The effect of community diagnostic centres on volume and waiting time for diagnostic procedures in the UK – March 2025 Update[1]

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Summary

- These results use the approach of Sivey and Wen (2024) but extend the dataset to December 2024. They include 65 trusts with community diagnostic centres (CDCs), based on the spreadsheet provided by Vincent Chinegwundoh (DHSC).
- We used the "patient ready" date to define each CDC opening.
- Alongside the two-way fixed effects models from the paper, we present the average treatment effect (ATE) from the Callaway and Sant'anna (2021, CSA) model.
- The test volume results mirror Sivey and Wen (2024). The largest volume effects appear in the model with only trust fixed effects (1). Effects diminish with the inclusion of time fixed effects (2) and trust-specific time trends (3). Model (3) shows a smaller, statistically insignificant effect, while the CSA model (4) shows a larger, statistically significant impact.
- Overall, results suggest the opening of CDCs at a trust is associated with an increase in test volume between 11% and 16%.
- Waiting times models (5) to (8) show a similar pattern to Sivey and Wen (2024), with no statistically significant effects.
- Figures 1 and 2 present event study estimates from the CSA model, indicating no concerns around pre-trends.
- For test volume (Fig. 1), CDC openings are associated with increased volume, which grows over time. Two to three years after opening, CDCs are associated with an increase of up to 25% in test volume at the trust.

[1] This project is funded by the National Institute for Health and Care Research (NIHR) Policy Research Programme (reference PR-PRU-1217-20301). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

- For waiting times (Fig. 2), CDC openings are associated with a modest but statistically significant reduction (approximately 7% reduction in patients waiting more than 6 weeks) two to three years post-opening.

Takeaway messages

1. Community diagnostic centres (CDCs) are associated with a sustained increase in test volumes at trusts where they have opened, with test volumes rising initially by 11 to 16% then by up to 25% within two to three years.
2. CDCs may have a modest impact on reducing patient waiting times with approximately 7 percentage points fewer patients waiting more than 6 weeks after two to three years.
3. The relatively small effects on waiting times could be due to expansion of demand in areas where new facilities open, or weaknesses in the waiting times data which make it hard to capture the true impact.

References

Callaway, B., & Sant'Anna, P. H. (2021). Difference-in-differences with multiple time periods. *Journal of econometrics*, *225*(2), 200-230.

Sivey, P., & Wen, J. (2024). The effect of community diagnostic centres on volume and waiting time for diagnostic procedures in the UK. *Health policy*, *147*, 105101.

The Impact of Opening CDCs on Tests Volume and Waiting Time

	Total Planned Tests Volume				Share of Waiting 6+ Weeks			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Two-way FE Model			CS (2020)	Two-way FE Model			CS (2020)
Post-CDC	2646.243***	1133.483***	436.141	1626.697***	5.867***	-0.192	1.364	-3.014
	(454.439)	(469.483)	(320.793)	(531.986)	(1.344)	(1.563)	(1.373)	(1.942)
Trust Fixed Effects	YES	YES	YES		YES	YES	YES	
Time Fixed Effects	NO	YES	YES		NO	YES	YES	
Trust Specific Time Trends	NO	NO	YES		NO	NO	YES	
Observation	13,004	13,004	13,004	13,004	12,894	12,894	12,894	12,894

Note: This table presents the effect of opening CDCs. The outcome variable is the number of planned and waiting list tests at the provider-month level in Columns 1 to 4, while the outcome variable is the percentage of waiting time above 6 weeks (%) in Columns 5 to 8.

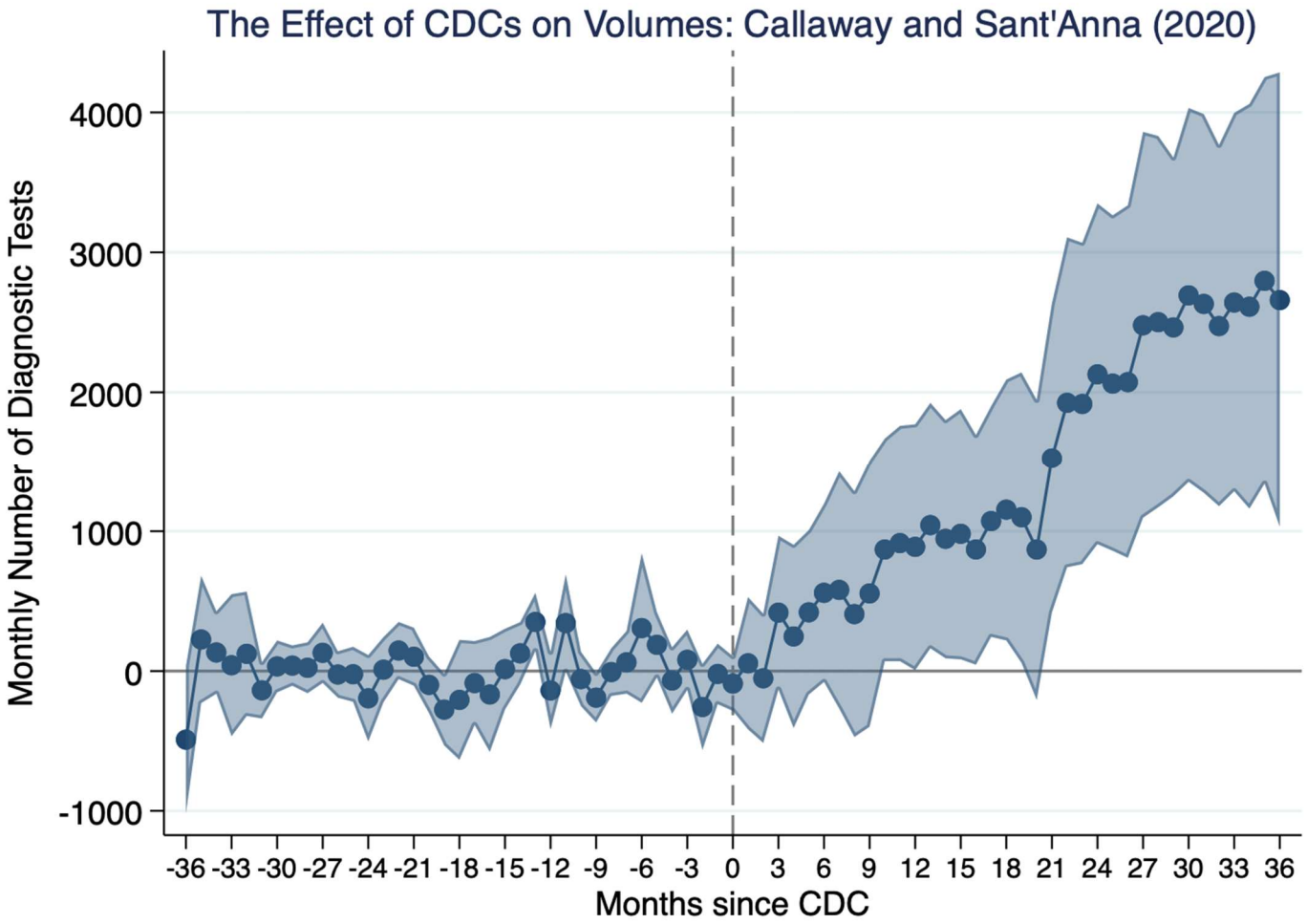

Figure 1: effects on volume of tests

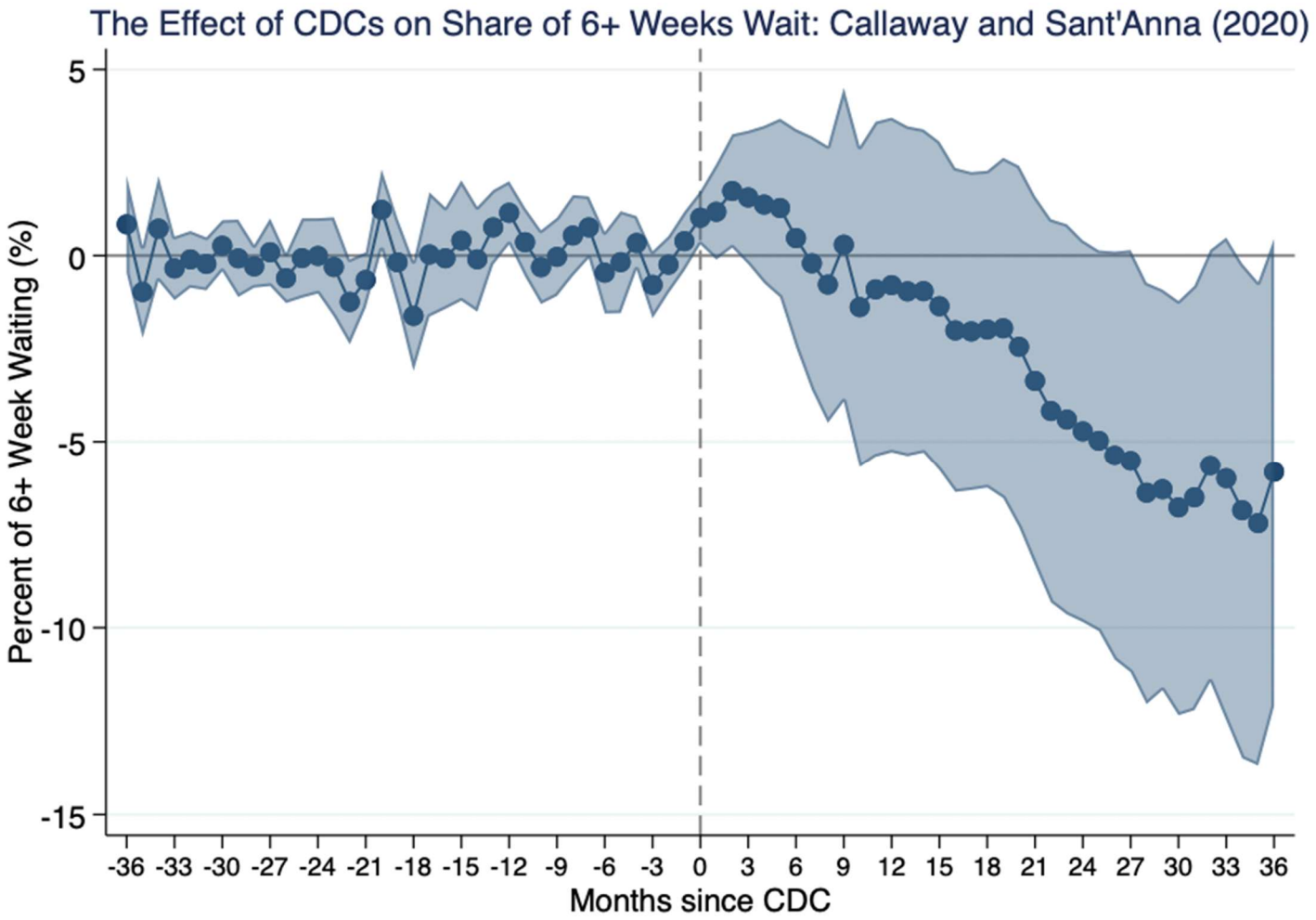

Figure 2: effects on waiting times