



Ysbrydoledig • Cynnwys • Hysbysu
EAHIL 2018
Caerdydd • Cardiff
Inspiring • Involving • Informing

July 12th, 2018

DISSECTING PUBMED

Which content is covered by the Library ? And Open Access ?

Pablo Iriarte
Floriane Muller

LIBRARY



UNIVERSITÉ
DE GENÈVE



Sciences

Sciences de
l'environnement

Economie et management
Droit
Sciences de la société
Psychologie
et sciences de
l'éducation
Traduction et
interprétation

Etudes globales

Uni Dufour

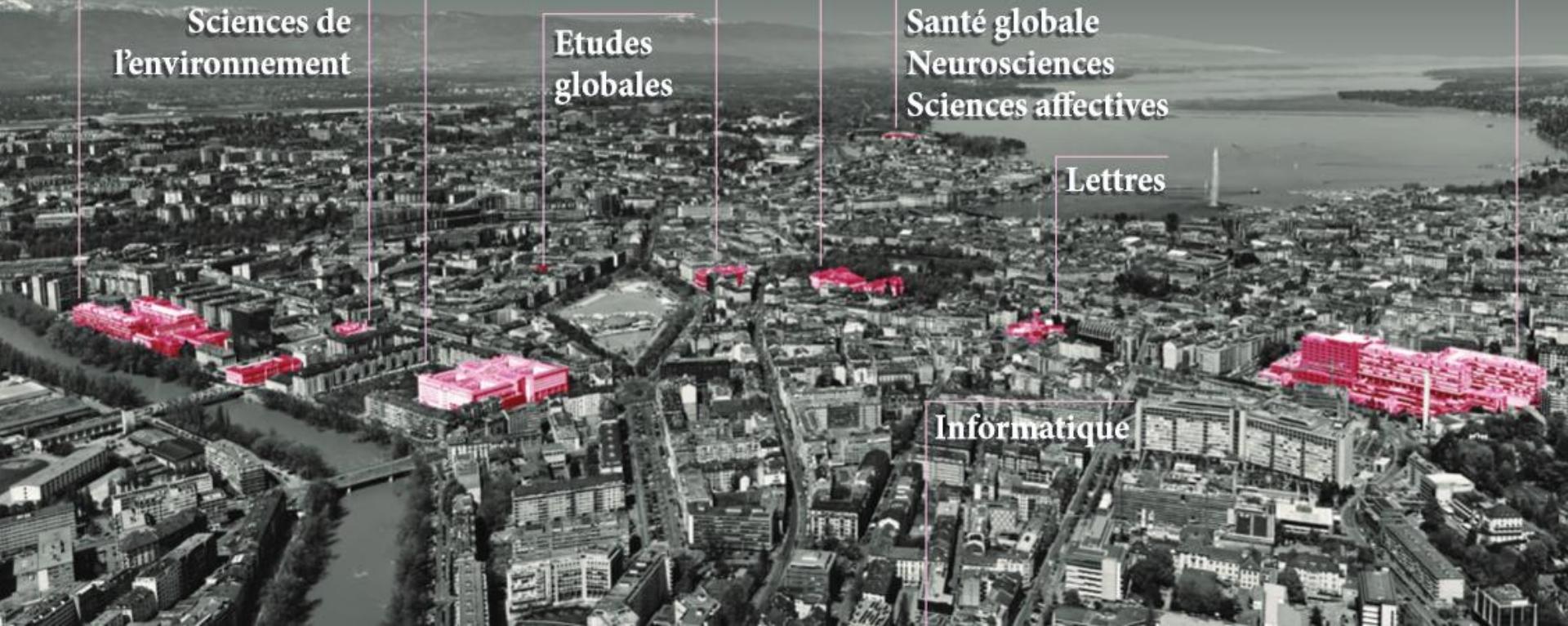
Lettres
Théologie

Médecine

Santé globale
Neurosciences
Sciences affectives

Lettres

Informatique



INSTITUTIONAL CONTEXT AT A GLANCE

16'935

Students



6'503

Staff



= 4'494,2 FTE

520

Professors (FTE)



Established in 1559

9
Faculties

37%
of foreign
students



152
nationalities



More than 500 programmes
- 27 Bachelor's degree
- 108 master's degree
- 80 doctoral programmes



60
Rang mondial
(Shanghai)

The Library

Open
343 days / year
88 hours / week

16 342 m²
2757 seats

104,4 FTE
(11.05 in Medicine)

2017

UNIGE data
Library data

Bibliothèque

WORKSHOPS LIBRARY WORKSHOPS

Do you really know the best PubMed tips & tricks ?

Are you sure you never miss a key publication ?

Come to our next workshop:

Use efficiently

PubMed

Thursday 15 February 2018

Bibliothèque Schmidheiny, site Uni-Aave/Sciences II (in English)

09:00 - 15:30

Thursday 22 February 2018

Bibliothèque site CML-Médecine (in French)

Details and registration: unige.ch/biblio/atelier-pubmed



LIBRARY

OUR RESEARCH QUESTIONS

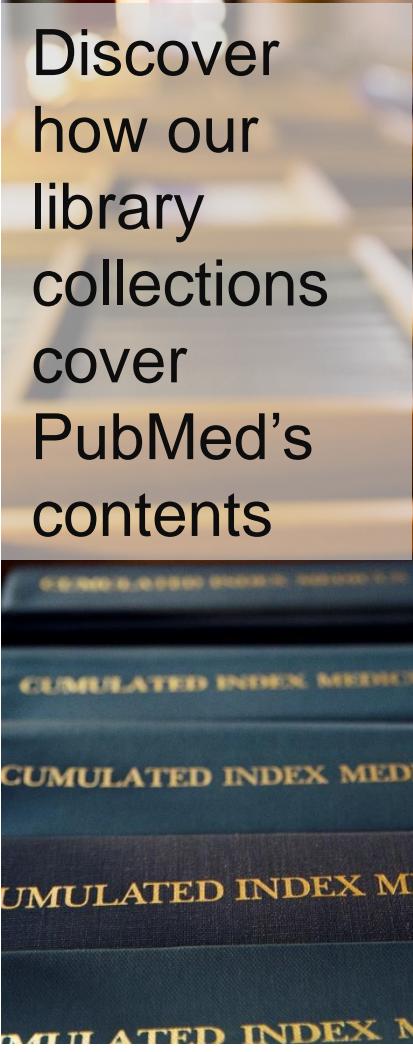


- What is full-text coverage of PubMed at our library ?
- Which portion of PubMed is accessible to the general public via Open Access (OA) ?
 - Are some PubMed's articles disconnected from their DOIs ?
 - Would finding those help increase OA tools' efficiency ?



PROJECT AIMS

Discover
how our
library
collections
cover
PubMed's
contents

A photograph showing a stack of several library books. The spines of the books are visible, with the title 'CUMULATED INDEX MEDICAL' printed in gold on the dark blue-green spines.

Observe
Open
Access
trends

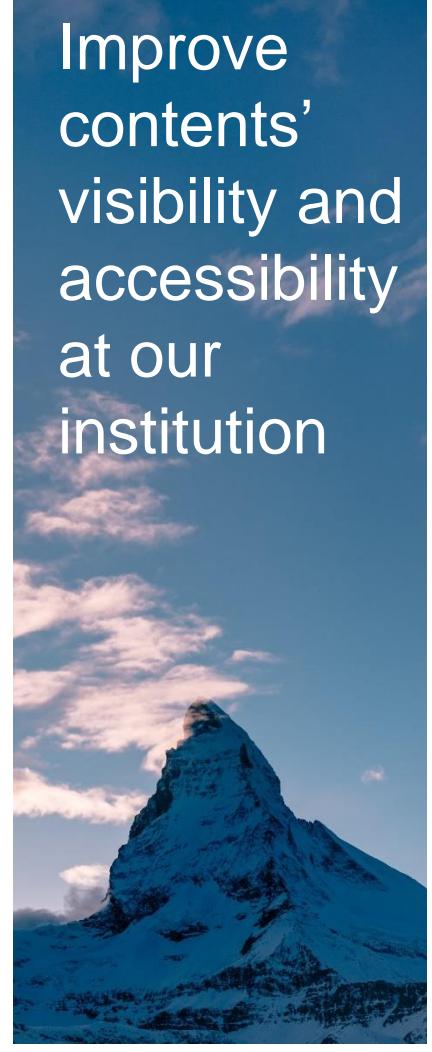
within
PubMed

A photograph of a silver padlock attached to a metal chain, set against a dark blue background. The chain is coiled around a dark object, possibly a book or a metal railing.

Try some
tools (data
science &
OA)

A close-up photograph of a silver adjustable wrench against a black background. The wrench is oriented vertically, with its jaws pointing upwards and downwards.

Improve
contents'
visibility and
accessibility
at our
institution

A photograph of a snow-capped mountain peak under a clear blue sky with scattered white clouds. The mountain has a sharp, triangular shape.

A photograph of three young children—two boys and one girl—playing a board game on a carpeted floor. They are all leaning forward, focused on the game. The boy on the left is wearing a white t-shirt with 'BOY' printed on it. The girl on the right is wearing a pink long-sleeved shirt. The game board is red and features a cartoon character. In the background, there's a bookshelf filled with books and a television. The carpet has a geometric pattern of brown, beige, and maroon.

METHODS

Download MEDLINE/PubMed Data

[Terms and Conditions](#)

Get the Data via Bulk Download

NLM produces an annual baseline, update files, and sample data.

[Annual Baseline](#) [Daily Update Files](#) [Sample Data](#)

Get the Data via API

PubMed data is also available from the E-utilities API.

[Insider's Guide to E-utilities](#) [E-utilities In-Depth](#)

About the Data

Learn about the MEDLINE/PubMed data.

[Documentation](#) [Data Elements](#) [Pubmed DTD](#) [FAQ](#)

NLM produces a baseline set of MEDLINE/PubMed citation records in XML format for download on an annual basis. The [annual baseline](#) is released in December of each year. Each day, NLM produces [update files](#) that include new, revised and deleted citations. See our [documentation](#) page for more information.

NLM Data News

Stay Connected

Enter your email address to receive updates about MEDLINE/PubMed data

March 5, 2018: Release of Mid-Year PubMed DTD and Upcoming Inclusion of MathML 3.0 Element Tags in PubMed XML

On June 1, 2018, we will begin displaying formulas in citation titles, abstracts, and keywords in PubMed. Today, formulas are replaced with [Formula: see text]. With this enhancement to PubMed, you will see formulas in the PubMed summary and abstract displays when these data are available. We will also be including the MathML 3.0 element tags in PubMed XML.

To support the addition of MathML tagging in our XML, we have created a new, [forthcoming DTD](#) which will be in use after June 1, 2018. You can download the forthcoming DTD for June 2018 now. Existing content will be valid against the new DTD. You can also download [sample XML files with MathML 3.0 tags](#).

February 8, 2018: Removal of <OtherID Source="NLM"> Data Element from Prospective Records

Beginning with file pubmed18n1022.xml, NLM will no longer populate the <OtherID Source=> with the attribute of "NLM". We will not remove and reissue citations that currently have an OtherID source of NLM but it will be removed from respective records in the PubMed web interface. Currently and in future use, users should refer to the <ArticleID> element as the authoritative Article Identification for the record.

MAIN DATASET



(08.02.2018 status)

- > 928 compressed files (gzip)
 - > Total size: 23 Gb (~200 Gb unzipped)
 - > 30'000 XML-formatted entries per file

Format: Abstract

Source: 2016 Dec 16;44(4): e8. doi: 10.3389/fnmic.040029.

Drug Vaping: From the Dangers of Misuse to New Therapeutic Devices.

Author information

Abstract

Users of e-cigarettes are increasing worldwide, participating in a worldwide epidemiological study. Because of the obvious benefits of e-cigarettes compared with traditional cigarette smoking, their electronic devices have been developed to reduce the health risk of tobacco smoking cessation. Some potential harm reduction could be considered by cannabis vaping for malignant smokers. However, the toxicities of liquids and aerosols remain under investigation because although the use of e-cigarettes is likely to be less harmful than traditional cigarette smoking, trace levels of contaminants have been identified. Simultaneously, other electronic devices such as e-vaporizers, e-hookahs or e-pipes, have been developed and commercialized. Consequently, misuse of electronic devices has increased, and experimentation has been documented on Internet web fora. Although legal and illegal drugs are currently consumed with these e-devices, no scientific papers are available to support the observations reported by numerous media and web forums. The potential therapeutic applications of vaping with e-cigarettes (vaping at baseline), legal and illegal alternative drugs (e.g., vaping) could present therapeutic benefits, as occurs with medical cannabis vaping with baby vaporizers. This review seeks to synthesize the problems of e-cigarette and liquid refill toxicity in order to introduce the dangers of illegal and legal drugs consumed using vaping and vaporization for recreational purposes, and finally, to present the potential therapeutic benefits of vaping as a new administration route for legal drugs.

Keywords: drug vaping, e-cigarette, e-liquid, vaping alternative use, vaping misuse

PMID: 27091432 PMCID: PMC5065688 DOI: 10.3389/fnmic.040029

Free PMC Article

Images from this publication: See all images (1) Free text

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Full text links

PMC Full text

Save items

Add to Favorites

Similar articles

E-cigarettes and vaping: a new challenge in clinical [Front Public Health. 2013] A closer look on the horizon-a survey into the use of electronic vaping devices [Soc Sci (London). 2010] Drug vaping and cannabis [Cannabimerc. 2014] Cannabimerc: a therapeutic review [Int J Environ Res Public Health. 2014] A longitudinal study of electronic cigarette users [Addict Behav. 2014]

E-Cigarettes: A Review of New Trends in Cannabis Use. [Int J Environ Res Public Health. 2014]

See reviews.

See all.

Related information

Articles frequently viewed together

References for this PMC Article

Free in PMC

Recent Activity

LinkOut - more resources

Drug Vaping: From the Dangers of Misuse to New Therapeutic Devices

University of Geneva (1204)

Published



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DATA SOURCES



27'836'723 PMIDs



UNIVERSITÉ
DE GENÈVE

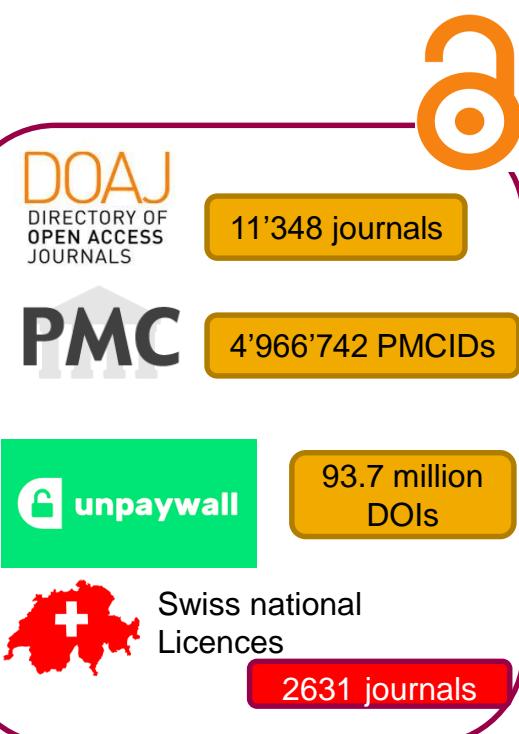
BIBLIOTHÈQUE

ExLibris SFX

128'449 ejournals



21'840 print holdings
(STM field)



TOOLS

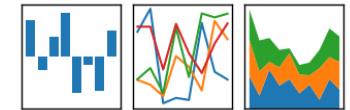


- > Command line utilities to parse, extract and transform XML files



- > Python library for data manipulation and analysis

pandas
 $y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$



- > Python library for algorhytm optimisation (parallel computing)

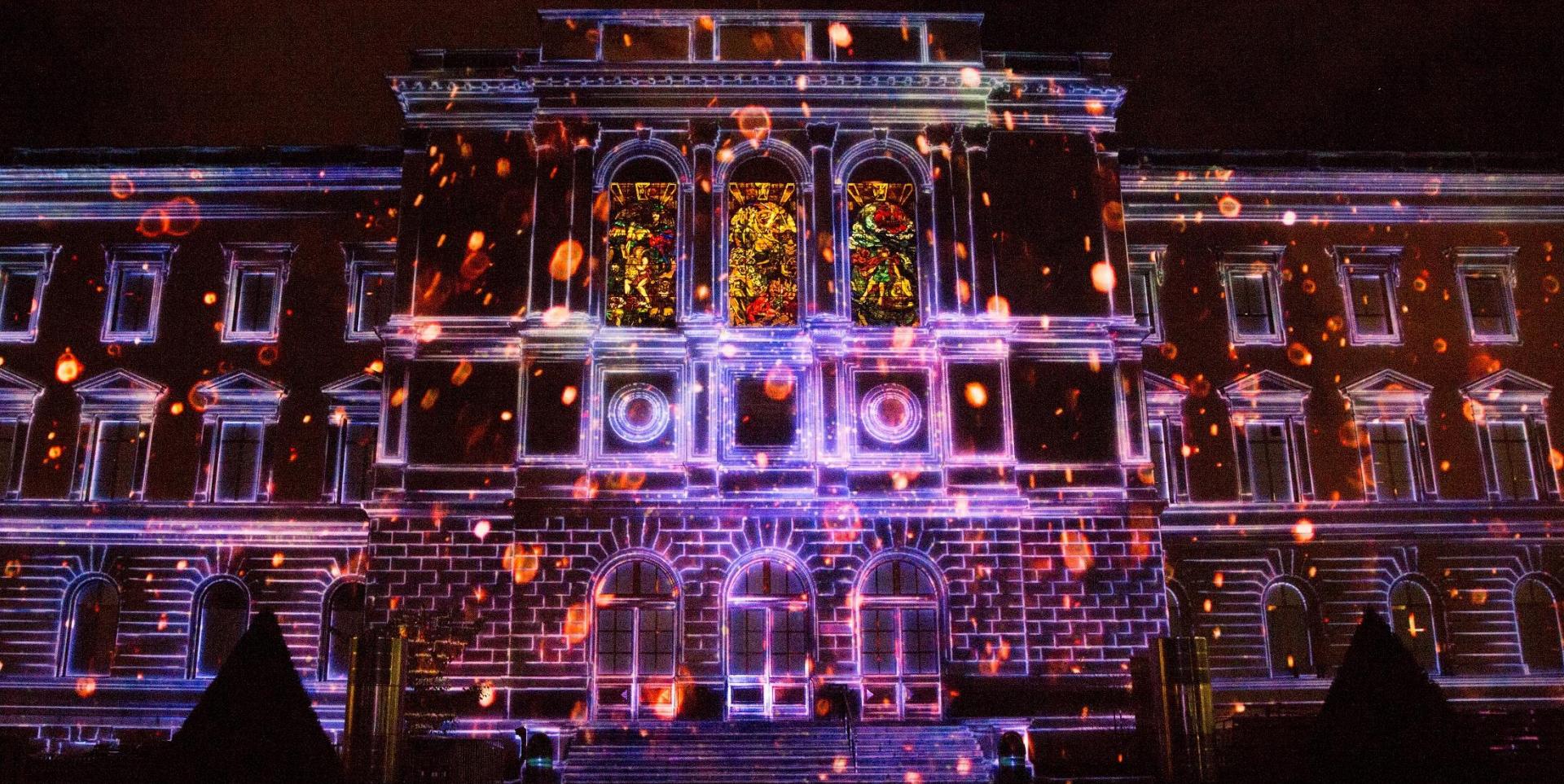


- > iPython Notebooks creation and collaboration tool



RESULTS

ACCESS OFFERED BY THE LIBRARY



METHODS



UNIVERSITÉ
DE GENÈVE
BIBLIOTHÈQUE



ExLibris SFX

128'449 ejournals



21'840 print holdings
(STM field)

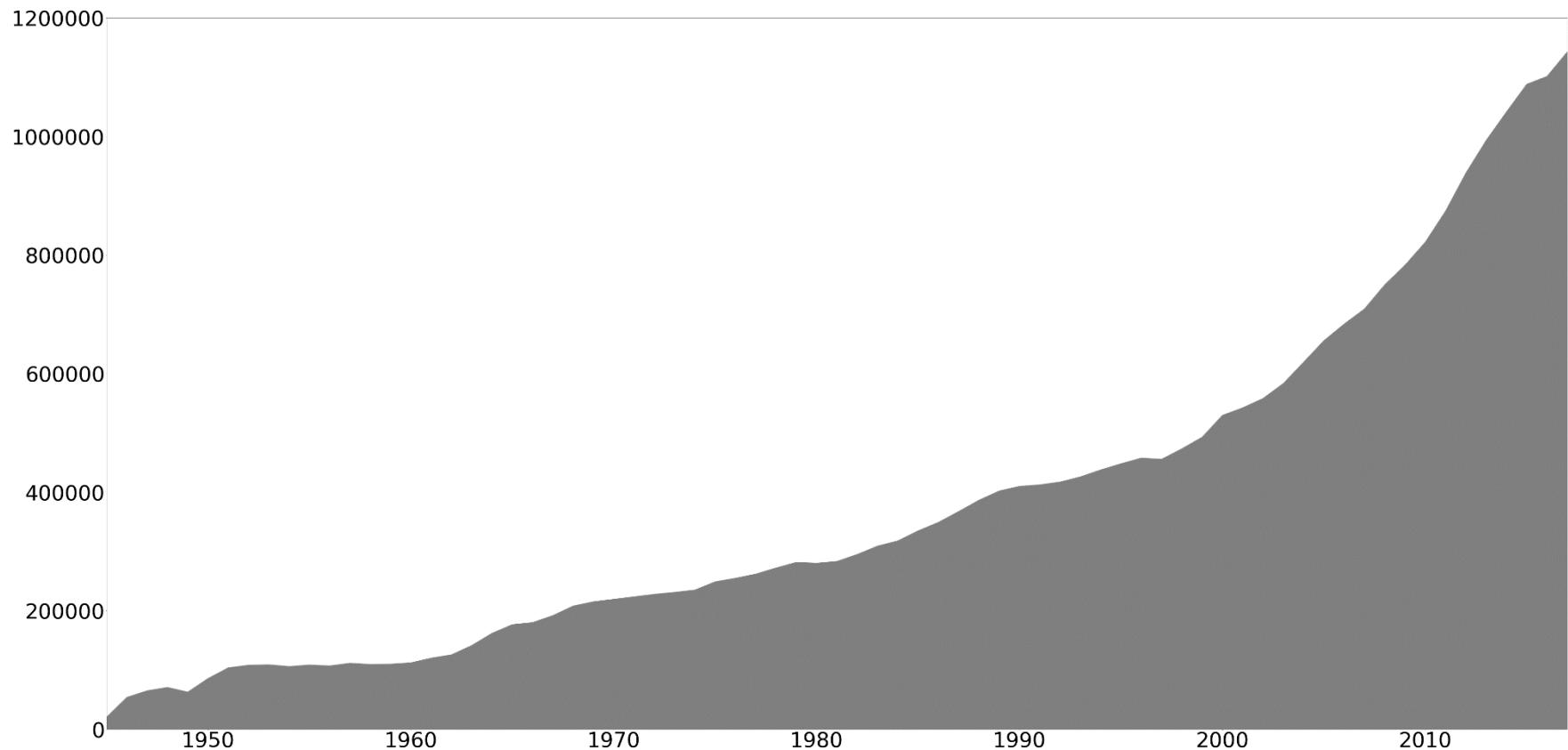
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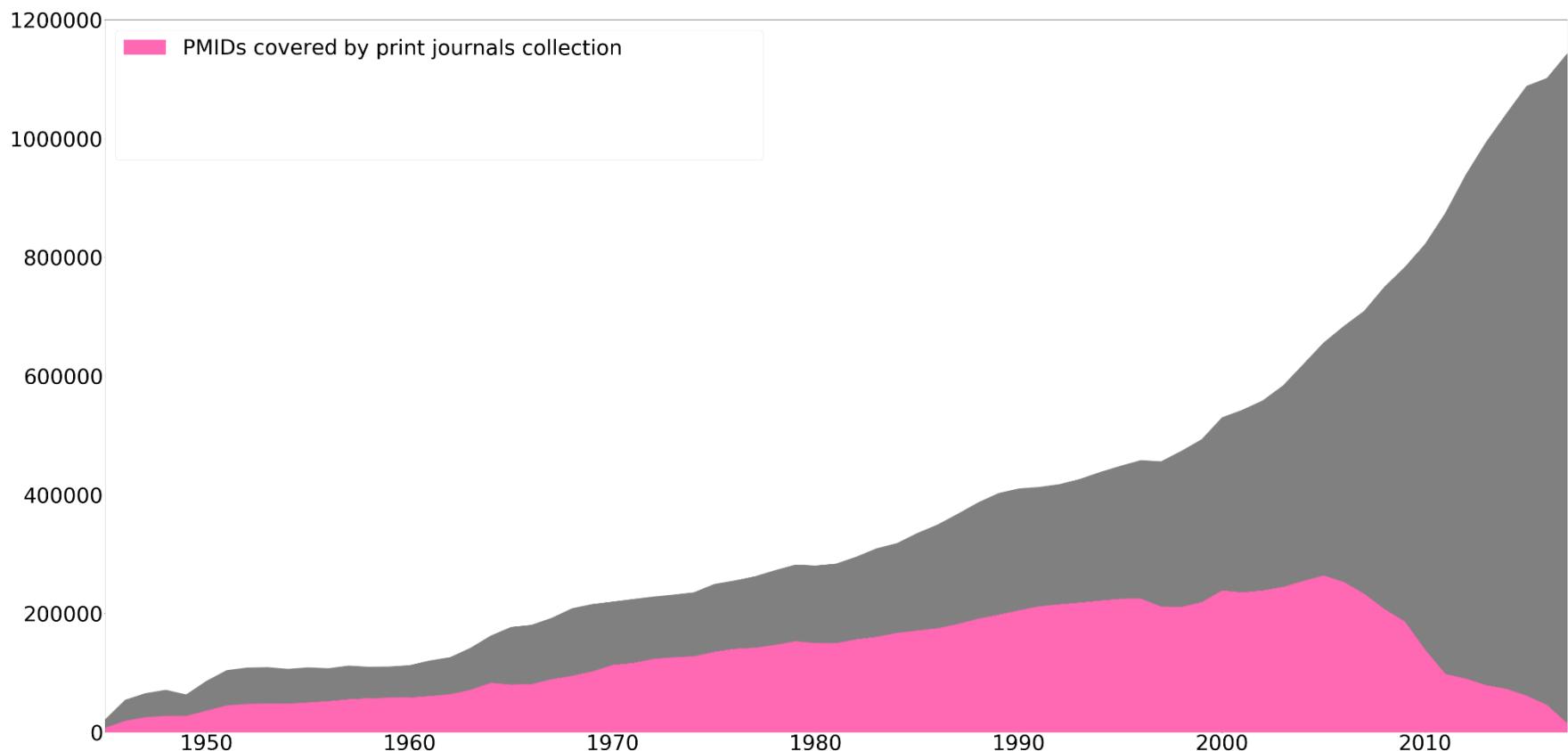
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PUBMED



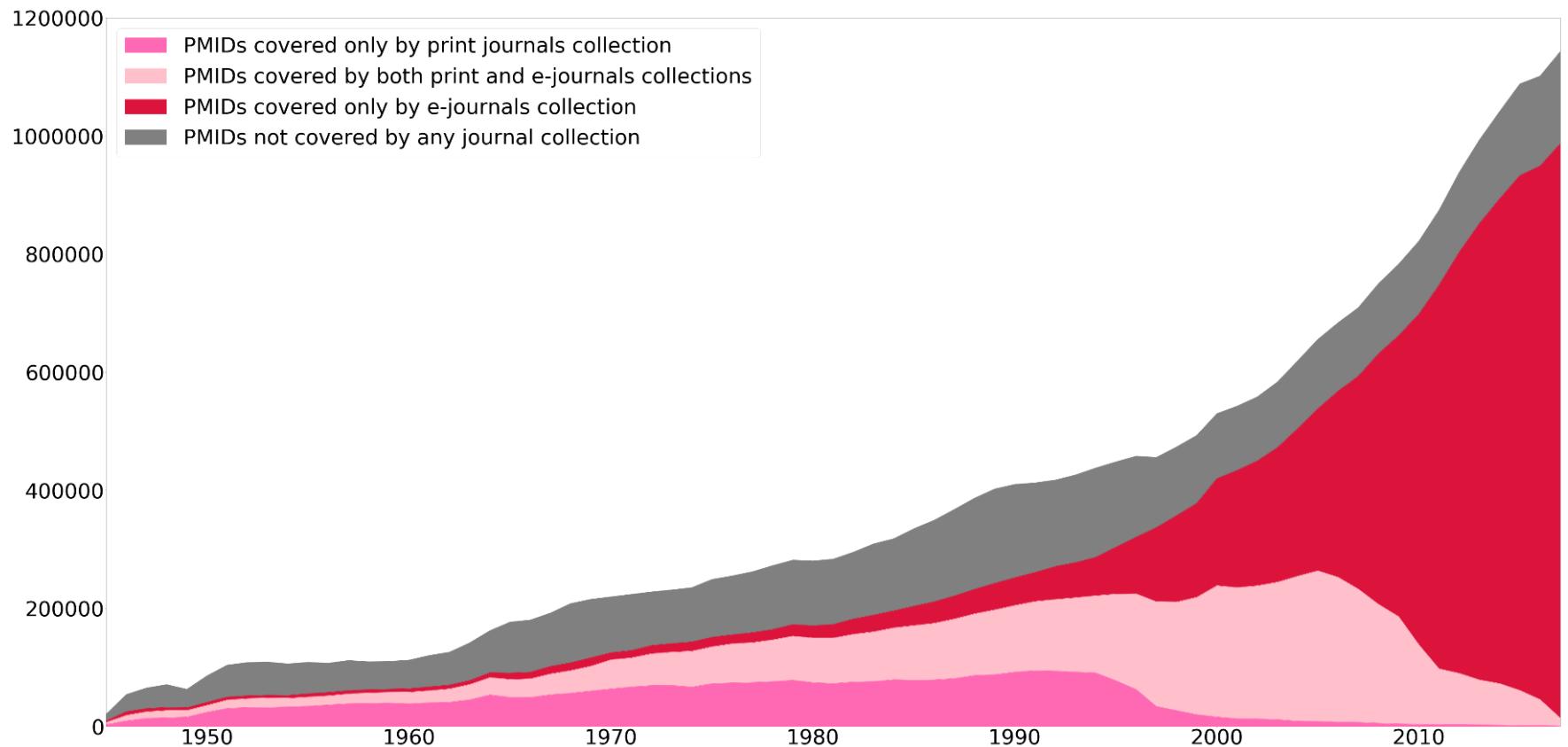
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Which content is covered by the Library ?



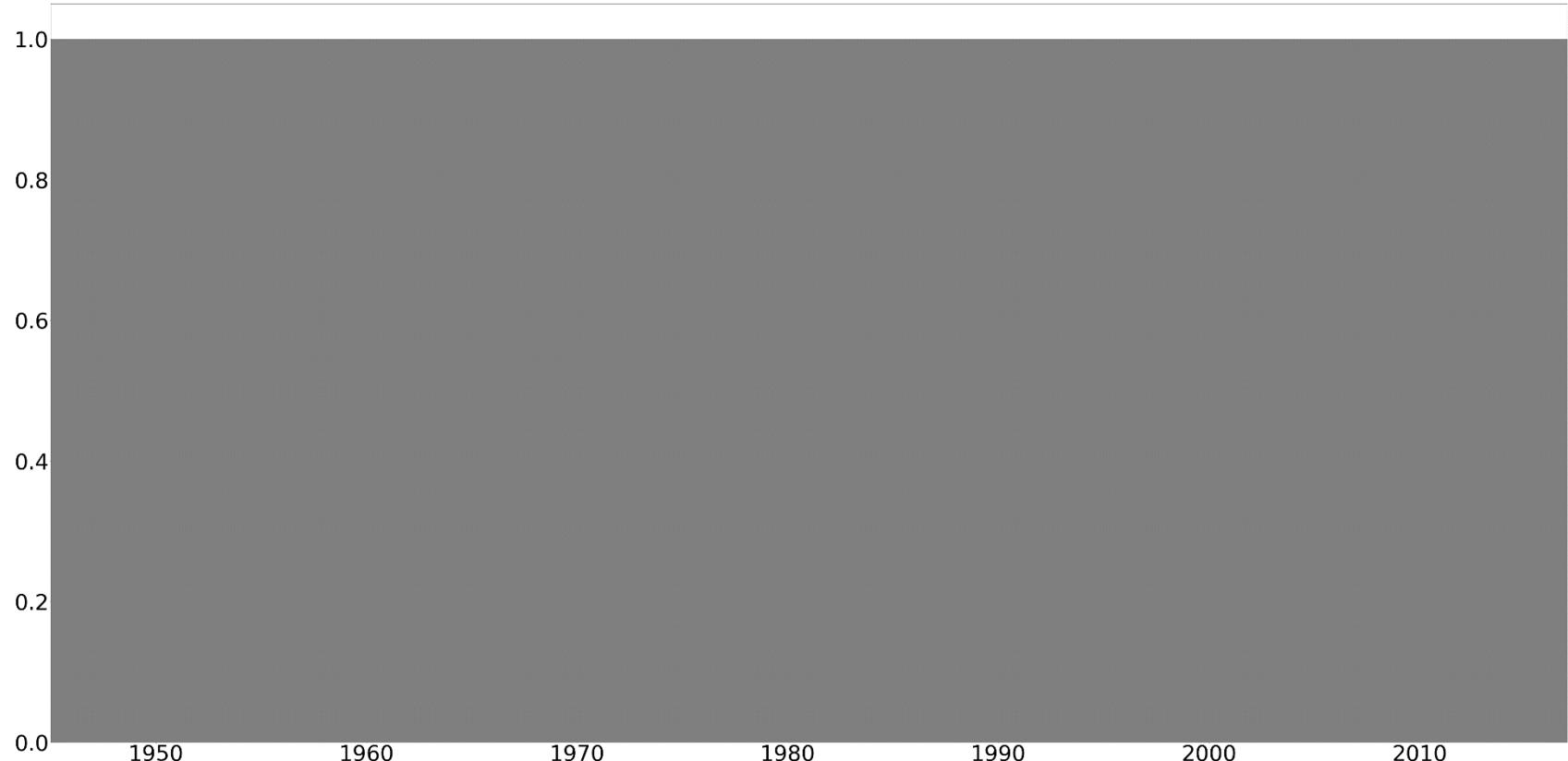
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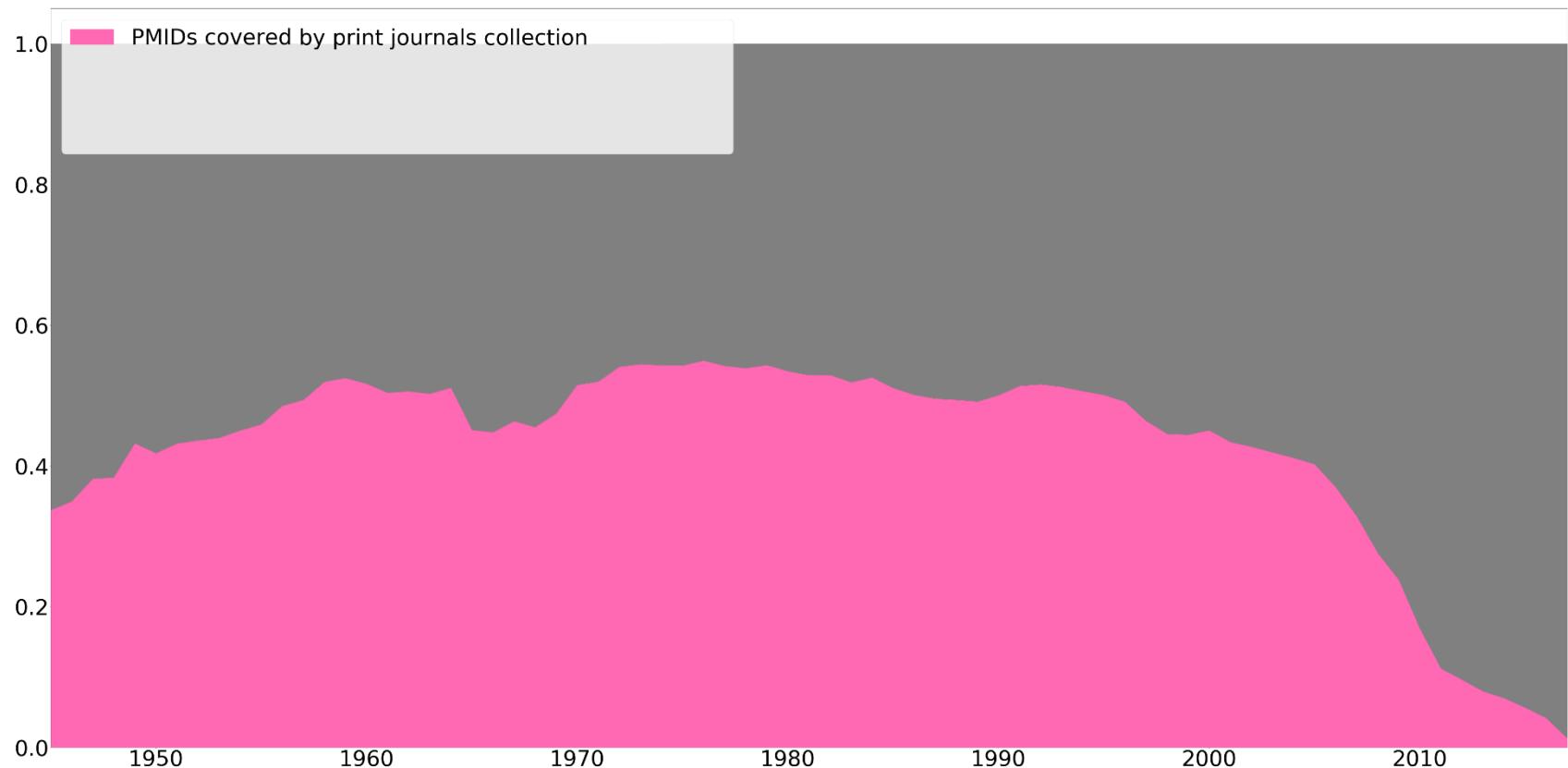
PUBMED

(percentage)



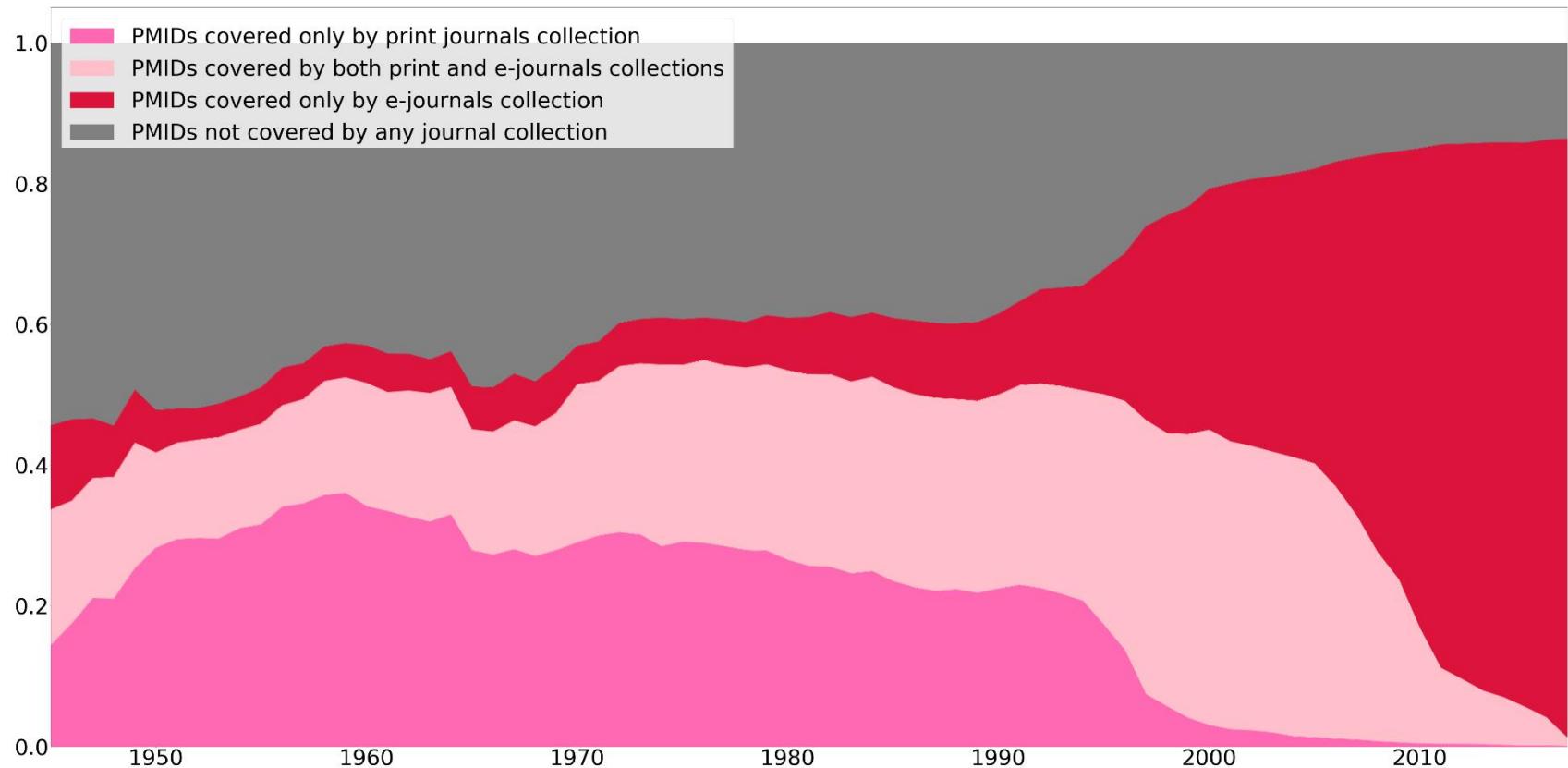
PUBMED

Which content is covered by the Library ? (percentage)



PUBMED

Which content is covered by the Library ? (percentage)



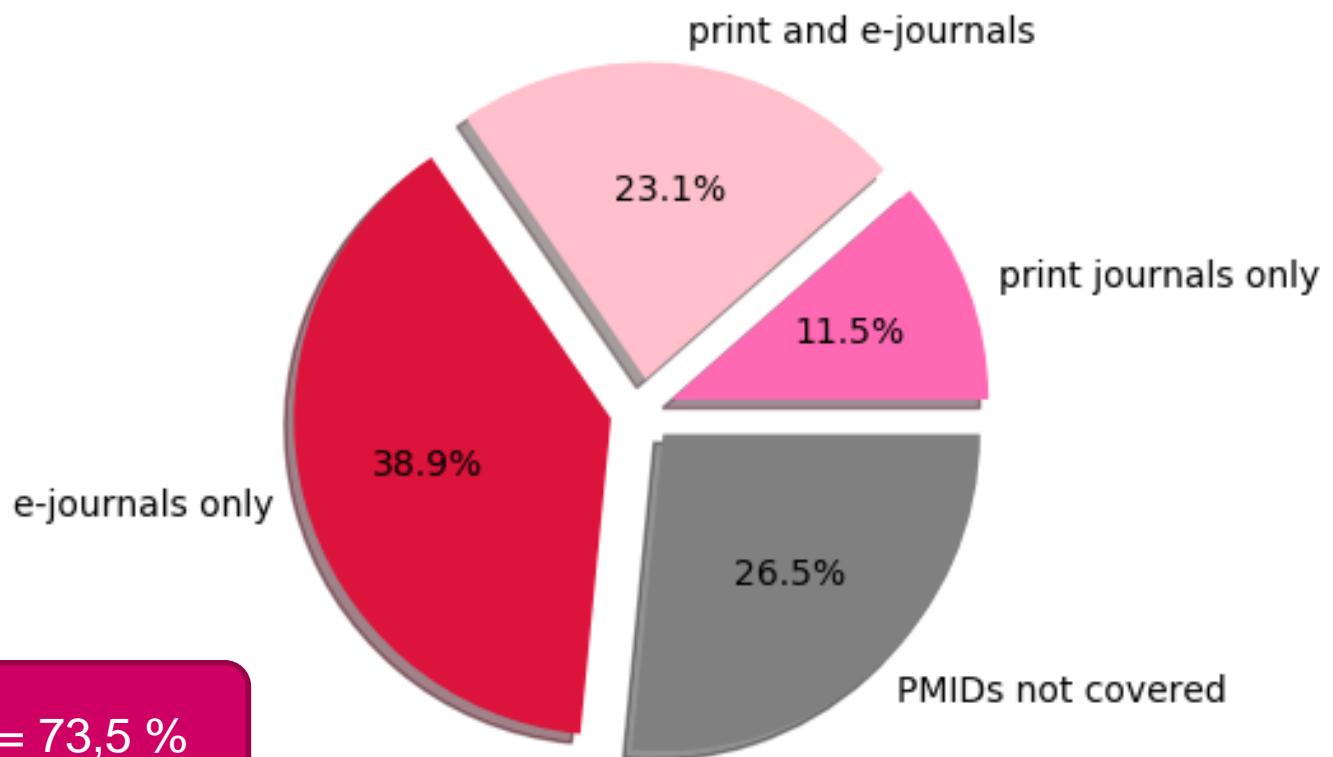
OVERALL PUBMED COVERAGE OFFERED BY THE LIBRARY



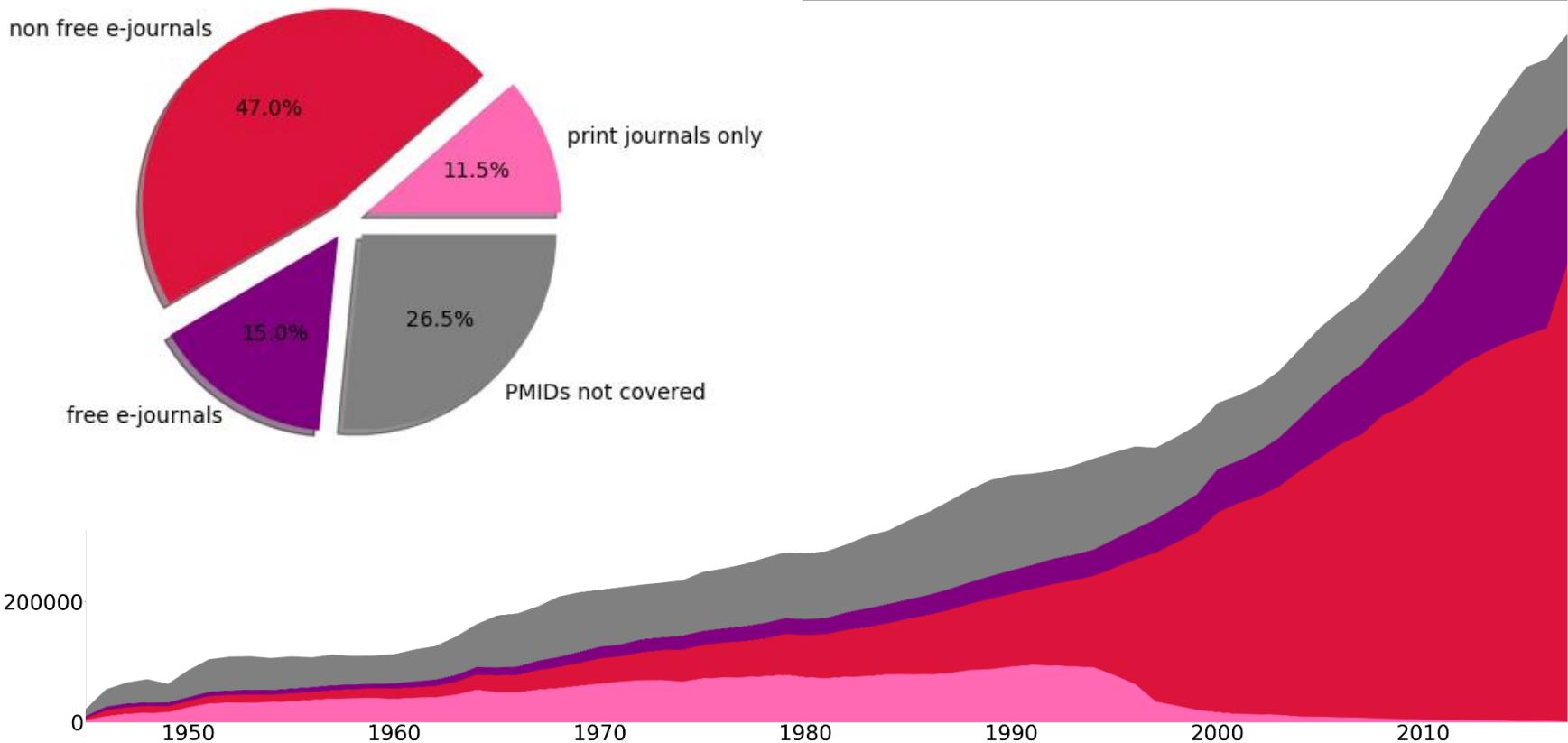
27'836'723
PMIDs



Full-text @ UNIGE = 73,5 %



OVERALL PUBMED COVERAGE OFFERED BY THE LIBRARY





PUBMED'S CONTENTS & OA

VARIOUS SOURCES OF (OPEN) ACCESS

PubMed.gov US National Library of Medicine National Institutes of Health

PubMed 29051432[uid] Search Help

Format Abstract ▾ Toxics. 2016 Dec 16;4(4). pii: E29. doi: 10.3390/toxics4040029.

Drug Vaping: From the Dangers of Misuse to New Therapeutic Devices.

Varlet V¹.
Author information

Abstract
Users of e-cigarettes are unwitting volunteers participating in a worldwide epidemiological study. Because of the obvious benefits of e-cigarettes compared with traditional cigarette smoking, these electronic devices have been introduced all around the world to support tobacco smoking cessation. Same potential harm reduction could be considered by cannabis vaping for marijuana smokers. However, the toxicities of liquids and aerosols remain under investigation because although the use of e-cigarettes is likely to be less harmful than traditional cigarette smoking, trace levels of contaminants have been identified. Simultaneously, other electronic devices, such as e-vaporisers, e-hookahs or e-pipes, have been developed and commercialised. Consequently, misuse of electronic devices has increased, and experimentation has been documented on Internet web fora. Although legal and illegal drugs are currently consumed with these e-devices, no scientific papers are available to support the observations reported by numerous media and web fora. Moreover, building on illegal drug vaping and vaporisation with e-devices (vaping misuse), legal drug vaping (an alternative use of vaping) could present therapeutic benefits, as occurs with medical cannabis vaporisation with table vaporisers. This review seeks to synthesise the problems of e-cigarette and liquid refill toxicity in order to introduce the dangers of illegal and legal drugs consumed using vaping and vaporisation for recreational purposes, and finally, to present the potential therapeutic benefits of vaping as a new administration route for legal drugs.

KEYWORDS: drug vaping; e-cigarette; e-liquid; vaping alternative use; vaping misuse

PMID: 29051432 PMCID: PMC5606648 DOI: 10.3390/toxics4040029

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Drug vaping applied to cannabis: Is "Cannavaping" a therapeutic altei [Sci Rep. 2016]
The unique contribution of e-cigarettes for tobacco harm reduction in [Harm Reduct J. 2018]
Review E-Cigarettes: A Review of New Trends in Cannabis Use. [Int J Environ Res Public Healt...]

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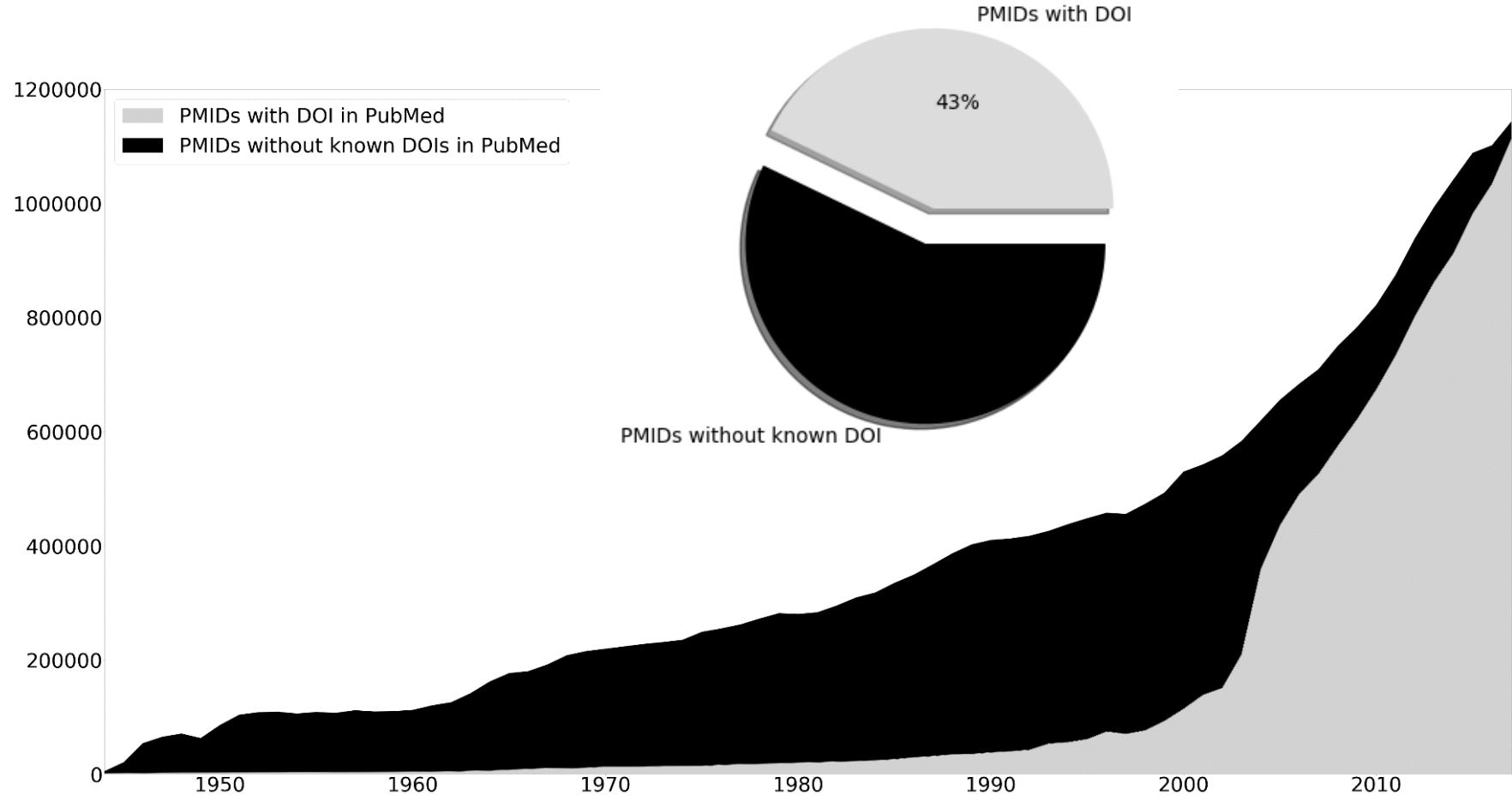
Search details

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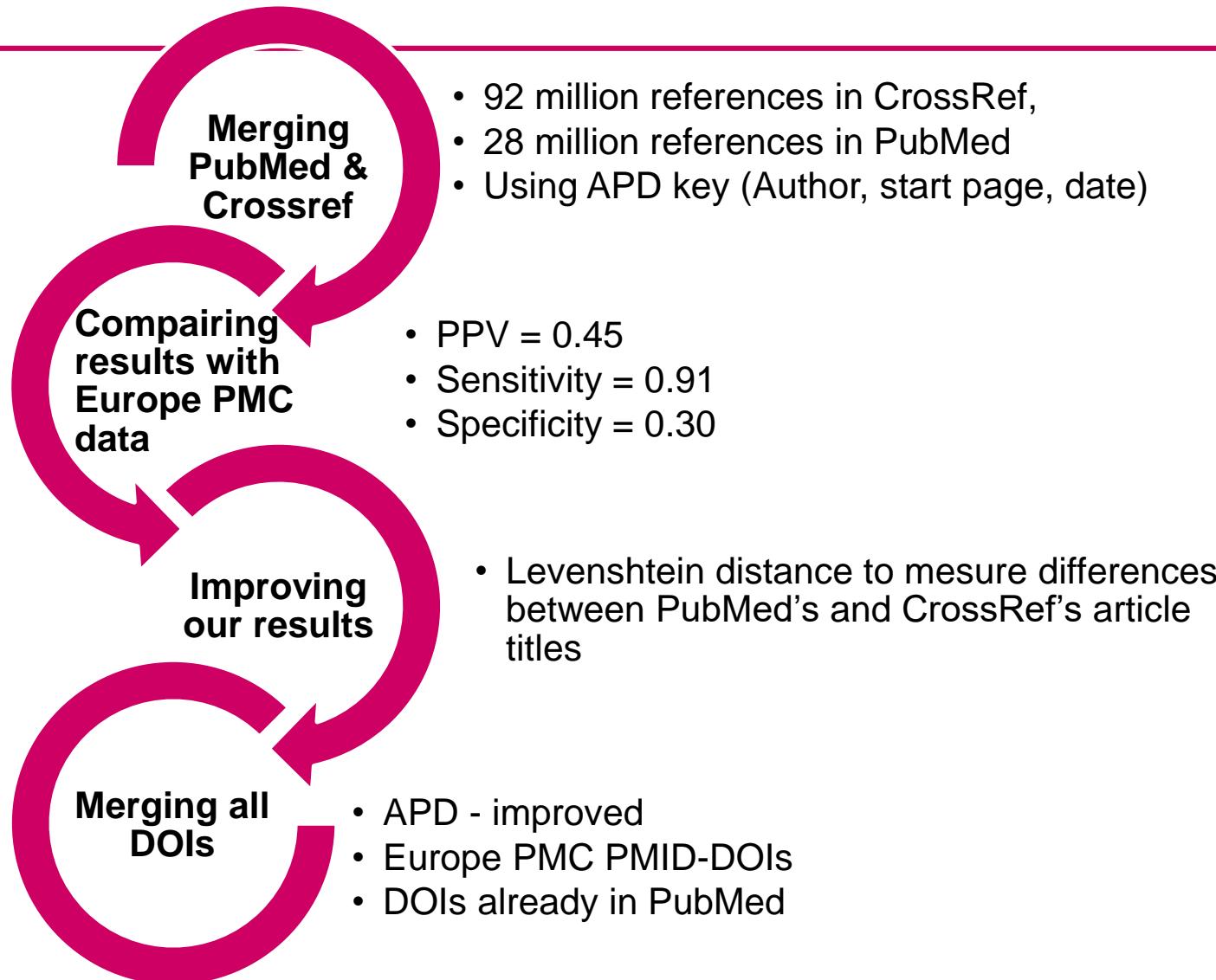
THE MISSING DOIs STORY



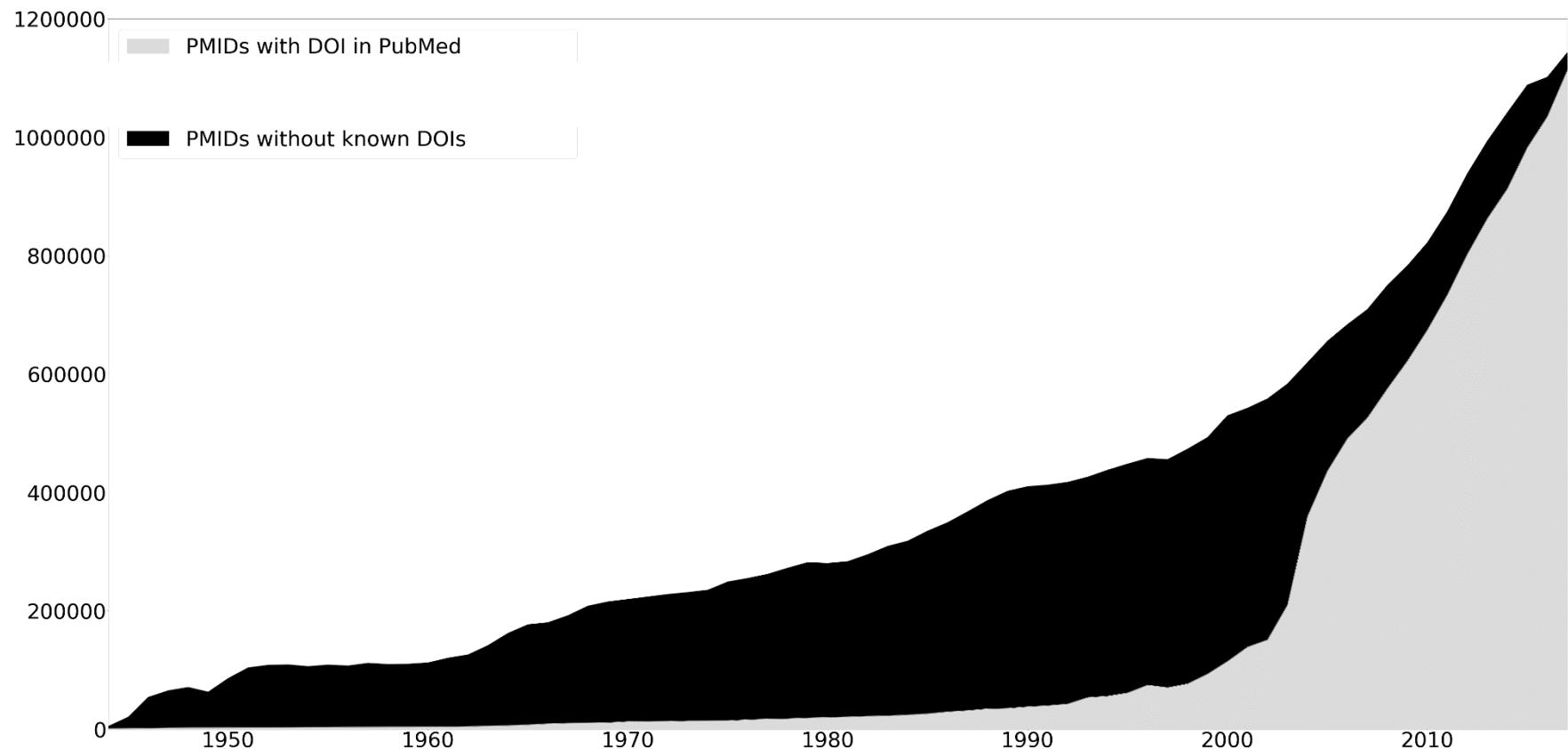
PUBMED DOIs



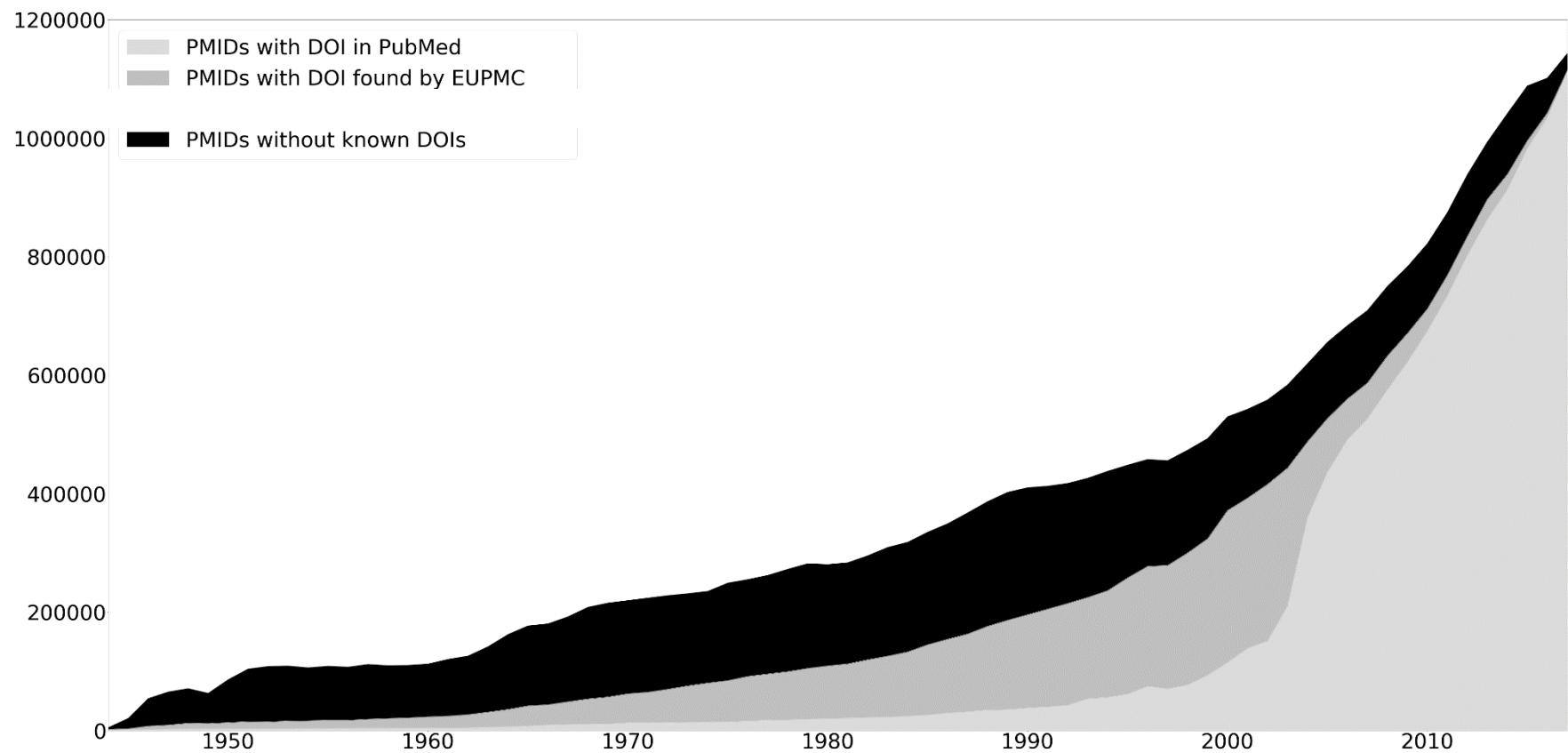
METHODS: MATCHING PMIDs TO DOIs



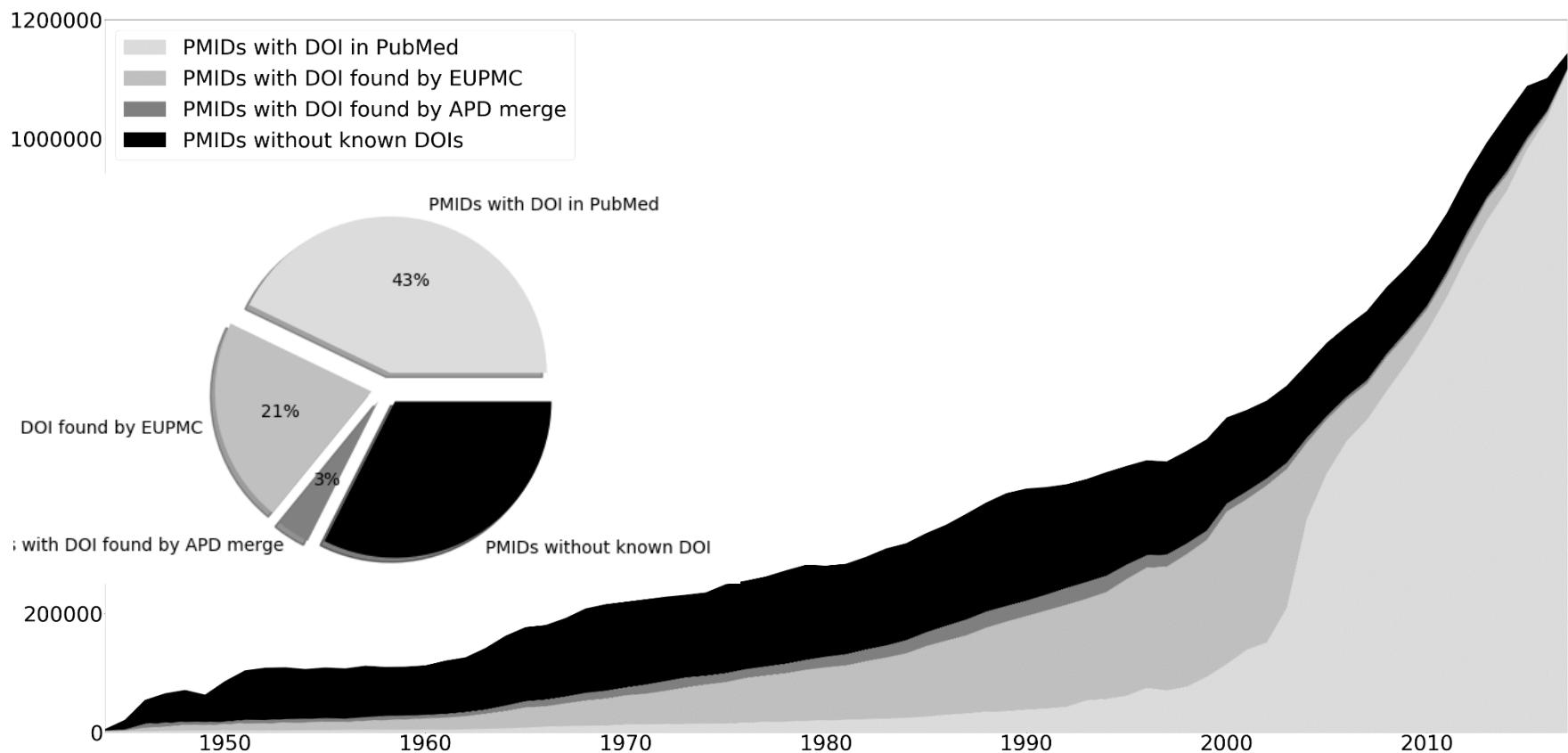
LOOKING FOR THE MISSING DOIs



LOOKING FOR THE MISSING DOIs



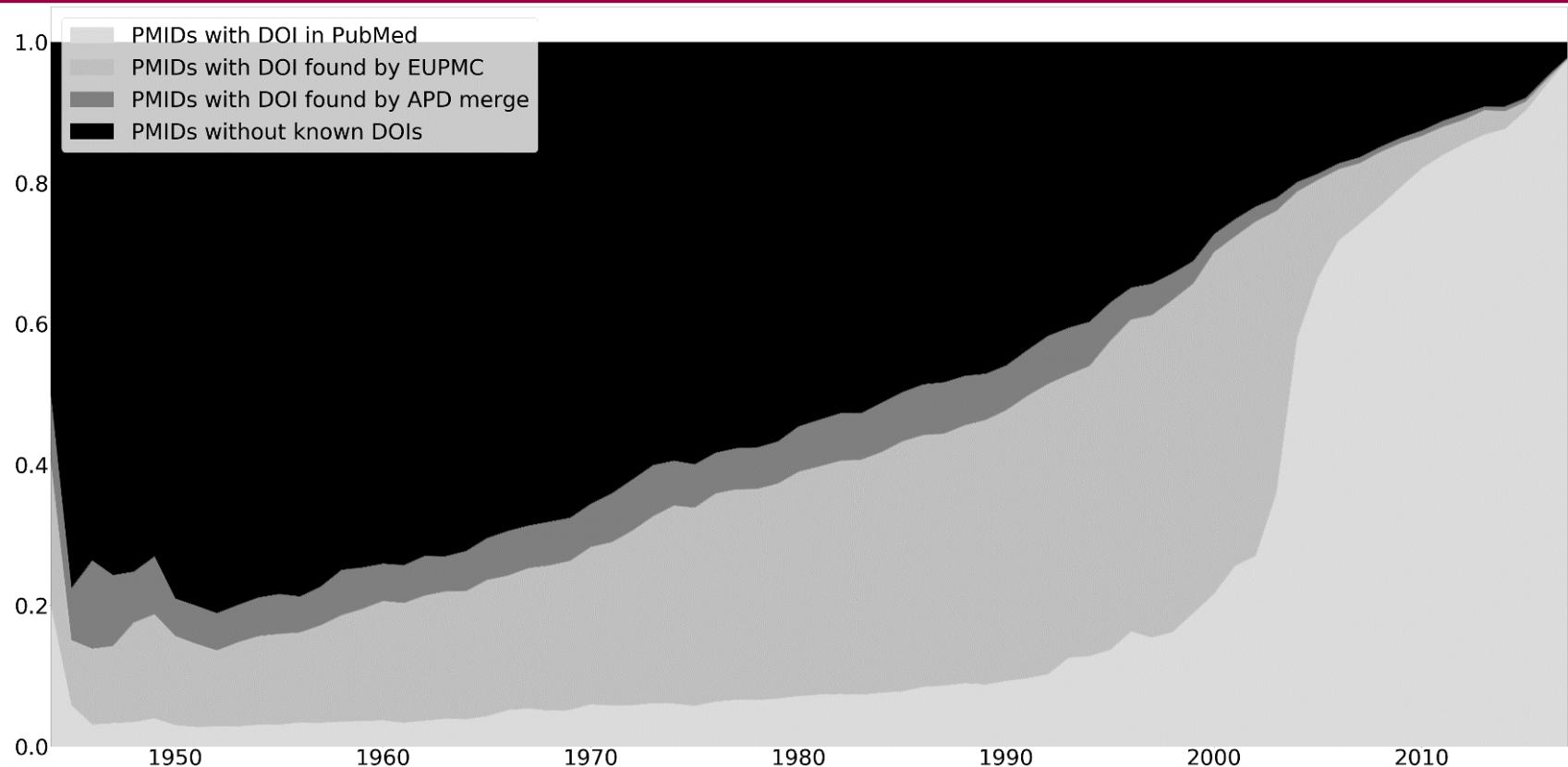
LOOKING FOR THE MISSING DOIs



PUBMED

Existing / found DOIs (percentage)

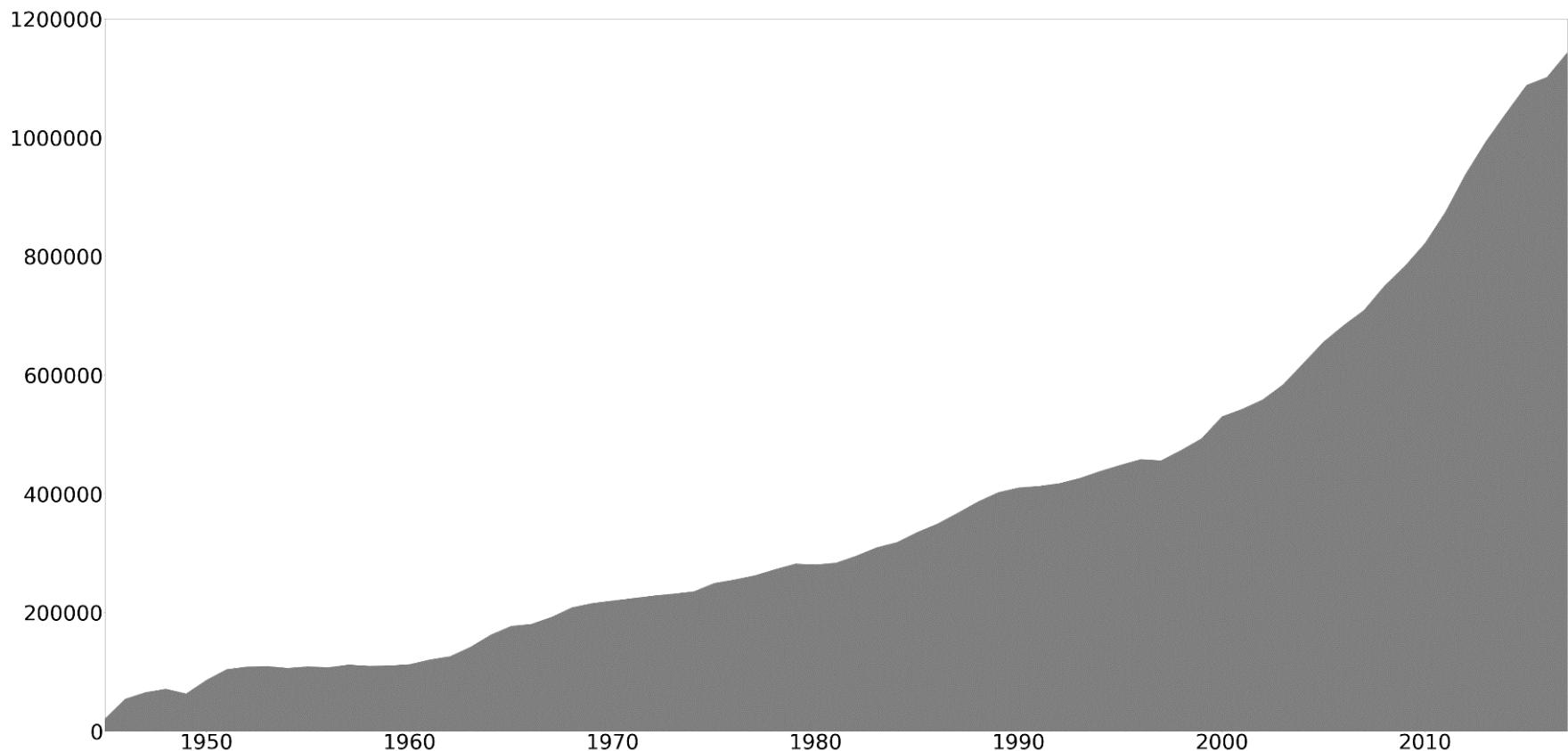
Total DOIs in PubMed = 11'931'616 - Added DOIs = 7'510'309



OPEN
PubMe^a

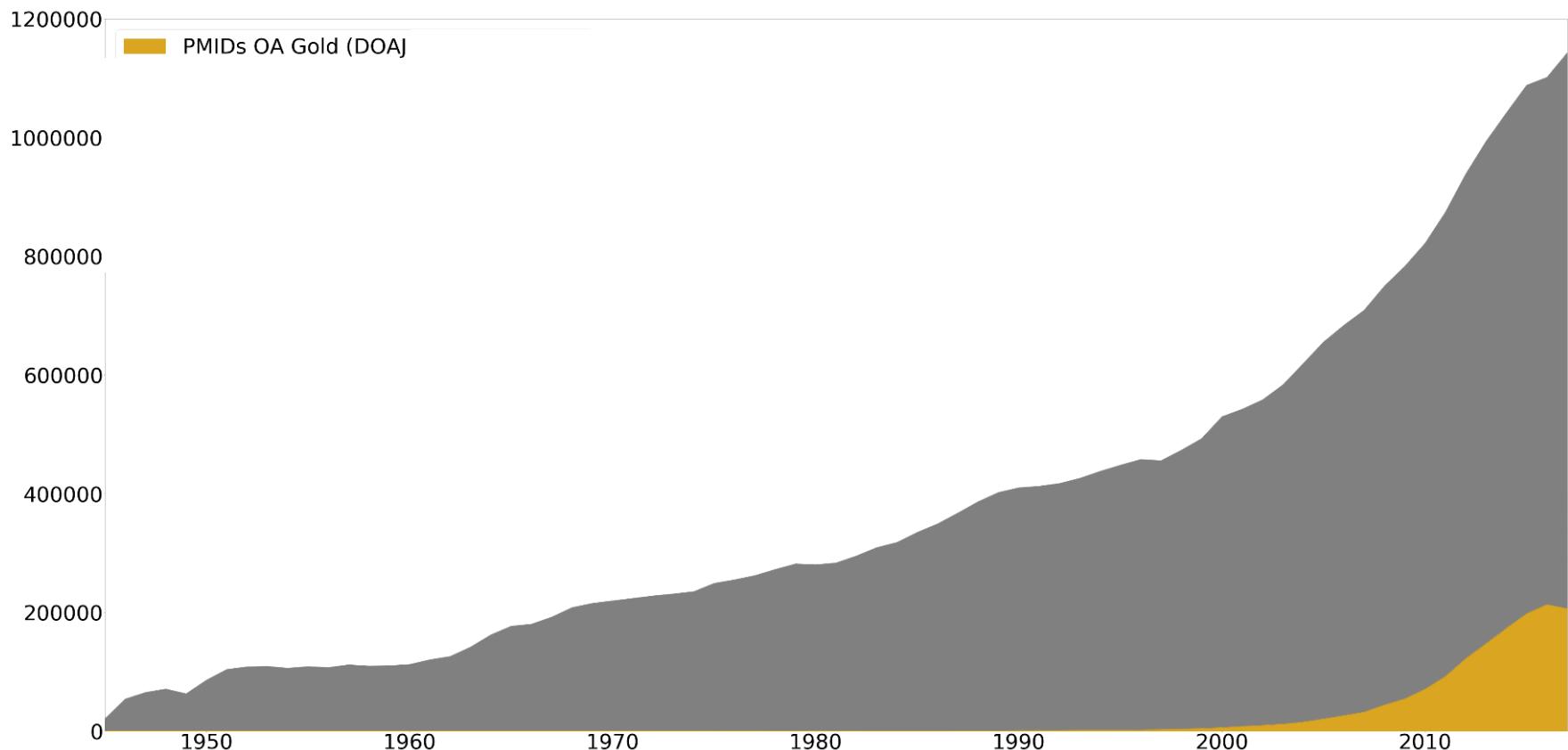
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Which content is Open Access ?



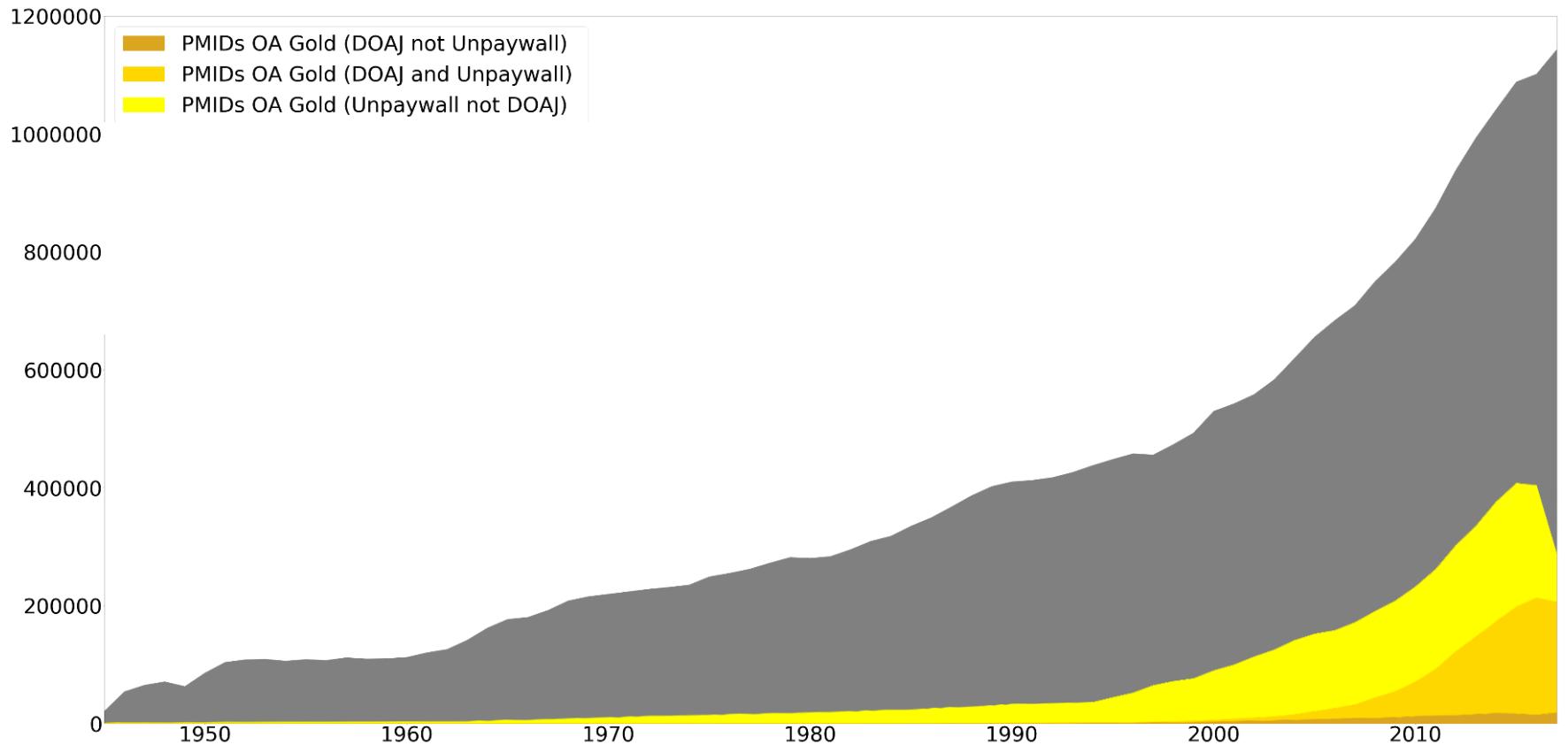
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Which content is Open Access ?



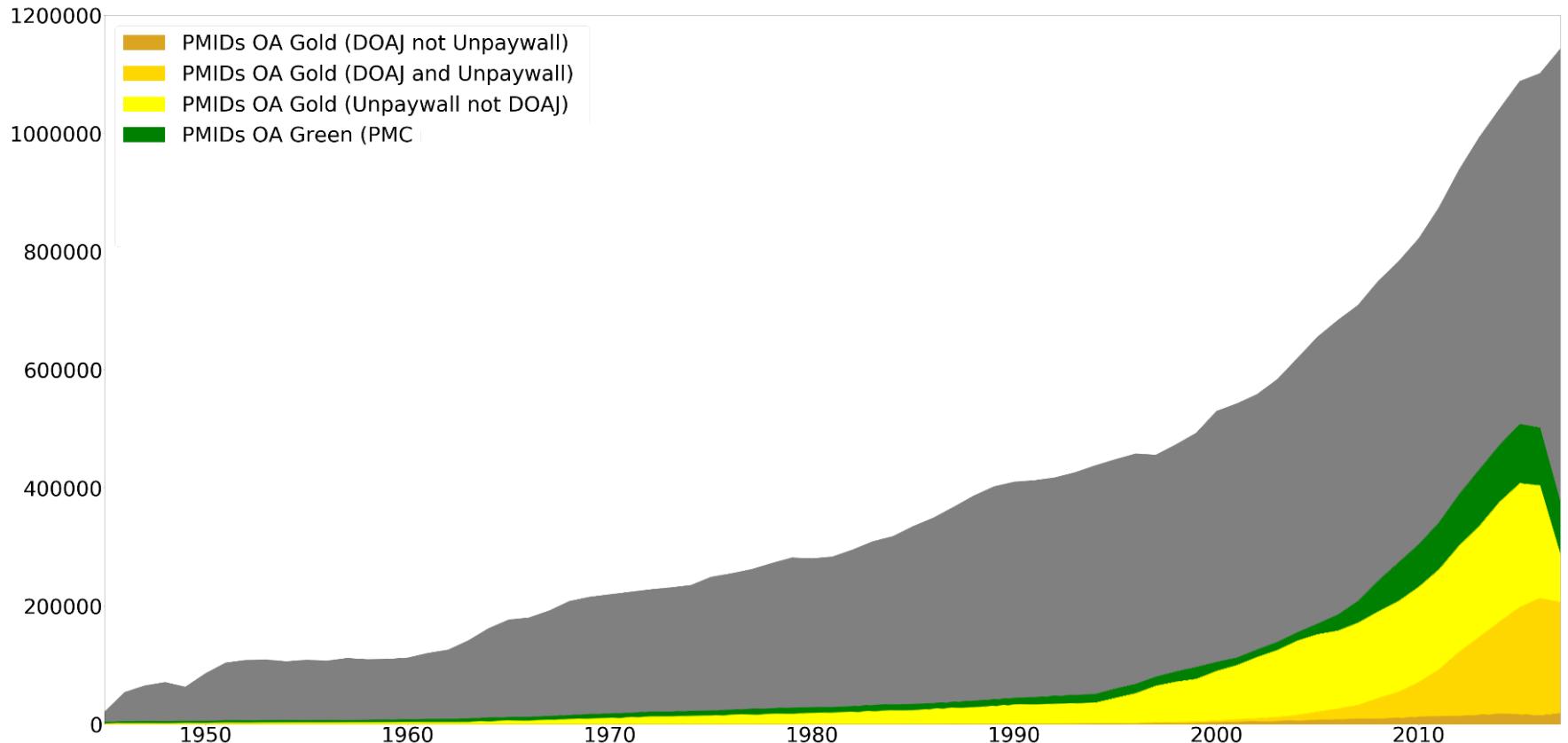
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Which content is Open Access ?



PUBMED

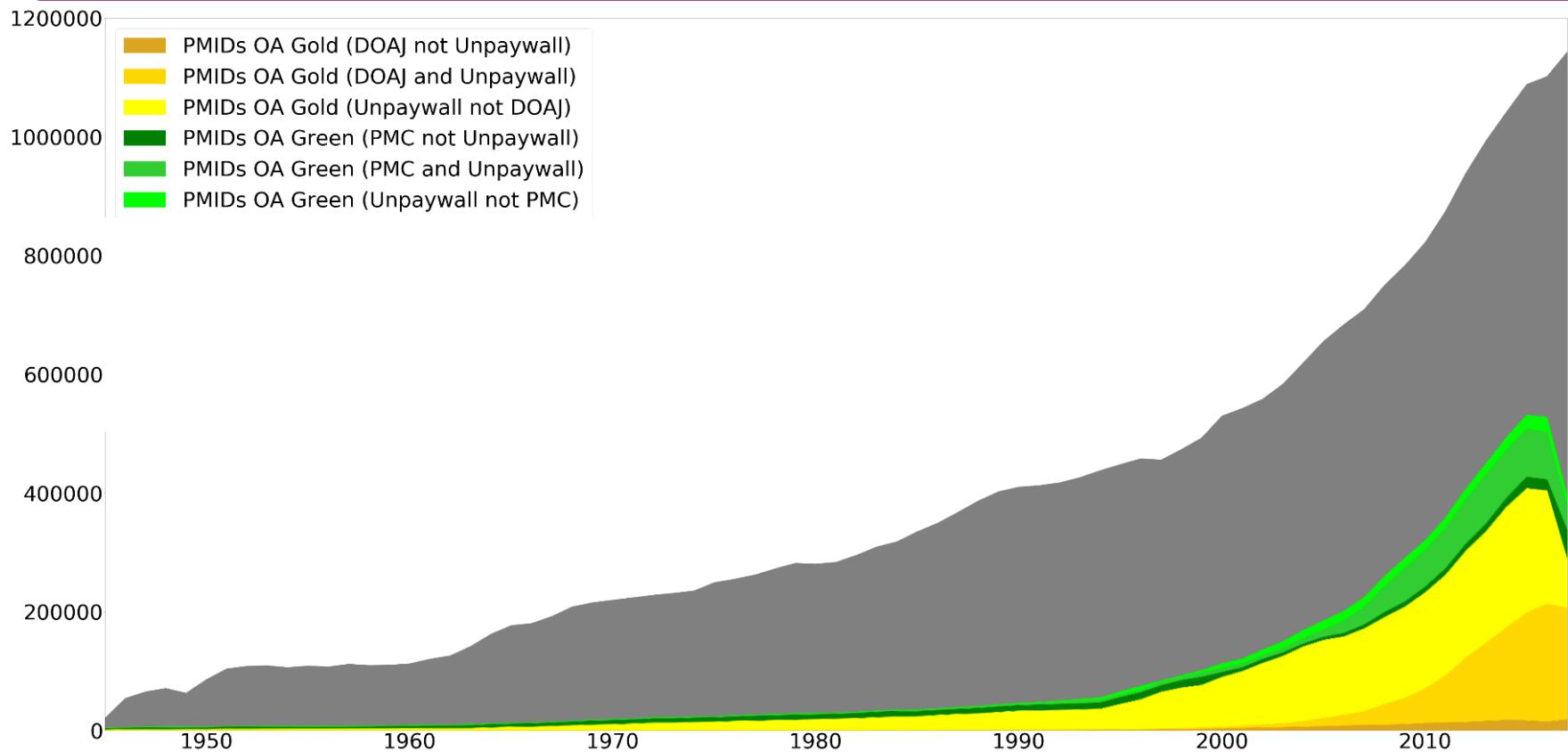
Which content is Open Access ?



PUBMED

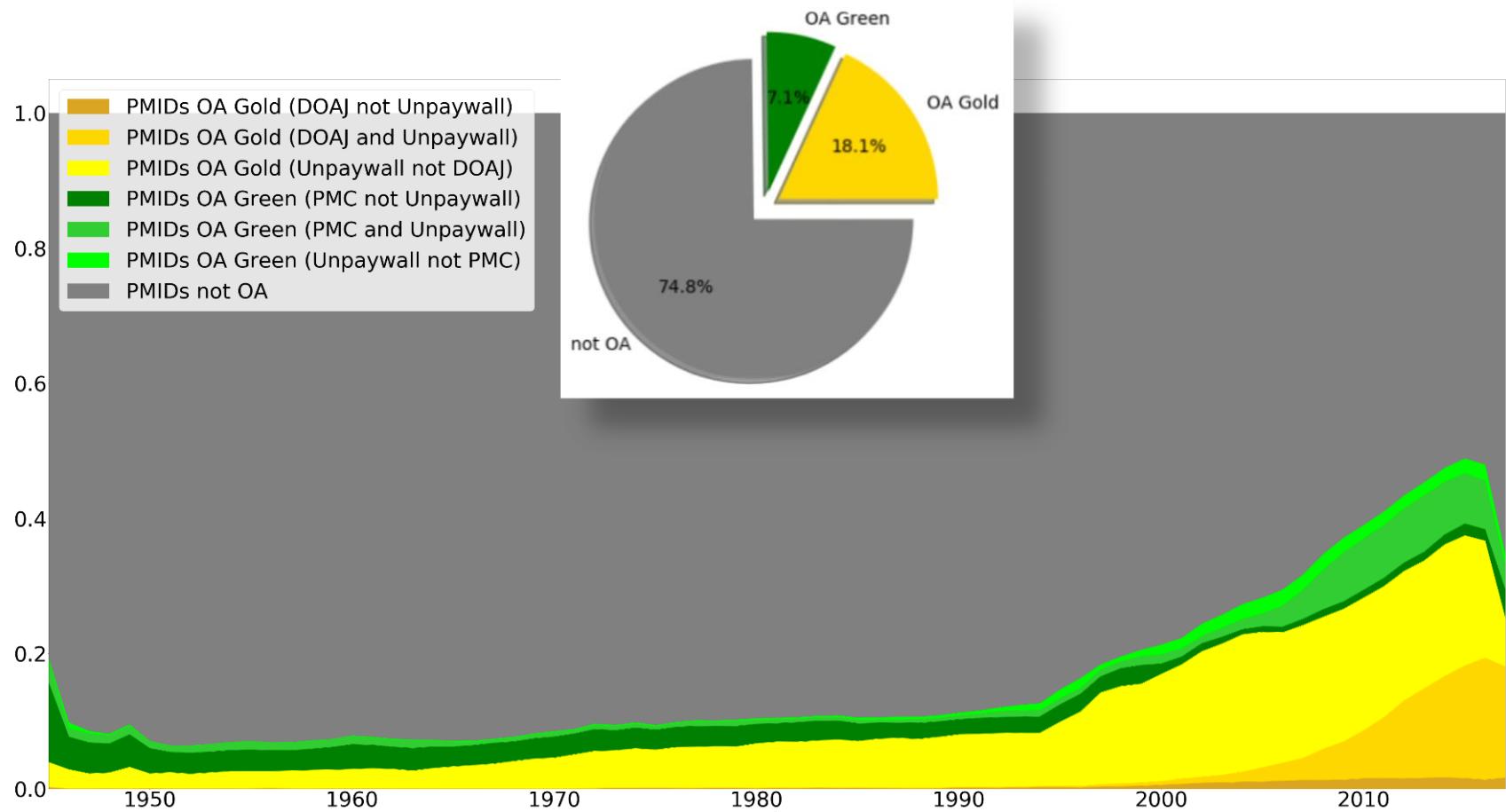
Which content is Open Access ?

Total Open Access in PubMed= 25,2 % - (33% of contents with known DOI)



PUBMED

Which content is Open Access ? (percentage)



THE STATE OF OA

“We estimate that at least 28% of the scholarly literature is OA (19M in total) and that this proportion is growing, driven particularly by growth in Gold and Hybrid. The most recent year analyzed (2015) also has the highest percentage of OA (45%).” Piwowar et al. (2018), [10.7717/peerj.4375](https://doi.org/10.7717/peerj.4375)

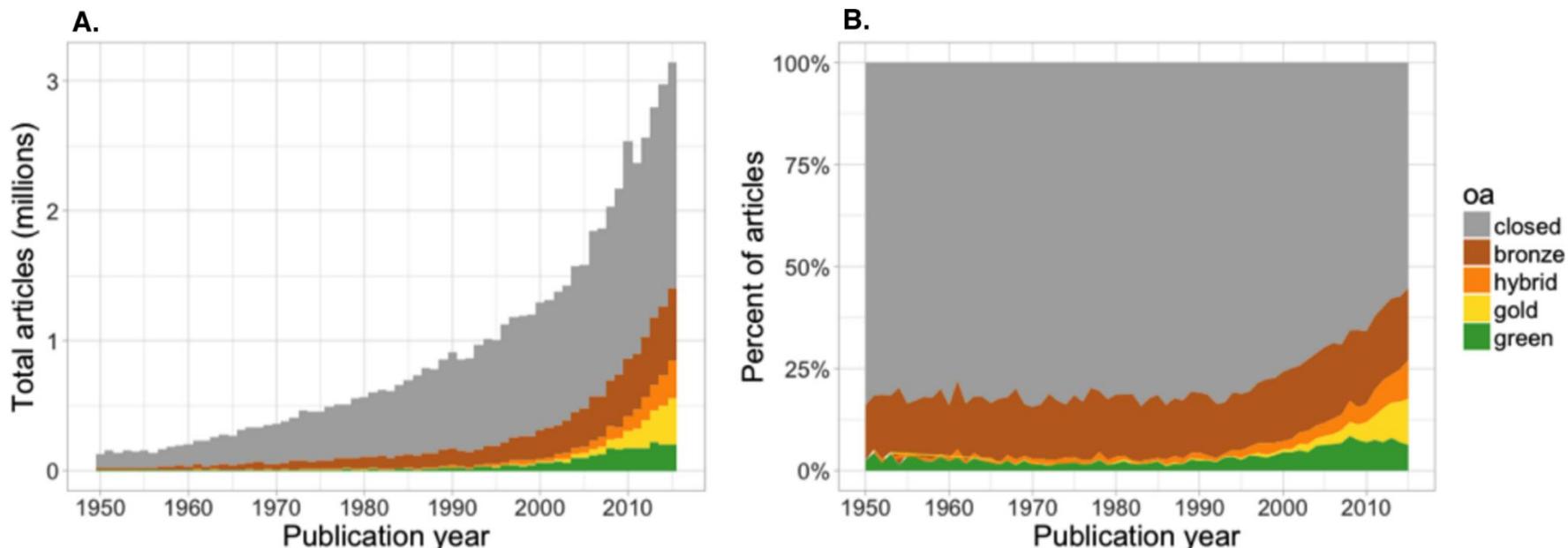


Figure 2 Number of articles (A) and proportion of articles (B) with OA copies, estimated based on a random sample of 100,000 articles with Crossref DOIs. [10.7717/peerj.4375/fig-2](https://doi.org/10.7717/peerj.4375/fig-2)

THE STATE OF PUBMED OA

*“We estimate that at least **28%** of the scholarly literature is OA (**19M** in total) and that this proportion is growing, driven particularly by growth in Gold and Hybrid. The most recent year analyzed (2015) also has the highest percentage of OA (**45%**).” Piwowar et al. (2018), [10.7717/peerj.4375](https://doi.org/10.7717/peerj.4375)*

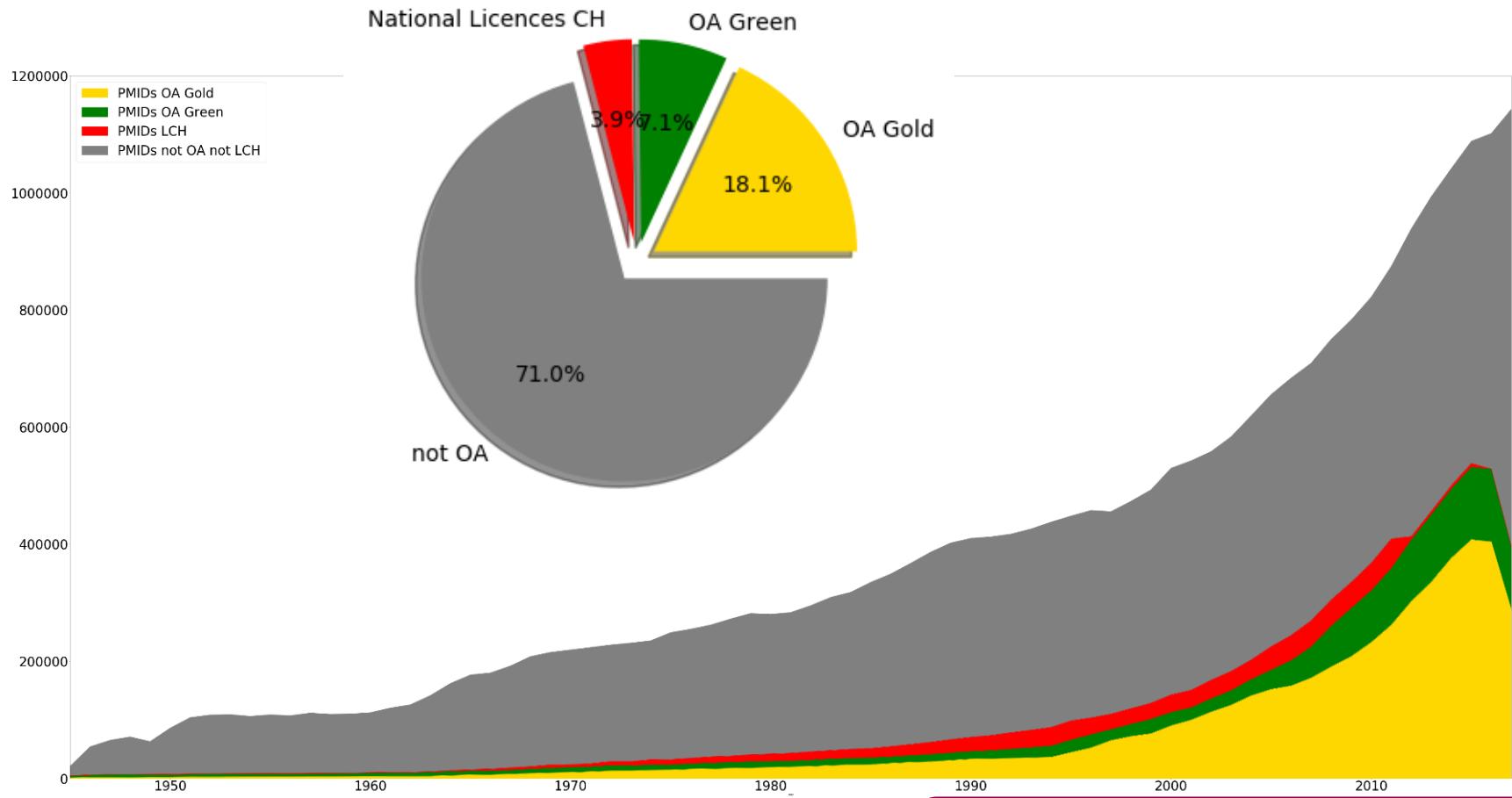
*We found that at least **33% of PubMed** literature with known/found DOI is OA (**6M** in total) and that this proportion is growing. The most recent years analyzed are suffering from embargo periods. 2015 has the highest percentage of OA (**49%**).*





OA + SWISS NATIONAL LICENCES

Accessibility for swiss citizens



Accessibility for swiss citizens
= 29,1 % of PMIDs

EXIT



CONCLUSIONS

QUICK RECAP

PubMed's growth :
>1 mio articles / year



Articles considered:
27'836'723
PMIDs

OA evaluation depends on granularity



DOIs are (the missing) keys
7'510'309 could be added



33% of PMIDs with known DOIs are OA
= 6'131'801

Embargoes' impact on OA is visible



Swiss citizens have access to 29% of PubMed's articles



Our UNIGE users have access to 74% of PubMed's articles



What about you ?



NEXT ?

The background of the slide features a wide-angle photograph of a snow-covered mountain range under a clear blue sky. In the lower right foreground, a dark grey directional signpost stands in the snow. It has several orange and yellow directional arrows pointing in various directions, with German text like "Melchsee-Frutt", "Tannenalp", and "Engstlenalp" visible. There are also green arrows with numbers such as "572", "88", and "574". A small blue arrow points left with the text "Rundweg Tanne".

Benchmarking
Inclusion & promotion of OA tools & contents
Systematic reviews
Informed collection development decisions
Visibility of our institution's production (IR)



CC-By Николай Максимович

THANK YOU FOR YOUR ATTENTION

SEE YOU NEXT YEAR IN BASEL !



@pablog_ch
@Flor_Mu

Pablo.Iriarte@unige.ch
Floriane.Muller@unige.ch

notebooks + slides: www.purl.org/unige/eahil2018



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