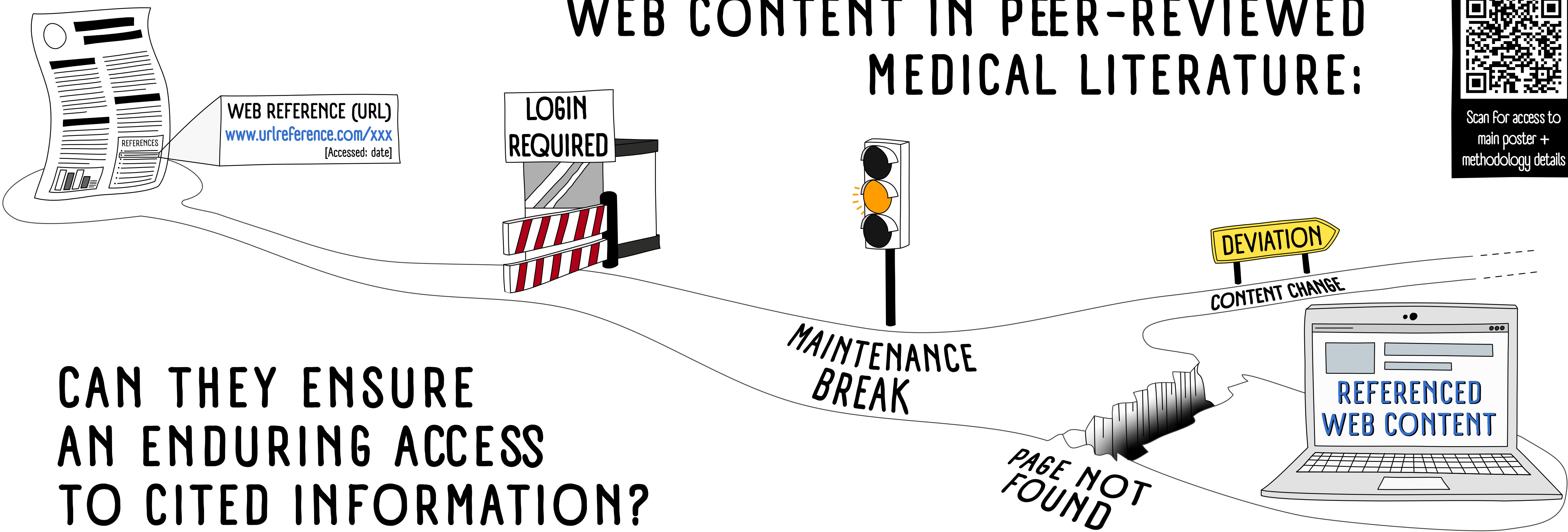


OBSOLESCENCE OF WEB REFERENCES: TIME-TREND AND QUALITATIVE ANALYSES

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CURRENT GUIDELINES FOR REFERENCING WEB CONTENT IN PEER-REVIEWED MEDICAL LITERATURE:



23



Scan for access to main poster + methodology details

CAN THEY ENSURE AN ENDURING ACCESS TO CITED INFORMATION?

TIME-TREND ANALYSIS



We assessed the proportion of inaccessible web references in articles at acceptance and up to 5 years post-publication (YPP).

- Six journals in the fields of vaccinology and infectious diseases
- 992 articles with ≥ 1 web reference, published in 2018

- Proofs of articles handled internally (same fields)
- 50 articles with ≥ 1 web reference, accepted 2022-2023

Web references can become inaccessible after only a few years ...

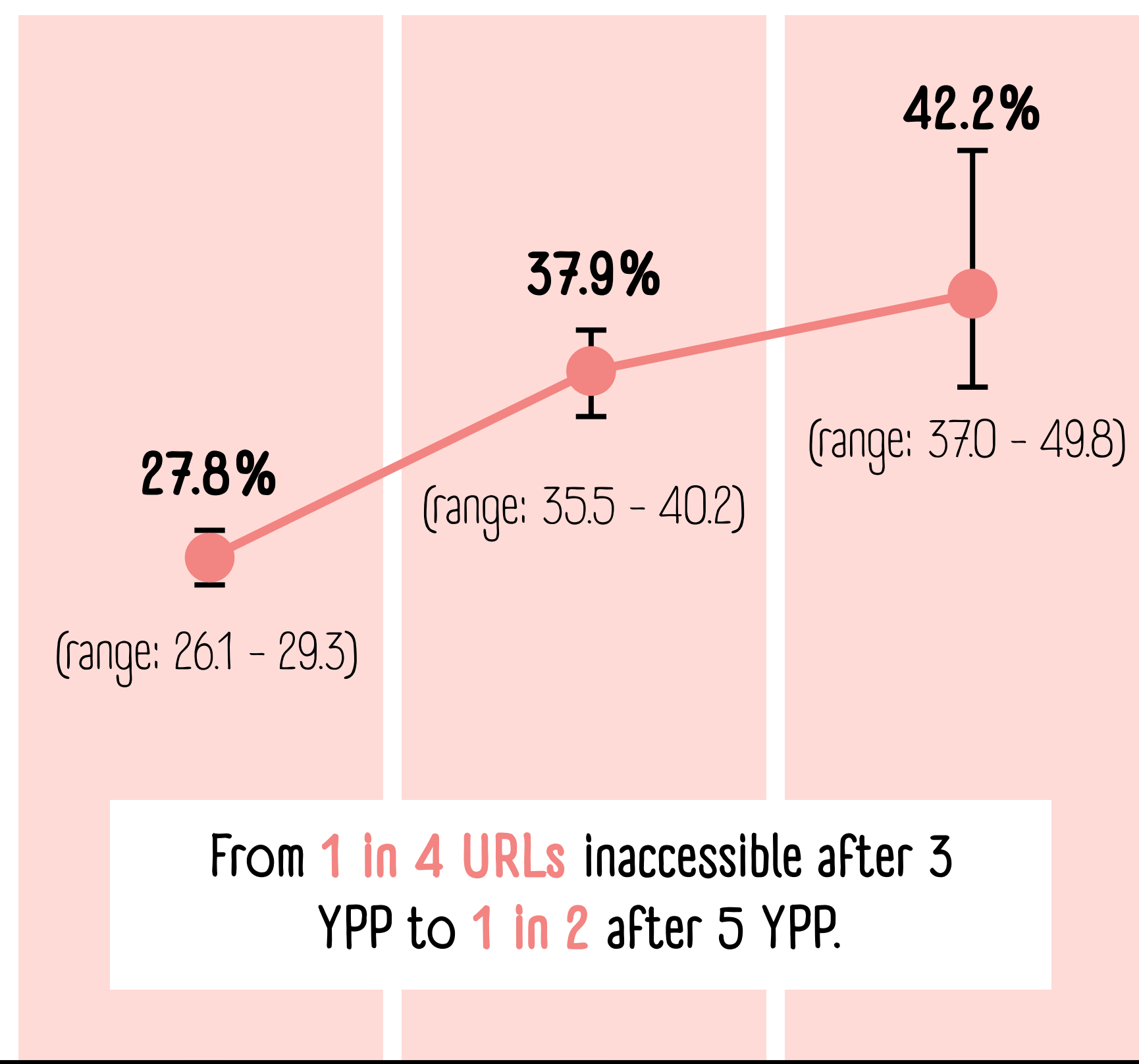
... when they are not already inaccessible before publication, as early as acceptance!

24% of proofs citing URLs cite at least one inaccessible URL



At acceptance, 1 in 20 URLs is already concerned

Proportion of inaccessible web references among all cited web references (year-over-year).



From 1 in 4 URLs inaccessible after 3 YPP to 1 in 2 after 5 YPP.



YPP:

Year 0

Year 3

Year 4

Year 5

QUALITATIVE ANALYSIS

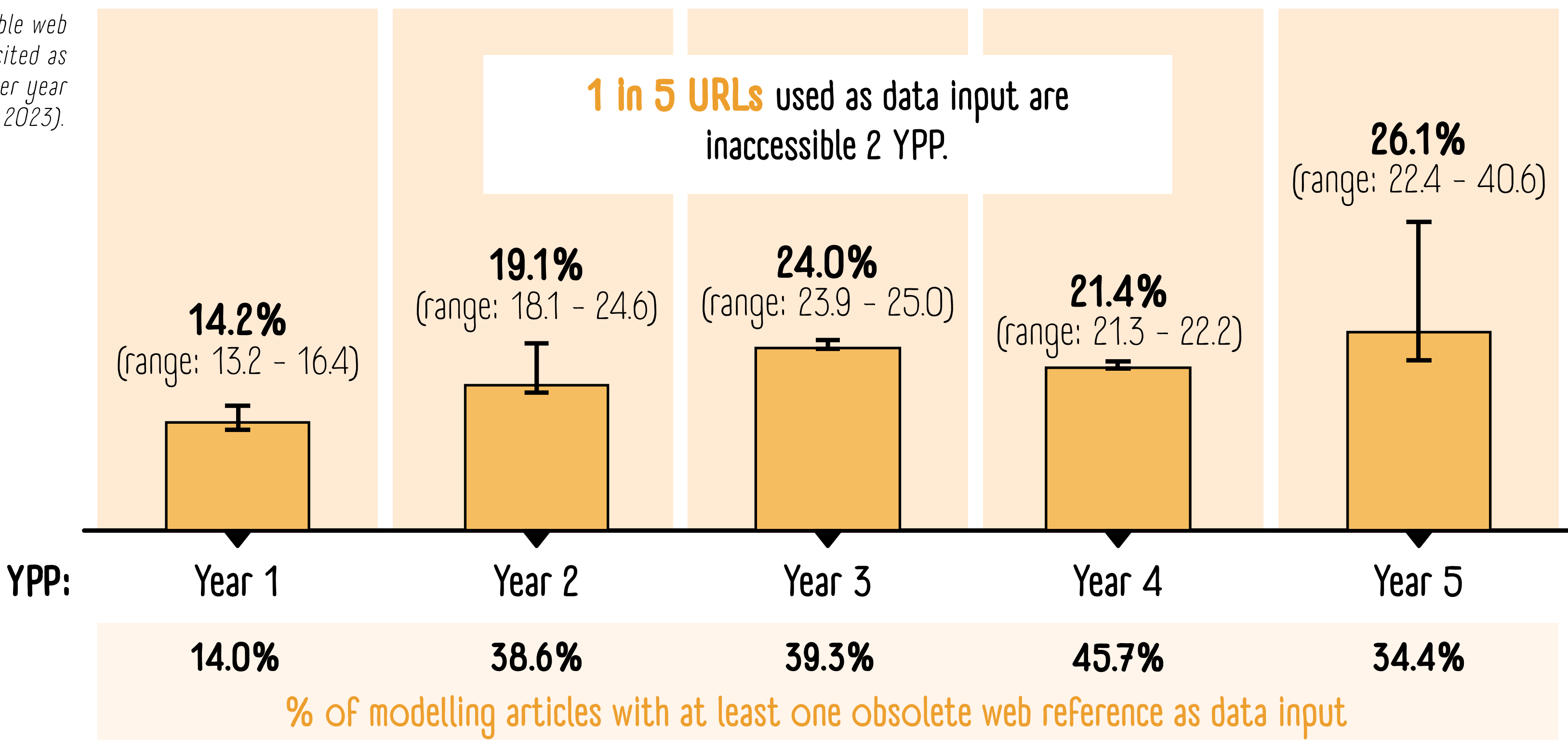


Taking a closer look at the potential impact of obsolescence, we assessed the proportion of inaccessible references used as data inputs of modelling articles.

- Two journals in the field of health economics
- 319 modelling articles with ≥ 1 web reference used as model input(s), published 2018-2022

Access to web references used as data inputs of modelling articles can fastly be lost, thereby impacting content persistence!

Proportion of inaccessible web references among those cited as model inputs in methods, per year (analysis in 2023).



1 in 5 URLs used as data input are inaccessible 2 YPP.

14.2%

19.1%

24.0%

21.4%

26.1%

YPP:

Year 1

Year 2

Year 3

Year 4

Year 5

14.0%

38.6%

39.3%

45.7%

34.4%

% of modelling articles with at least one obsolete web reference as data input



WHAT DOES IT MEAN?

Current guidelines for referencing web content cannot ensure an enduring access to information (Issues of traceability and reproducibility)

Limitations

likely underestimation; unclear impact; limiting interpretation

- No double check
- No in-depth analysis of cited content
- No analysis of supplementary material
- Extended screening period
1-2 weeks
1 month
- Limited sample size
- Open/free access articles only

WHAT CAN BE DONE?

FOR AUTHORS

- ➔ Whenever possible, favour the use of references associated with a digital object identifier (doi).
- ➔ When citing URLs, authors should proactively back up screenshots of the webpages they are referencing.

FOR JOURNALS

- ➔ Guidelines to authors should specifically inform about the risks of citing web references.
- ➔ Peer-reviewers and editors should be encouraged to take an attentive look at web references.
- ➔ Journals might consider the possibility of archiving web-hosted materials used as sources in their published articles.

FOR AGENCIES

- ➔ MedCom agencies should educate authors about the risks of citing web references and foster discussions on best practices within the community.

Reference

1. Lemaire, B., Bauer, F., Rodriguez, E. C., Ghesquiere, J., Radziejowski, A., & Boyer, M. Probing the obsolescence of web references in the recent peer-reviewed medical literature. CURRENT MEDICAL RESEARCH AND OPINION 2022;38:S42-S43.

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