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From data to dialogue: Opportunities to enhance reach and accessibility of RWE publications using extenders



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> Background

- Real-world evidence (RWE) is transforming healthcare by^{1,2}
- Capturing data from broader patient populations
- Enhancing informed clinical decision-making
- Supporting regulatory decisions
- There are, however, challenges associated with efficient publication and reach of RWE, such as data interpretation and accessibility³

• A recent survey highlighted the value of enhanced content such as infographics in RWE publications to broaden research data accessibility and improve audience engagement⁴

> Methods

- A PubMed search identified RWE articles with extenders in diabetes, cardiovascular disease (CVD), and kidney disease (KD)
- Search terms: ("real-world evidence" OR "real-world data" OR "real-world outcomes" OR "real-world research" OR "health outcomes research" OR "HEOR" OR "health economics outcomes research" OR "observational stud*" OR "non-interventional stud*" OR "real-world stud*") AND ("plain language summary" OR
- Filters included articles in "English, Humans, from 2022/7/1 - 2024/6/30"
- Articles from the search results were then assessed manually in January 2025 to determine
- Open access or paywall status
- Demographics in the study; representation of patient populations in RWE publications were compared with global disease prevalence

> **Objective**

To conduct a targeted assessment of the use, accessibility, and impact of publication extenders and patient engagement to identify areas for improvement and develop strategies to enhance the reach of RWE publications

"lay summary" OR "graphical abstract" OR "visual abstract" OR "video abstract" OR "video summary" OR "infographic" OR "podcast") AND ("diabetes" OR "cardiovascular disease" OR "heart disease" OR "kidney")

- Patient engagement or authorship
- Type of extender and location on journal page
- Metrics (citation counts, social media shares, Mendeley saves, views/downloads/accesses, news/blog mentions)

> **Results**

83RWEpublicationsidentified	

73% (61/83) met	
inclusion criteria	

Of these:

- **95%** (58/61) were related to KD
- **3%** (2/61) were related to diabetes
- **2%** (1/61) were related to CVD

56% (34/61) were open-access enabled

27% (22/83) were excluded

belonging to unrelated therapeutic areas

Mainly randomized clinical trials or

Demographics and study locations

RWE datasets were primarily sourced from North America and Europe



Publication extenders

- Graphical abstracts (GAs; 82%, 50/61) and/or plain language summaries (PLSs; 54%, 33/61) constituted the majority of extenders
- About 97% (32/33) PLSs and 62% (31/50) GAs were located within the main article rather than the supplemental material

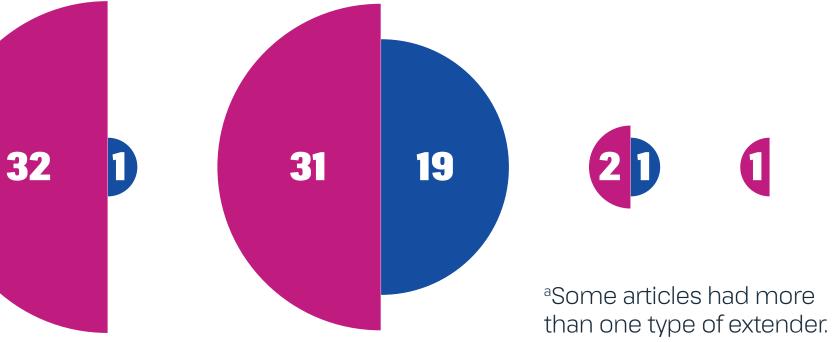
article

Supplemental

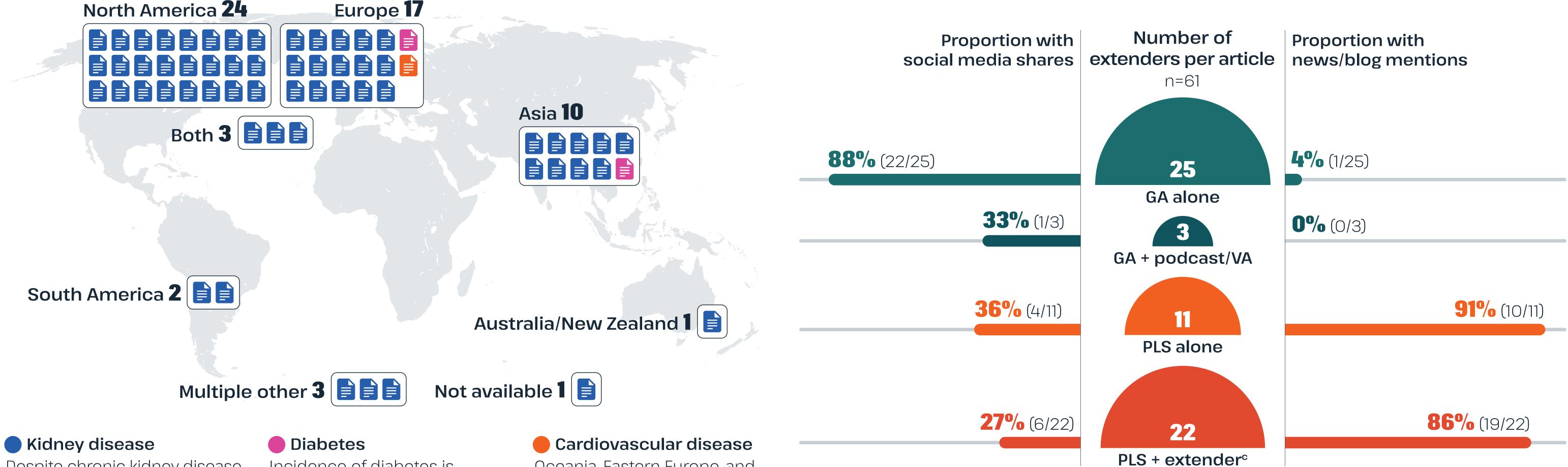
materials



Number of RWE publication extenders by type^a



- Assessment of the number of extenders per article (below) showed that majority articles had GAs alone (41%, n=25) or PLSs with an additional extender (36%, n=22)
- Articles with GA alone were more frequently shared on social media^a (88%, 22/25) versus those with PLSs alone (36%, 4/11)
- News and blog mentions^b were highest in articles with PLSs alone (91%, 10/11) and PLSs with extenders (86%, 19/22)



Despite chronic kidney disease being most prevalent in Asia,^{5,a} 42/58 renal studies were performed in North America or Europe

^aData from 2017. ^bData from 2021. ^cData from 2023.

Incidence of diabetes is widespread in Asia^{6,b}; only one study was performed in Asia across 11 countries

Oceania, Eastern Europe, and Central Asia have the highest incidence of heart disease^{7,c}; the single study identified was performed in Germany

^aSocial media includes posts on Meta and X.

^bNews/blog mentions include journal blog posts and mentions on consumer health websites. ^cAdditional extenders were primarily graphical abstracts; one article had a graphical and video abstract.

Publication metric ranges







Patient authorship and engagement



publication included disease area leaders, policymakers, and patient advocates as survey respondents for the study



Citation	Social media	
counts	shares	
1-45	1-101	

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Mer	nde	ley
Si	ave	S
1-	-5	3

Views, downloads or accesses

News/blog mentions

437-8568

1-32

> Conclusions

- RWE datasets were skewed toward North America/Europe, potentially underrepresenting regions with high-prevalence disease
- A critical gap was identified in patient authorship and engagement that hinders authentic patient voice in RWE research
- GAs and PLSs were frequently used extenders in RWE publications, suggesting feasibility and

perceived value in enhancing accessibility and engagement

- Variable reach/engagement of extenders highlights potential for optimization
- GAs drive social media engagement, while PLSs boost news/blog mentions, indicative of the variation in the consumption and dissemination patterns of different types of content across various platforms

> Recommendations

Medical communications professionals can play a crucial role in addressing barriers to RWE data interpretation, access, impact, and more by

- Simplifying complex RWE data for broad understanding
- Encouraging patient authorship for relevant and patient-centric outcomes
- Leveraging diverse journal extenders and utilizing multimedia (eg, podcasts, video abstracts) to amplify RWE reach for inclusive reach
- Optimizing extender placement for direct research integration
- Defining consistent metrics for extender impact
- Developing and supporting strategies (eg, digital, omnichannel) to increase RWE awareness

Abbreviations

CVD, cardiovascular disease; GA, graphical abstract; KD, kidney disease; PLS, plain language summary; RWE, real-world evidence; VA, video abstract

References

- 1. Dang A. Real-world evidence: a primer. J Pharm Med. 2023;37(1):25-36.10.1007/s40290-022-00456-6.
- 2. Food and Drug Administration. Real-world evidence.

https://www.fda.gov/science-research/science-and-researchspecial-topics/real-world-evidence. Accessed April 13, 2025.

- 3. Saal G, Booth M. OP23 Best practice for publication of health economics and outcomes research/real-world evidence (RWE) - a pilot study on guidance needs and scope for development. *Value Health.* 2023;26(12):S446. Abstract OP23.
- 4. Hanekamp E, Drake T, Buisson S, van Delden L, Huang Y, Dormer L. Presented at ISMPP Annual Meeting 2024; April 29-May 1, 2024; Washington DC. Poster 46.
- 5. GBD Chronic Kidney Disease Collaboration. Global, regional,

and national burden of chronic kidney disease, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2020;395(10225):709-733.

- 6. Magliano DJ, Boyko EJ; IDF Diabetes Atlas 10th edition scientific committee. Global picture. In: IDF DIABETES ATLAS [Internet]. 10th ed. International Diabetes Foundation; 2021. Accessed April 22, 2025.
- https://www.ncbi.nlm.nih.gov/books/NBK581940/
- 7. Mensah GA, et al. Global burden of cardiovascular diseases and risks, 1990-2022. J Am Coll Cardiol. 2023;82(25):2350-2473.

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Disclosures

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