

# DID THE EXPANSION OF FREE GP CARE IMPACT DEMAND FOR EMERGENCY DEPARTMENT ATTENDANCES?

## A DIFFERENCE-IN-DIFFERENCES ANALYSIS

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# Did the expansion of free GP care impact demand for emergency department attendances? A difference-in-differences analysis<sup>1</sup>

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## INTRODUCTION

We investigate whether the introduction of universal free General Practitioner (GP) care for children aged under 6 reduced visits by this group to Emergency Departments (EDs). In July 2015 all children in Ireland aged under 6 became eligible for free GP care. The number of those aged 0-5 years eligible for free GP care increased from 124,000 in December 2014 to 248,000 by December 2016, with over 90% of GPs with a General Medical Services (GMS) contract quickly signing up to provide free GP care to this group. Previous studies have shown that removing co-payments for GP services increases GP visit rates in both adults and children. As many services provided within EDs can also be provided by a GP, the introduction of free GP care could be expected to reduce of ED visits. This is especially true for those without a medical card, or a referral from a GP, who must pay €100 for each ED visit. We also examine whether there were changes in ED visits following a GP referral, as referrals to EDs from GPs are free of charge.

## DATA AND METHODS

We used data from the Patient Experience Time dataset, which is a large administrative dataset covering over 400,000 ED visits by children between January 2015 and June 2016 in Irish public hospitals with Tier 1 (operating 24/7) EDs. These data include information on age and sex of the attendee, and the time of day, day of week, and hospital of the visit, as well as the mode of referral and referral type of the ED visit. We apply a difference-in-differences statistical

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<sup>1</sup> This Bulletin summarises the findings from Walsh, B., Nolan, A., Brick, A., and Keegan, C., "Did the expansion of free GP care impact demand for Emergency Department attendances? A difference-in-differences analysis", *Social Science and Medicine*, Available at: <https://doi.org/10.1016/j.socscimed.2018.12.029>

method. Specifically, this technique compares how ED visits changed for the group targeted by the introduction of universal free GP care (children aged 0-5 years) compared to a group (children aged 7-15 years) who were not directly affected by the policy change. Using linear regression analyses we examine:

- a) Whether there was a greater reduction in ED visits for children under 6, compared to the older group.
- b) Whether there was a greater increase in GP referral rates to EDs for children under 6, compared to the older group.

#### **FINDINGS**

We find that in the period following the introduction of universal free GP care to under 6s, ED visit rates increased for all ages, and ED visits in the under 6 group did not reduce relative to the older child group. Additionally, we find that GP referral rates to the ED increased by over 2 percentage points relative to the older child group (where no increase occurred). This finding is largely explained by GP referral rate increases in children aged 3-5 years. There is evidence of a larger increase in GP referral rates for under 6s at the weekend, when Out of Hours GP care is more common. These results are consistent across geographic regions.

#### **POLICY IMPLICATIONS**

The expansion of free GP care to all under 6s did not impact their visits to public hospital EDs, but a small increase in referrals from a GP to EDs did occur. This latter finding may indicate increased pressure placed on GPs because of additional demand for care. The finding of no reduction in ED visits for the under 6 group may in part be due to the majority (75%) of younger children without a medical card or GP visit card being covered by private health insurance. This population may attend private emergency or medical clinics, for which we do not have data, and in general therefore their engagement with EDs may be less influenced by the cost of a GP visit. Universal free GP care considerably reduces the cost burden on patients for GP care and while evidence suggests this may increase GP visits, findings from this analysis suggest that, in the short term at least, it may not reduce visits to EDs or alleviate pressure on ED services.

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