

Use of Real-World Evidence in Cost-Effectiveness Evaluations in Asia

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Aim

This research provides an overview of the role of real-world evidence (RWE) in cost-effectiveness analyses (CEAs) in Asia.

“What impact does RWE have on CEAs submitted to Asian HTA bodies?”

Background

RWE can play an important role in reimbursement decisions by providing data on the effectiveness and safety of therapies in real-world populations.¹⁻³

Use of RWE in submissions to HTA bodies in emerging markets can be particularly beneficial, given that local patient populations are often underrepresented in pivotal clinical trials.⁴⁻⁶

- Although 60% of the global population lives in Asia, only 17% of global clinical trials are conducted in the region.

In countries where reimbursement decisions are not made at the time of market entry (e.g., India, Indonesia, Malaysia, China, Philippines, Singapore, and Thailand), there is an opportunity to collect RWE prior to preparing HTA submissions.³

In countries where reimbursement decisions are made after market entry (e.g., South Korea, Japan, and Taiwan), RWE can be considered when reassessing initial funding decisions.³

Methods

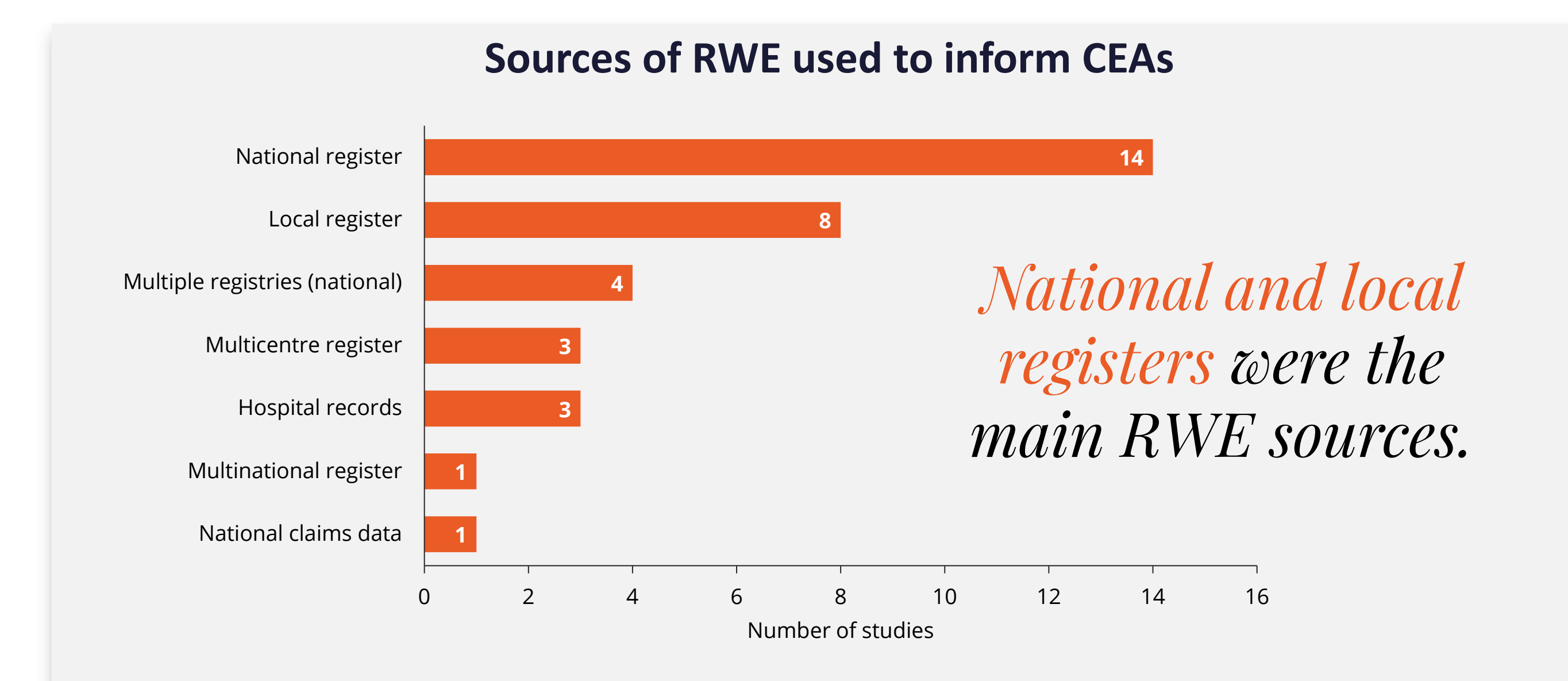
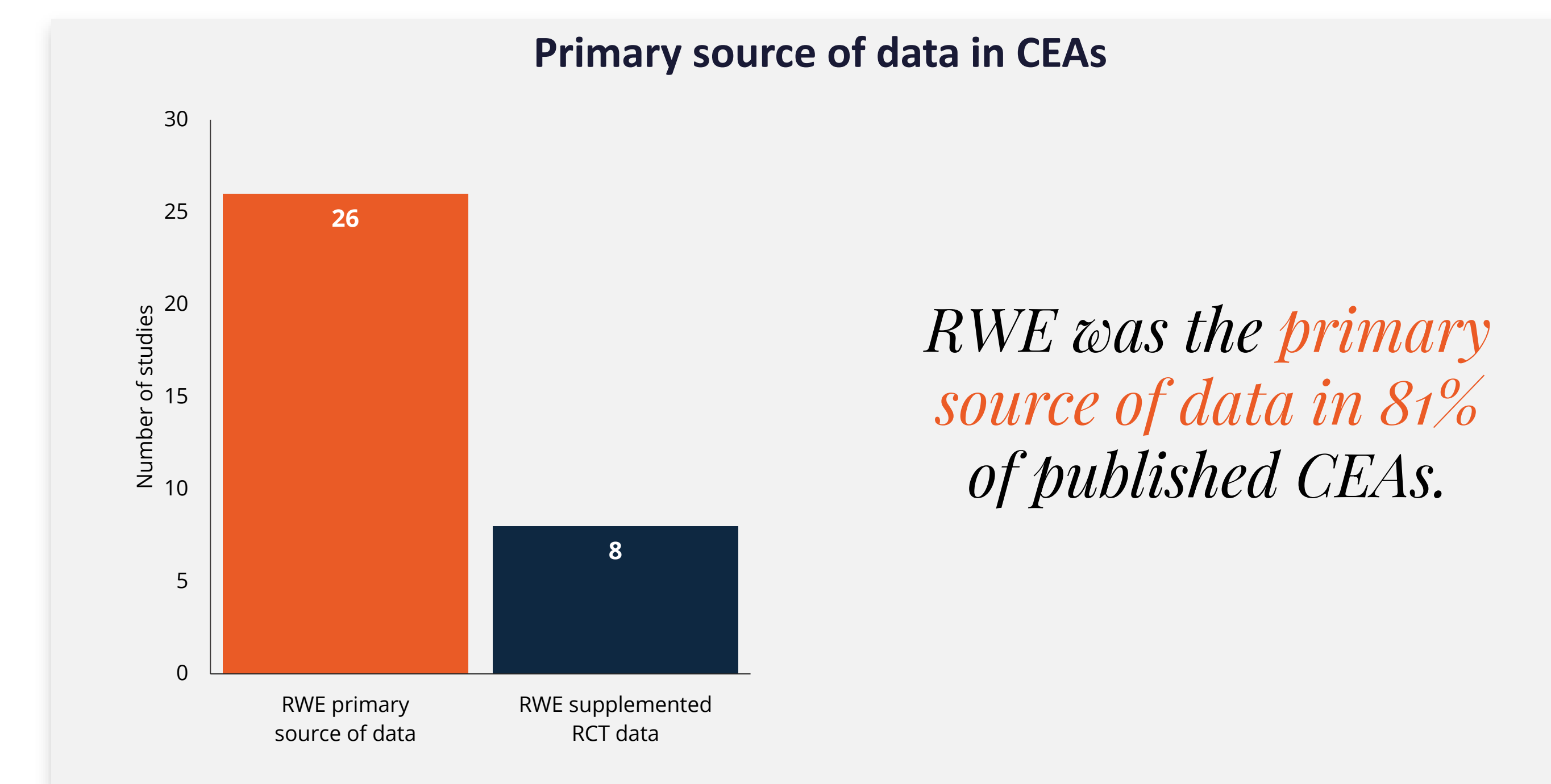
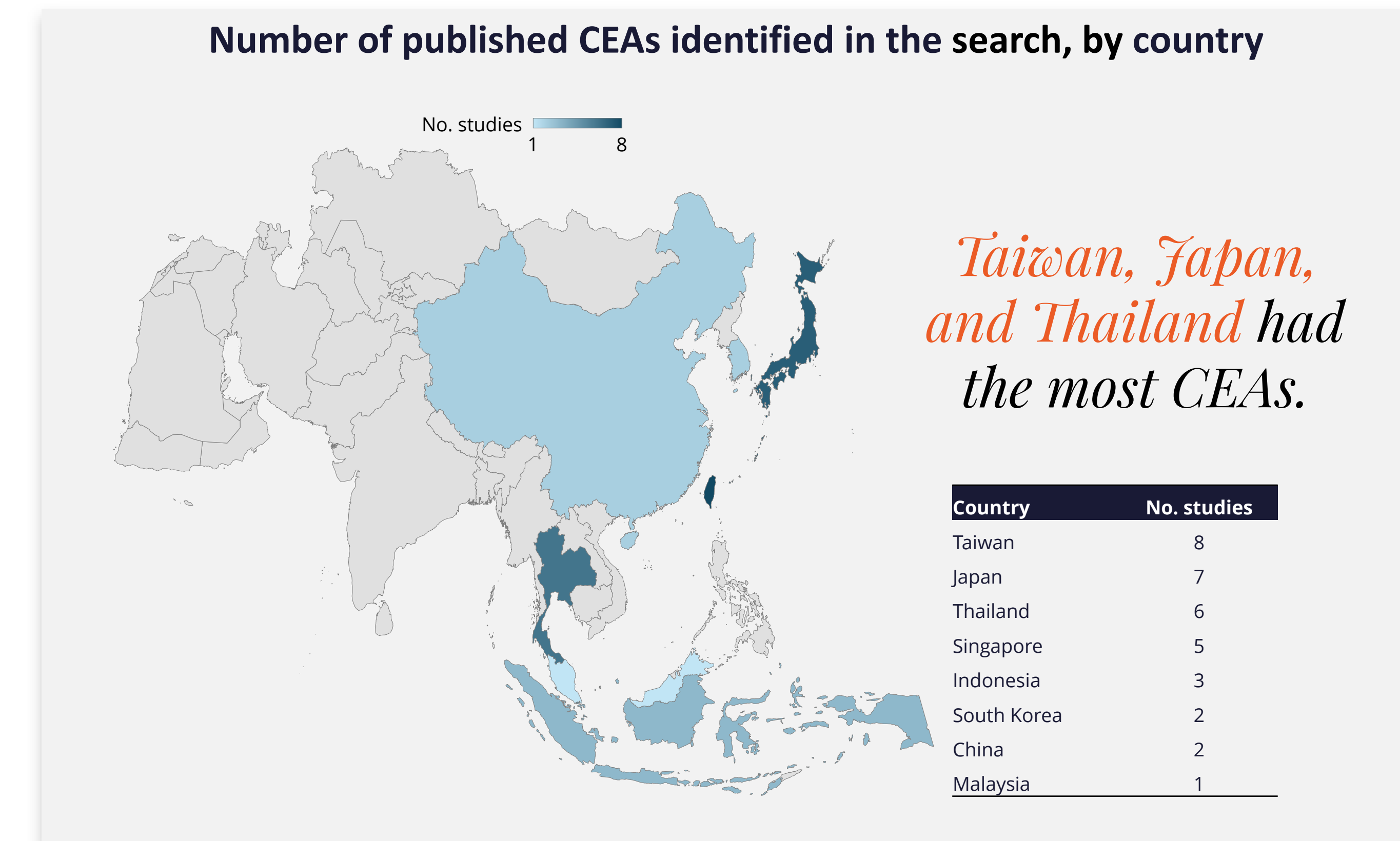
A targeted literature review was conducted to identify data on RWE in CEAs in Asian countries. Searches were executed on PubMed and the ISPOR Presentations Database in January 2024; supplemental searches were conducted in April 2025.

Records were screened by experienced researchers and results were categorized by country and source of RWE used. Reference lists of review articles were screened for relevant studies.

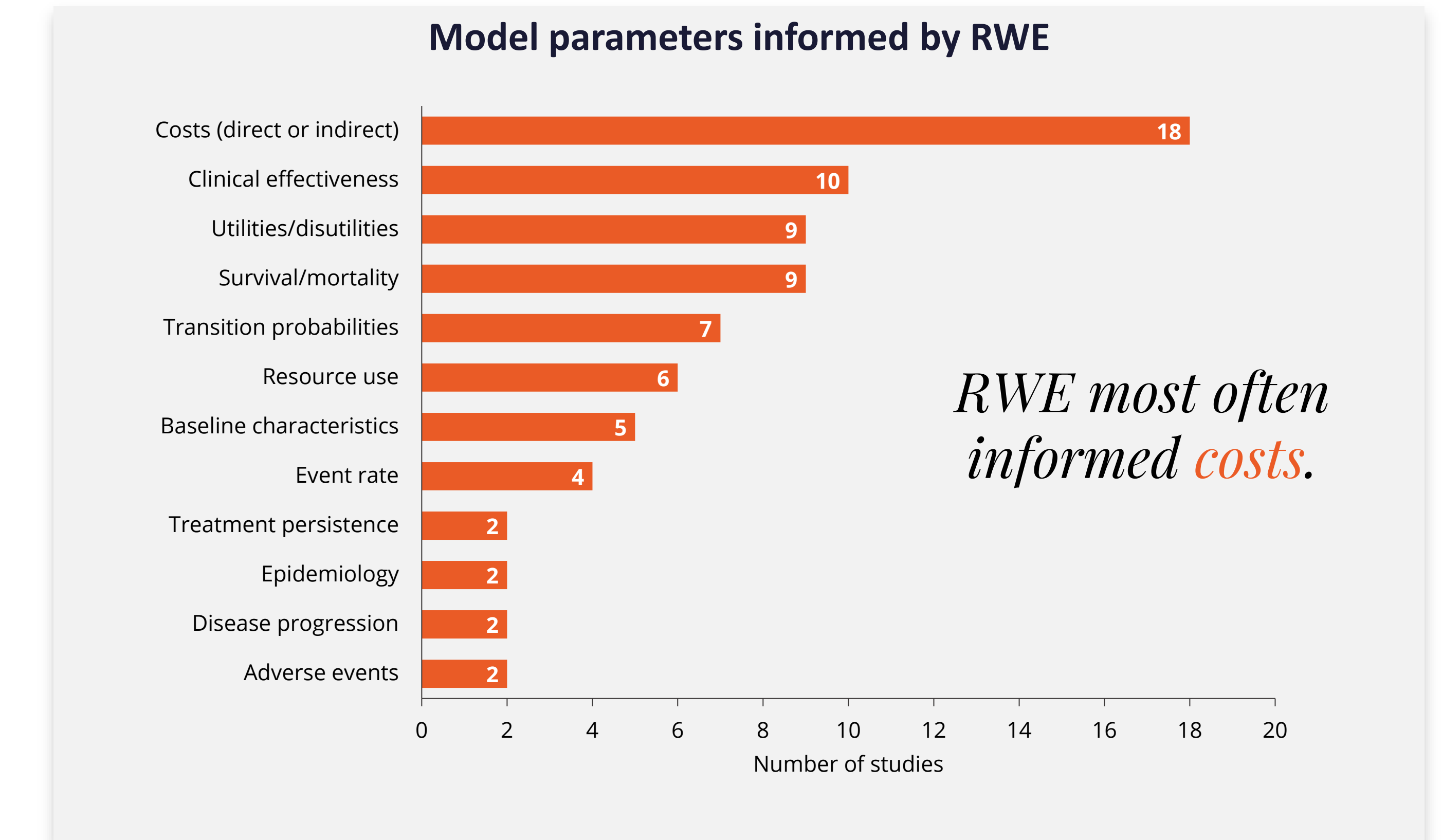
Records were included if they used RWE collected in Asia to inform the cost-effectiveness model.

Findings

RWE was used to inform CEAs in 34 publications.



Findings



Examples of use of RWE in HTA submissions

Early HTA:

- RWE was used in an early HTA in Singapore ahead of the clinical trial to understand the potential value of a novel technology in poststroke recovery.⁷

Reevaluation of initial HTA decisions:

- In Indonesia, RWE was used to recalibrate transition probabilities and survival estimates from the initial CEA to better reflect real-world practice and inform decision-making.⁸
- In Taiwan, RWE was used to adjust National Health Insurance Administration benefit packages for immune checkpoint inhibitors.⁹
- In Thailand, RWE was used to reevaluate streptokinase and tenecteplase as treatments for ST-segment elevation myocardial infarction.¹⁰

Discussion

RWE plays a crucial role in HTA in Asia, with 81% of identified CEAs using it as a primary source of data.

Underrepresentation of Asian populations in RCTs is a critical gap that needs to be addressed for adequate decision-making.

Collection of RWE ahead of HTA submissions can address data gaps on local populations and potentially reduce delays in the reimbursement process.

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