

Ang Yun Lee¹, Yvonne Ang Li En², Ross Andrew Soo², Koh Wee Yao⁴, Lowell Leow³, John Tam Kit Chung³, Kenneth Sooi², Ahmad Zhafran², Yu Yang Soon⁴, Yiqing Huang²

¹Division of Oncology Nursing, National University Cancer Institute, Singapore, ²Department of Haematology-Oncology, National University Cancer Institute, Singapore,

³Division of Surgical Oncology, National University Cancer Institute, Singapore, ⁴Department of Radiation Oncology, National University Cancer Institute, Singapore

Correspondence: lee_ang_yun@nuhs.edu.sg

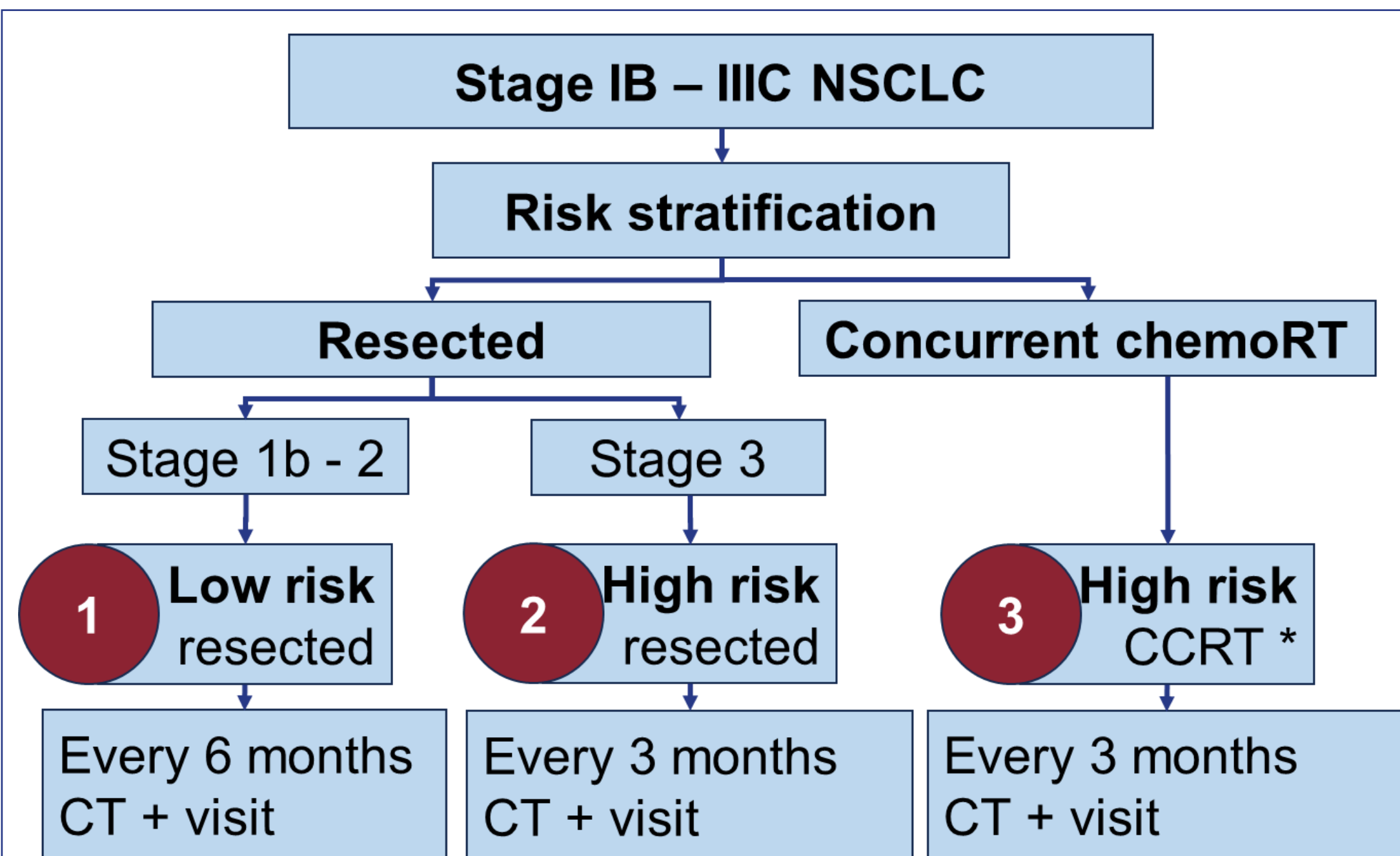
INTRODUCTION

- Surveillance after curative intent non-small cell lung cancer (NSCLC) treatment aims to detect recurrence and second primary cancers.
- Guidelines (NCCN, ASCO) recommend CT-based surveillance, but intervals vary and may drive unnecessary visits and imaging.
- We evaluated the impact of a risk-stratified Lung Cancer Care Pathway (LCCP) on clinic visits and CT use in Stage IB–IIIC NSCLC within the first year after diagnosis.

METHODS

- Single tertiary cancer center; Stage IB – IIIC NSCLC.
- Lung Cancer Care Pathway (LCCP) implemented January 2024 for low-risk resected (LR), high-risk resected (HR), and CCRT pathways.
- Retrospective pre-post chart reviews: 2023 (pre-LCCP) vs 2024 (post-LCCP).
- Outcomes analysed within first year: clinic visits and CT scans per patient-year.

Risk-stratified Lung Cancer Care Pathway



* CCRT: Concurrent chemoradiotherapy

RESULTS

- 253 persons with Stage IB – IIIC NSCLC (120 in 2023, 133 in 2024).
- Median age 70-71, majority male, predominantly Stage III disease.

Resource impact of LCCP in first year

Direct healthcare costs

- Estimated **105 SGD** lower follow-up cost per patient-year.

Physician time

- Reduced 58 hours** of annual physician clinic time for NSCLC follow up.

	2023 (n=120)	2024 (n=133)
	Median	
Age (years)	70 (IQR 63-75)	71 (IQR 65-76)
Gender	n (%)	
Male	88 (73.3%)	87 (65.4%)
Female	32 (26.7%)	46 (34.6%)
Stage		
Stage IB	19 (15.83%)	34 (25.37%)
Stage II	23 (19.17%)	20 (15.04%)
Stage III	78 (65.00%)	79 (59.40%)

Table 1. Patient Demographics

Patient Care Pathway	2023	2024	2023	2024
	mean visits ± SD		mean CT scans ± SD	
Low-risk Resected (LR)	3.86 ± 1.77	2.94 ± 2.46	0.86 ± 0.69	1.53 ± 1.28
High-risk Resected (HR)	4.09 ± 2.26	3.25 ± 1.58	1.09 ± 0.83	2.00 ± 1.41
High-risk CCRT *	5.46 ± 4.15	3.29 ± 2.54	1.71 ± 1.33	1.24 ± 1.39
All patients	4.89 ± 3.52	3.14 ± 2.31	1.43 ± 1.19	1.50 ± 1.35

Table 2. Patient Annual Visits and CT scan

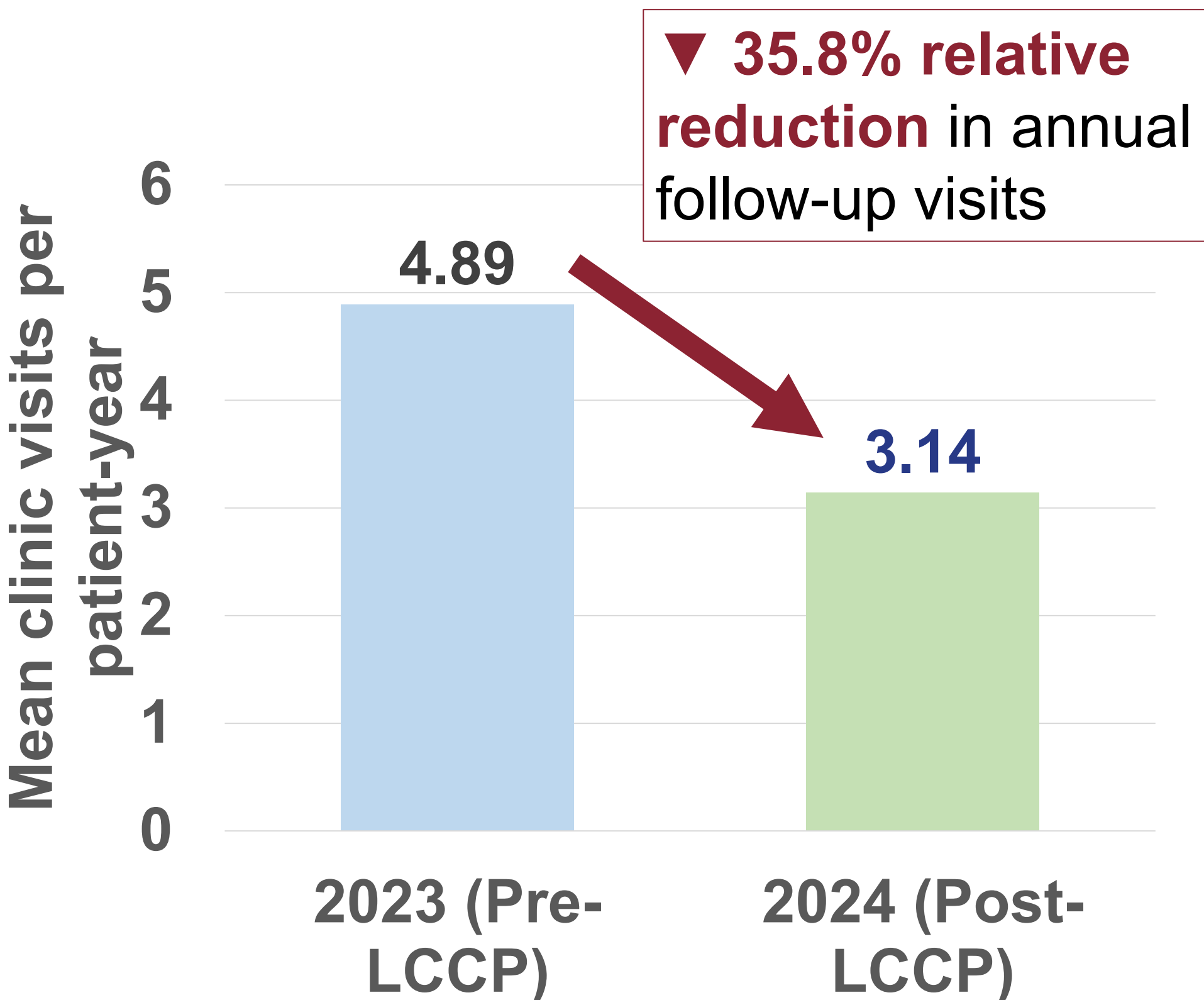


Figure 1. Mean clinic visits per patient-year decreased from 4.89 in 2023 (pre-LCCP) to 3.14 in 2024 (post-LCCP) ($p=0.0037$).

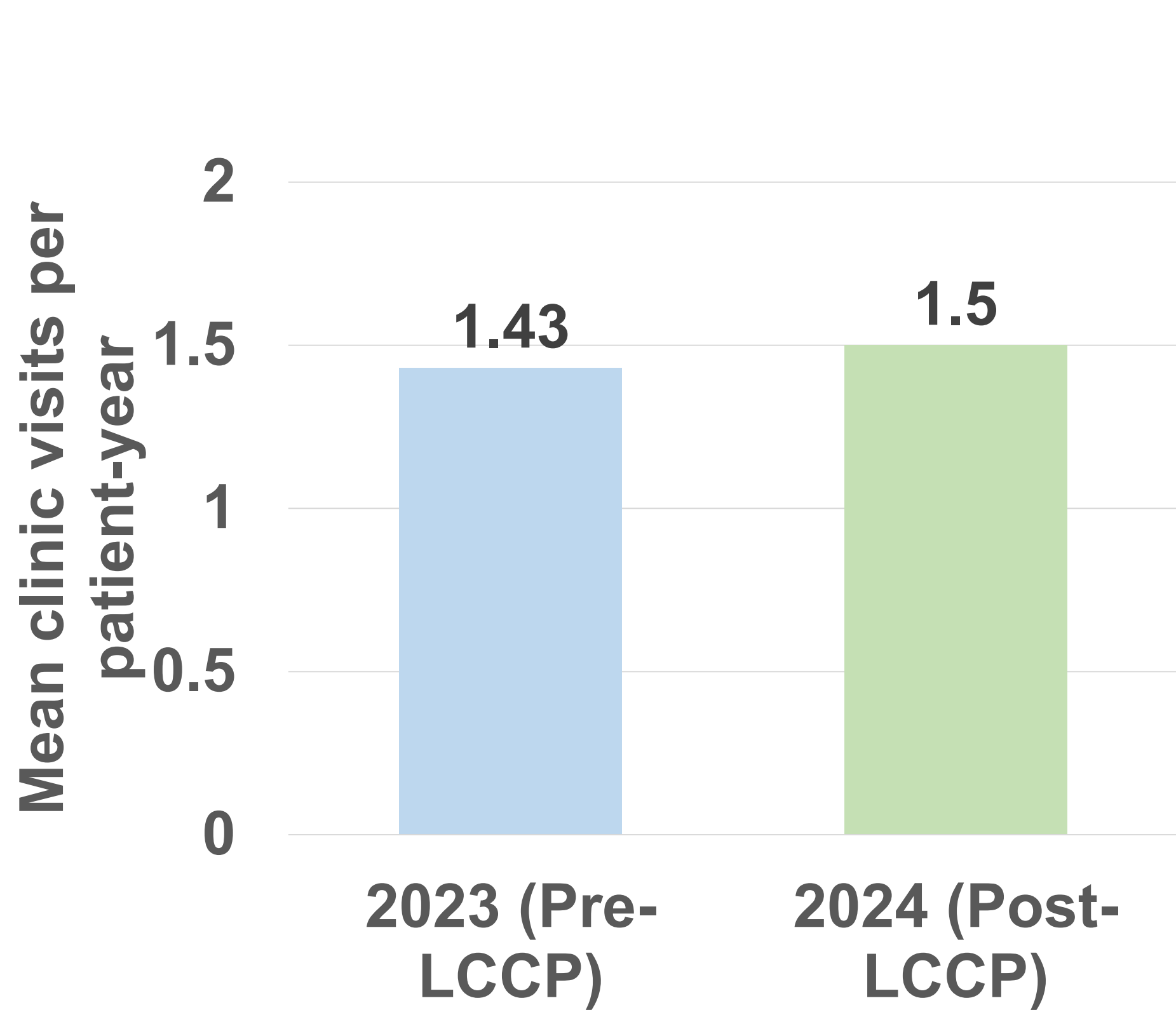


Figure 2. Mean CT scans per patient-year remained similar (1.43 vs 1.50; $p=0.81$), indicating maintained CT-based surveillance.

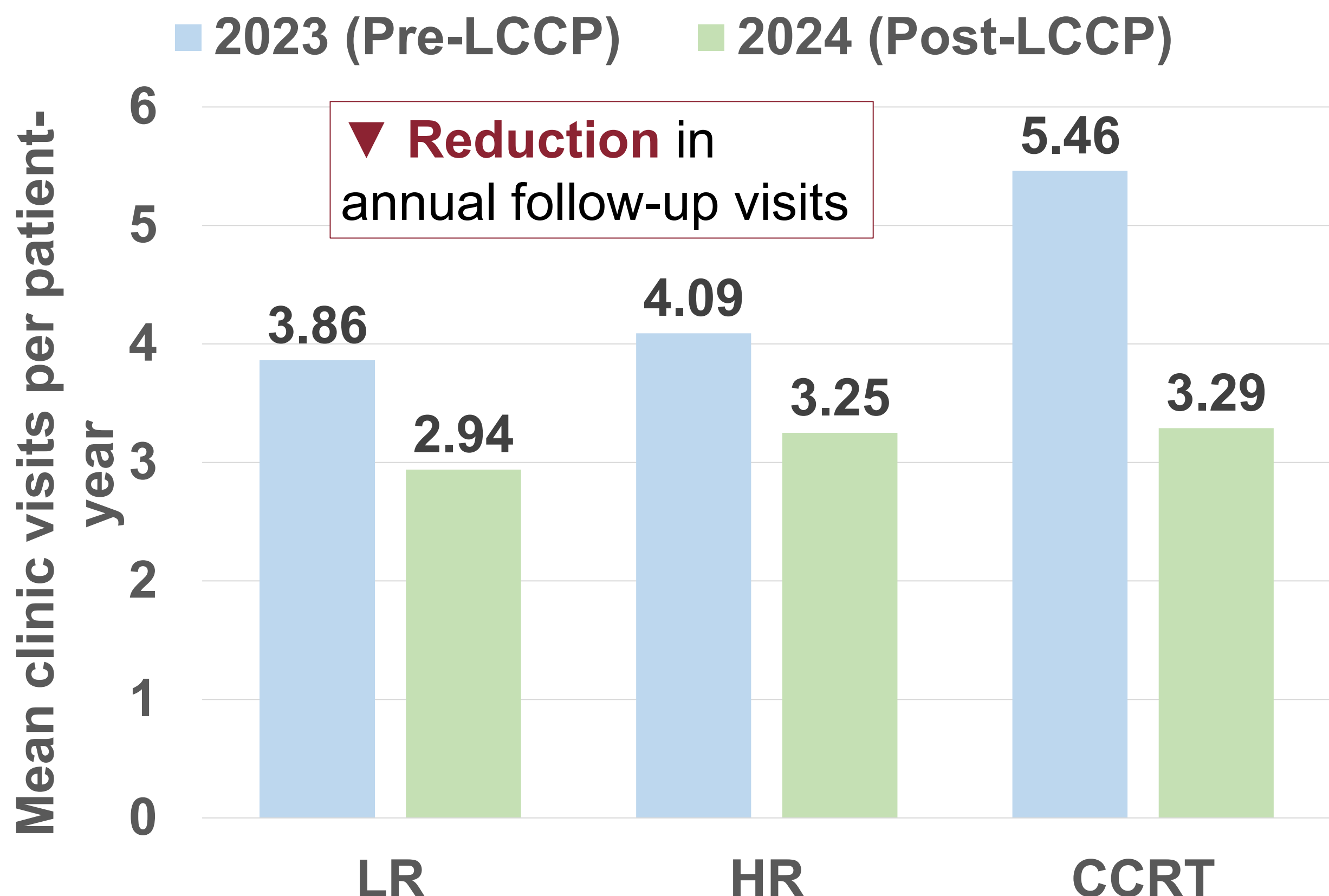


Figure 3. Mean clinic visits per patient-year decreased across all pathways, with the largest absolute reduction in CCRT.

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- A risk-stratified Lung Cancer Care Pathway effectively **reduces clinic visits for patients**.
- This translates to **reduction in annual follow-up cost** for patients and **reduction in physician clinic time**.

Future Direction for Research

- Longer follow-up is needed to determine its **long-term impact on healthcare resources**.

ACKNOWLEDGEMENTS

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