Aa cell culture selected for uniformity from a cell population derived from a usually homogeneous tissue source (such as an organ).	http://www.merriam-webster.com/dictionary/cell%20line
New Species Discovered	Biologics and Life Sciences	A species is often defined as a group of individuals that actually or potentially interbreed in nature.	https://www.force11.org/group/attributonwg; http://evolution.berkeley.edu/evolibrary/article/evo_41
News Item	Communications	An announcement or statement of recent or current events of new data and matters of interest.	https://www.nlm.nih.gov/mesh/pubtypes.html
Observational Study	Publications	A work that reports on the results of a clinical study in which participants may receive diagnostic, therapeutic, or other types of interventions, but the investigator does not assign participants to specific interventions (as in an interventional study).	https://www.nlm.nih.gov/mesh/pubtypes.html
Ontology/Taxonomy	Standards	A formal naming and definition of the types, properties, and interrelationships of the entities that really or fundamentally exist for a particular domain of discourse.	https://www.force11.org/group/attributonwg; https://en.wikipedia.org/wiki/Ontology_%28information_science%29

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Partnership/ Collaboration	Capacity	A working relationship formed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Patents	Instruments, Devices, Inventions	A form of intellectual property protection that defines the exclusive right by law for inventors and assignees to make use of and exploit their inventions, products, or processes, for a limited period of time.	http://dictionary.casrai.org/Patent
Patient Education Handout	Grey Literature	A handout or self-contained informative material used to explain a procedure or a condition or the contents of a specific article in a biomedical journal and written in non-technical language for the patient or consumer.	https://www.nlm.nih.gov/mesh/pubtypes.html
Performance	Event	An occasion at which entertainment or other act is presented.	https://www.force11.org/group/attributio http://musicontology.com/specification/#term-Performance
Pharmaceutical Preparation	Instruments, Devices, Inventions	A drug intended for human or veterinary use, presented in finished dosage form	http://www.ncbi.nlm.nih.gov/mesh?term=Pharmaceutical%20Preparations
Pharmacopoeia	Standards	An authoritative work, which has the status of a standard, containing lists of drugs and preparations, their description, formulation, analytic composition, main chemical properties, standards for strength, purity, and dosage, chemical tests for determining identity, etc.	https://www.nlm.nih.gov/mesh/pubtypes.html
Poetry	Publications	Compositions in verse; metrical writing.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Policy	Regulatory, Compliance, and Legislation	A set of ideas or a plan for action.	http://dictionary.cambridge.org/us/dictionary/english/policy
Portfolio	Grey Literature	A collection of work, often artistic.	https://www.force11.org/group/attributio http://www.force11.org/group/attributio
Practice Guidelines	Publications	A set of directions or principles to assist a health care practitioner with patient-care decisions about appropriate diagnostic, therapeutic, or other clinical procedures for specific clinical circumstances. Practice guidelines may be developed by government agencies at any level, institutions, organizations such as professional societies or governing boards, or by the convening of expert panels. Guidelines can provide a foundation for assessing and evaluating the quality and effectiveness of health care by measuring improved health, reduction of variation in services or procedures performed, and reduction of variation in outcomes of health care delivery outcomes.	https://www.nlm.nih.gov/mesh/pubtypes.html
Proceedings Paper	Publications	Published literature of conferences, symposia, seminars, colloquia, workshops, and conventions in a wide range of disciplines. Generally published in a book of conference proceedings.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Processed Data (cleaned, annotated, etc.)	Data	Data that has been subjected to processing, such as normalization, or other manipulation.	https://www.ebi.ac.uk/training/online/glossary/term/235

Proof of Concept (POC)	Instruments, devices, inventions	"A demonstration, the purpose of which is to verify that certain concepts or theories have the potential for real-world application. POC is therefore a prototype that is designed to determine feasibility, but does not represent deliverables. Proof of concept is also known as proof of principle."	https://www.techopedia.com/definition/4066/proof-of-concept-poc
Reporting Requirements	Regulatory, Compliance, and Legislation	New parameters guiding the surveillance and reporting of a disease, disorder, or condition identified as a result of a research study.	https://becker.wustl.edu/impact-assessment
Repository	Data	Where data and other research study outputs are stored.	https://becker.wustl.edu/impact-assessment
Requests for Information	Other	Physicians, policy makers, or consumers contact research study investigators for more information on research findings.	https://becker.wustl.edu/impact-assessment
Research Direction	Other	A new direction focus and/or area of research investigation developed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Research Field or Discipline	Other	A new field of research study or discipline work developed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Research Project/Ancillary	Other	A related research study generated as a result of an existing research study.	https://becker.wustl.edu/impact-assessment
Research Project/New	Other	New funded research studies/work generated as a result of a research study.	https://becker.wustl.edu/impact-assessment
Research Project/Renewed	Other	A research project that is renewed, recommenced, or enabled to continue as a result of a research study.	https://becker.wustl.edu/impact-assessment
Resource Guide	Grey Literature	Works listing and describing various sources of information, from multiple media or in different formats, on a given subject.	https://www.nlm.nih.gov/mesh/pubtypes.html
Review	Grey Literature	A renewed study of material previously studied. Includes review articles and surveys of previously published literature. Usually will not present any new information on a subject.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Scientific Samples or Specimens	Biologics and Life Sciences	Items developed, harvested, or processed as part of a research study.	
Script or screenplay	Publications	Dialogue and related instructions written for film, plays, video game, television program, radio, and online class. Can be original works or adaptations from existing pieces of writing.	https://en.wikipedia.org/wiki/Screenplay
Software	Code and Software	Computer applications and libraries resulting from the a research study.	https://becker.wustl.edu/impact-assessment
Software Documentation	Standards	Written text or illustration that accompanies computer software. It either explains how the software operates or how to use it, and may mean different things to people in different roles.	https://en.wikipedia.org/wiki/Software_documentation
Software Patch	Code and Software	A piece of software designed to update a computer program or its supporting data, to fix or improve it.	https://en.wikipedia.org/wiki/Patch_%28computing%29

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Software Review	Grey Literature	A critical appraisal of computer software, often reflecting a reviewer's personal opinion or recommendation. Refers to programs, procedures, and rules, along with associated documentation pertaining to the operation of a computer system.	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Spin-off Company	Industry	A "sibling" company formed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Standard of Care	Standards	A clinically effective approach in the standard of care for treating a disease, disorder, or condition, developed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Standard Operating Procedures	Standards	Established or prescribed methods to be followed routinely for the performance of designated operations or in designated situations.	http://www.merriam-webster.com/dictionary/standard%20operating%20procedure
Start-up Company	Capacity	A business formed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Subject Heading	Other	The most specific word or phrase that describes the subject, or one of the subjects, of a work, selected from a list of preferred terms (controlled vocabulary) and assigned as an added entry in the bibliographic record to serve as an access point in the library catalog. A subject heading may be subdivided by the addition of subheadings. The use of cross-references to indicate semantic relations between subject headings is called syndetic structure. The process of examining the content of new publications and assigning appropriate subject headings is called subject analysis. In the United States, most libraries use Library of Congress subject headings (LCSH), but small libraries may use Sears subject headings.	http://www.abc-clio.com/ODLIS/odlis_s.aspx#subjectheading
Supplemental materials	Grey Literature	Supporting content or information, such as animation, datasets, multimedia files, video, movies, audio files, text files, or software, which is submitted for publication in an online journal or an online edition of a journal. This information may be referenced in the text of the article with a link to the supplementary data provided.	https://www.nlm.nih.gov/mesh/pubtypes.html
Survey	Grey Literature	Most often used to describe a method of gathering information from a sample of individuals. This "sample" is usually just a fraction of the population being studied.	http://jguffey.sites.truman.edu/files/2013/11/pamphlet.pdf
Syllabus	Education and Training Materials	An outline of the topics to be covered in a formal course of study, given in the order in which they are to be discussed in class, with any assignments and related readings also indicated. Some college and university faculty make their syllabi available online, usually on the World Wide Web, or place printed copies on reserve at the library.	http://www.abc-clio.com/ODLIS/odlis_s.aspx
Technical Report	Grey Literature	A formal document giving details of an investigation and results of a medical or other scientific problem. When issued by a government agency or comparable official body, its contents may be classified, unclassified, or declassified with regard to security clearance. This publication type may also cover a scientific paper or article that records the current state or current position of scientific research and development. If so labeled by the editor or publisher, this publication type may be properly used for journal articles.	https://www.nlm.nih.gov/mesh/pubtypes.html
Terminology	Standards	Lists of the technical terms or expressions used in a specific field. These lists may or may not be formally adopted or sanctioned by usage.	https://www.nlm.nih.gov/mesh/pubtypes.html

Testimony	Regulatory, Compliance, and Legislation	In the law, testimony is a form of evidence that is obtained from a witness who makes a solemn statement or declaration of fact. Testimony may be oral or written, and it is usually made by oath or affirmation under penalty of perjury. Unless a witness is testifying as an expert witness, testimony in the form of opinions or inferences is generally limited to those opinions or inferences that are rationally based on the perceptions of the witness and are helpful to a clear understanding of the witness's' testimony.	https://en.wikipedia.org/wiki/Testimony
Textbook	Education and Training Materials	A title intended for use in the study of specific subjects, containing systematic presentation of the principles and essential knowledge of the subjects.	https://www.nlm.nih.gov/mesh/pubtypes.html
Trademark	Industry	A word, phrase, symbol, and/or design that identifies and distinguishes the source of the goods of one party from those of others. A service mark is a word, phrase, symbol, and/or design that identifies and distinguishes the source of a service rather than goods. Think Examples include brand names, slogans, and logos. The term "trademark" is often used to refer to both trademarks and service marks.	http://www.uspto.gov/trademarks-getting-started/trademark-basics/trademark-patent-or-copyright
Trainee/Scholar	Capacity	For some research studies, trainees or scholars are involved with research. Examples of outcomes related to the training/education received are: trainees or scholars receive advanced degrees, continue research at different institutions, or engage in translational research; or training materials created by the research study are used or adapted by others.	http://www.abcclio.com/ODLIS/odlis_t.aspx#thesis
Training materials	Education and Training Materials	Educational items developed as a result of a research study.	https://becker.wustl.edu/impact-assessment
Transgenic Animal	Biologic and Life Sciences	An transgenic animal is one that has integrated a gene or DNA sequence (a 'transgene'), which has been transferred by human intervention, into the genome of a cell.	https://www.force11.org/group/attributio http://www.nature.com/scitable/knowledge/library/transgenic-animals-in-agriculture-105646080
TV, Radio, Film, or Theater Review	Publications	"Reviews of television, radio broadcasts, motion pictures, theater performances, and videos."	http://images.webofknowledge.com/WOKRS59B4/help/WOS/hs_document_type.html
Video-Audio file	Images, Diagrams, and Video	Audiovisual material that accompanies an articles and that may include video files or clips; the material may itself comprise an article.	https://www.nlm.nih.gov/mesh/pubtypes.html
Virtual machine	Code and Software	A virtual machine (VM) is an emulation of a particular computer system.	https://en.wikipedia.org/wiki/Virtual_machine
W3C standard	Standards	W3C (the World Wide Web Consortium) publishes documents that define Web technologies. These documents follow a process designed to promote consensus, fairness, public accountability, and quality. At the end of this process, W3C publishes Recommendations, which are considered Web standards.	https://www.w3.org/standards/faq
Webcasts	Images, Diagrams, and Video	Content from transmission of live or pre-recorded audio or video via Internet connection or download from the Internet.	https://www.nlm.nih.gov/mesh/pubtypes.html

Website of Research Study	Other	An Internet site that discusses and presents the results of a research study.	https://becker.wustl.edu/impact-assessment
White paper	Grey Literature	An official government report on any subject, especially one summarizing the results of an investigation or important policy decision of the British Parliament. Compare in this sense with green paper. The term is also used to refer to an authoritative report on a technology topic in technology, such as a new line of product development, sometimes available online, usually written by a person employed by a research company or vendor or by an independent consultant.	http://www.abc-clio.com/ODLIS/odlis_w.aspx
Wiki	Other	A website that allows collaborative modification of its content and structure directly from the web browser. In a typical wiki, text is written using a simplified markup language (known as "wiki markup"), and often edited with the help of a rich-text editor.	https://en.wikipedia.org/wiki/Wiki