

P1.334: EGFR-Tyrosine Kinase Inhibitor Access and Utilization Gaps in Indonesian Lung Cancer: A 13-Year Retrospective Study

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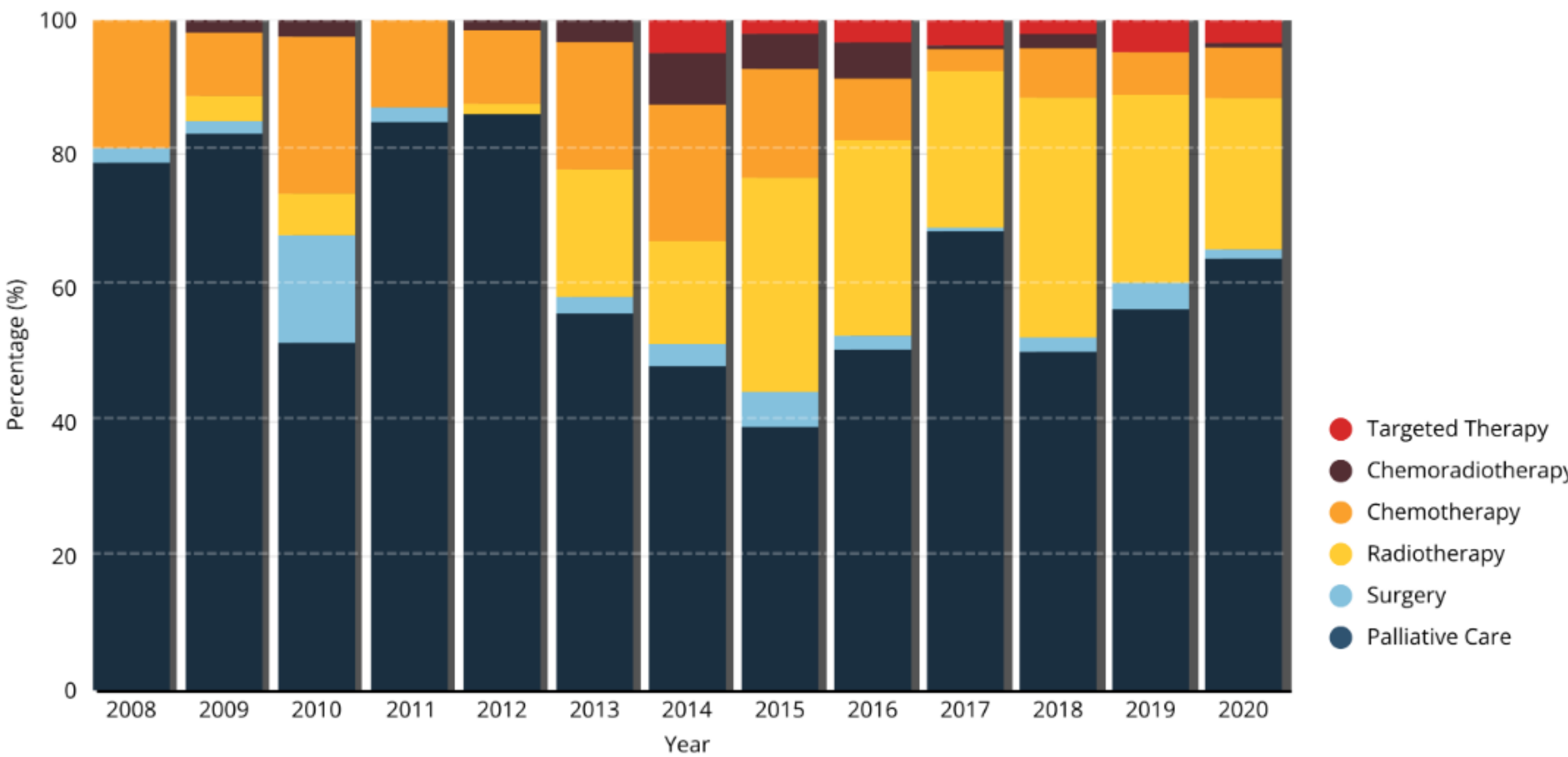
INTRODUCTION

In low and middle income countries, access to molecularly targeted therapies for lung cancer remains limited. This study assessed the gap between estimated epidermal growth factor receptor-tyrosine kinase inhibitors (EGFR-TKIs) treatment need and observed uptake in Indonesia, and evaluated the gap before and after implementation of the National Reimbursement System (NRS). We hypothesized that many potentially eligible patients in Indonesia would not receive EGFR-TKI therapy, as they ideally should.

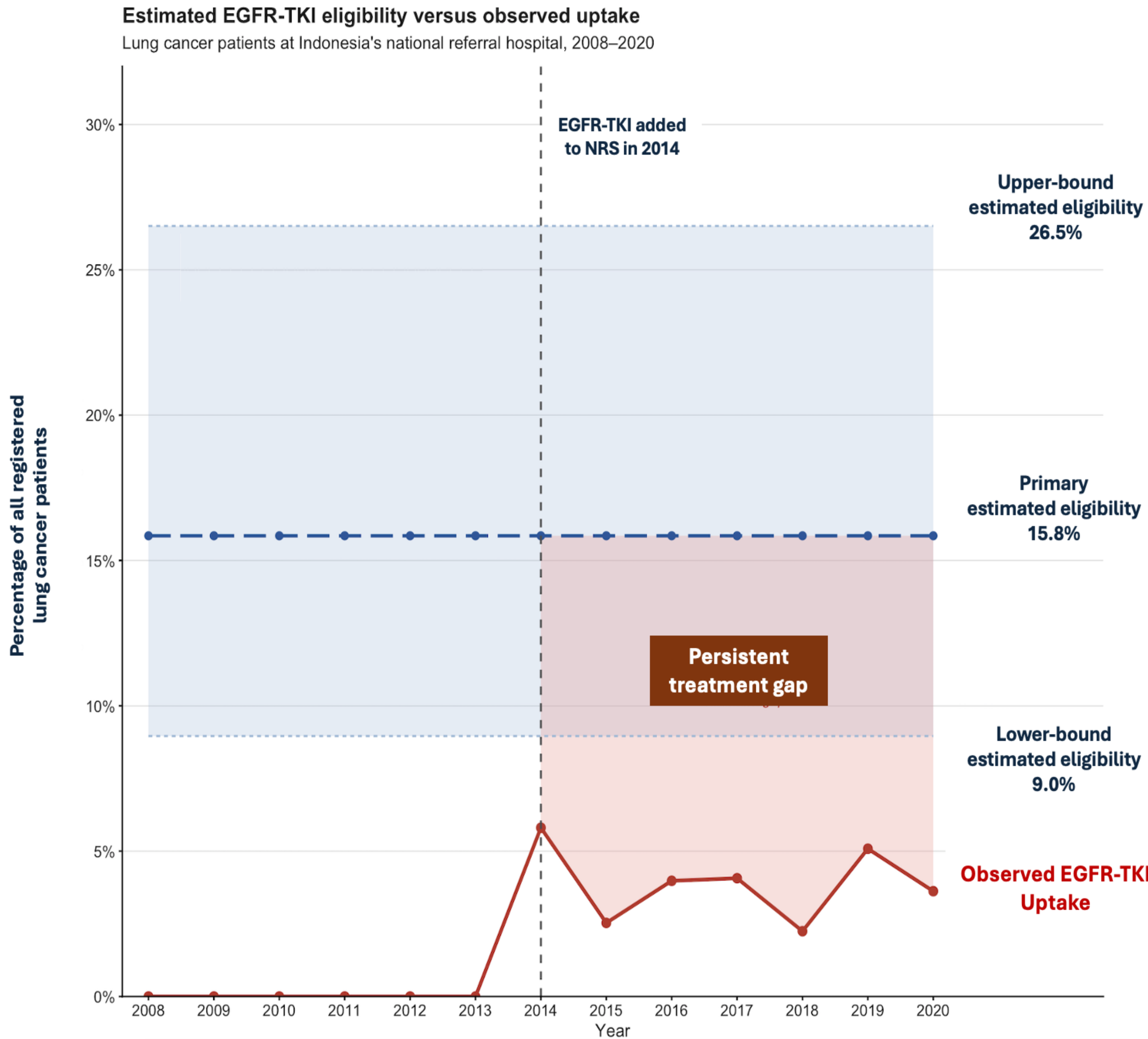
METHODS

This retrospective longitudinal study included all registered lung cancer patients at RSCM, Jakarta, from 2008–2020. Registry data underwent standardized abstraction, deduplication, coding, and quality control using SRIKANDI and CanReg5. EGFR-TKI eligibility was estimated using a five-step epidemiological model: lung cancer → NSCLC → adenocarcinoma → EGFR mutation → TKI-sensitive mutation → clinical eligibility. Lower-bound, primary, and upper-bound models were constructed from Indonesian and regional evidence as a sensitivity analysis. Observed EGFR-TKI use was compared with estimated eligibility to quantify treatment uptake and treatment gaps, including changes before and after NRS implementation in 2014.

- 1,426 lung cancer cases, 67.8% male, median age 55 for men and 53 for women.
- 93.6% were stage IV, adenocarcinoma accounted for 57.2% of NSCLC cases.
- Under lower-bound, primary, and upper-bound models, estimated eligible populations were 128 (9.0%), 226 (15.8%), and 378 (26.5%) patients, respectively.
- 41 patients received EGFR-TKIs, corresponding to 32.0%, 18.1%, and 10.8% of the estimated eligible population.
- After NRS implementation, uptake increased from 0% to 25.0% of the primary estimate; however, a substantial gap persisted throughout study period.



RESULTS



DISCUSSION AND CONCLUSION

Actionable Take Away Message

- The substantial gap between estimated need and observed EGFR-TKI uptake persisted even under the most conservative model, highlighting multilevel barriers.

Future Direction for Research

- Although treatment uptake increased following NRS implementation, further investment in diagnostics, infrastructure, and policy expansion remains important.
- Future research should strengthen the national registry and evaluate survival, quality of life, and cost-effectiveness within the NRS.

REFERENCES & ACKNOWLEDGEMENTS

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