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POLICY PAPER

The Impact of Free GP Care on GP Utilisation in Ireland

Paul K Gorecki[1]
Economic and Social Research Institute and Trinity College Dublin

Abstract: The successful implementation of the ongoing roll-out of free GP care for all private patients in Ireland, begun in 2015, requires an estimate of its impact on GP utilisation. However, estimates of this impact vary widely. For example, a recent study based on administrative records of six GP practices, predicts an extra 4.4 million GP visits. This paper argues that little reliance should be placed on this estimate due to methodological and sample selection issues, as well as the use of demonstrably inappropriate assumptions. Instead, more reliance should be placed on estimates derived from retrospective self-reporting surveys (e.g. *Growing Up in Ireland*, the Irish Longitudinal Study on Ageing) which suggest that extending free GP care to all private patients is likely to result in an increase of around 2.5 million GP visits. The increase in demand for GP services occasioned by free GP care feeds into the wider debate about the enhanced role of primary care in Ireland and the corresponding increase in funding.

I INTRODUCTION

Public policy in Ireland is committed, on a phased basis, to extending free GP care to all. In 2015, under 6s and over 70s became eligible for free GP care. Progress has stalled for those between six and 11, the next group for which it is intended to provide eligibility.

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[1] Corresponding Author: pkgorecki@gmail.com

Prior to the phased introduction of free GP care, eligibility for free GP care was restricted to those qualifying for a means tested Medical Card or GP Visit Card, introduced in 1972 and November 2005, respectively. In May 2015, 41.0 per cent of the population was in receipt of free means tested GP care. Private patients (i.e., those without a means tested Medical or GP Visit Card) were charged an estimated €50 per GP visit.[2] Thus the issue arises, which is the subject of this paper, as to how much the abolition of this fee will affect the utilisation of GP services.

Accurate estimation of the impact has important implications for: the setting of GP capitation fees by the State; medical workforce planning; the potential costs of universal health insurance; and the quality of GP care, which is liable to be inversely related to the ratio of demand to available resources. In other words, the greater the increase in demand for GP services due to the provision of free GP care, other things equal, the lower the capacity to deliver the same level of care.

Behan *et al.* (2013; 2014) have argued that extending free GP care to all will result in an extra 4.4 million GP visits annually. These estimates have gained widespread attention and currency (e.g. IMO, 2014; Williams, 2015, para. 46). But how credible is this estimate? After addressing this question (Section II), attention turns to alternative estimates which have attracted somewhat less attention, but are arguably superior (Section III). Section IV concludes.

II SIX GP PRACTICES ADMINISTRATIVE RECORDS

2.1 Introduction

Behan *et al.* (2013; 2014) estimate the impact of free GP care based on the administrative data from six GP practices. These practices were non-randomly selected. The methodology was not validated or reviewed independently by third parties. They represent a small proportion of all GP practices – six out of 2,093 or less than half a percentage point.[3] Nevertheless, Behan *et al.* (2013) argue that their sample is comparable to the national population in terms of age and Medical Card status.

In estimating the impact of free GP care Behan *et al.* assume that when a private patient is in receipt of a free GP Visit Card that they will visit with the same frequency as existing patients with a means tested GP Visit Card. In other words, the annual number of GP visits for private patients will increase from 3.35 to 5.06 (Panel A compared to Panel B, Table 1).

[2] The NCA (2010, pp. 9-12) conducted a survey in March 2010 of the cost of a routine GP consultation/examination and found that this was €51 per visit. Doctors' fees, as measured by the CSO (2011b, Table 6, p. 8; 2015, Table 9), remained essentially unchanged between March 2010 and May 2015. This is consistent with an earlier survey conducted by the Competition Authority (2010, p. 10) for October 2008 which reported a range of €45-€60.

[3] The number of GP practices is based on HSE, personnel communication, 19 March 2014.

Table 1: Impact of Free GP Care on GP Visits, Six GP Practice Administrative Records, All Persons, Ireland, 2013[a]

Panel A: as per Behan et al. (2013)			
GP Cover	*Population (Million)*	*GP Visits (number, per year)*	*Total GP Visits (million)*
Public	1.99	7.72[b]	15.4
Private	2.60	3.35	8.8
Total	4.59	–	24.2
Panel B: private patients replicate GP visit rate of GP Visit Card holders			
Public	1.99	7.72[a]	15.4
Private	2.60	5.06	13.2
Total	4.59	–	28.6

Source: Behan *et al.* (2013); HSE (2008, p. 11).
Notes: (a) GP visit rates recorded from 23 October 2012 to 22 October 2013.
(b) Public patients refer to those on Medical and GP Visit Cards. However, a GP visit rate of 7.72 refers only to Medical Cards holders. If account is taken of the GP Visit Card visiting rate in estimating the Public GP visiting rate, then instead of 7.72, 7.57 should be used.

However, as shown in the next three sections, Behan *et al.*'s (2013) estimated annual 4.4 million increase[4] in the number of GP visits due to the extension of free GP care to private patients is biased upward.

2.2 Means Tested vs. Free GP Visit Card GP Visiting Rates

Implicit in the approach of Behan *et al.* is that the GP visiting rates of patients with a means tested GP Visit Card are representative of private patients that are granted a free GP Visit Card once the State has rolled out free GP care. In other words, given that the population of persons eligible for means tested GP Visit Cards and the population of private patients share the same characteristics that determine the demand for GP services – an assumption we will relax in Section 2.4 – then Behan *et al.* assume that persons in receipt of means tested GP Visit Cards are representative of those that will have a free GP Visit Card.

Qualification for a means tested GP Visit Card requires the completion of a 12 page form seeking information on, *inter alia*, the applicant's income, wealth (e.g. investments, property), expenses (e.g. rent, mortgage, house insurance), travel to work costs, together with accompanying documentation.[5] In contrast, a free GP Visit Card requires the completion of a four page form seeking the patient's name, date of birth, gender, PPS number, and choice of GP.[6] Application for a means tested and free GP Visit Card can be either through hard copy or online.

[4] i.e. 28.6 million – 24.2 million = 4.4 million from Table 1.
[5] Note that the same form has to be completed for a means tested Medical Card: http://www.hse.ie/eng/services/list/1/schemes/mc/forms/Medical_Card_GP_Visit_Card_Application_Form.pdf.
[6] https://www.hse.ie/eng/services/list/1/schemes/mc/gpvc/under6applicationform.pdf for the application form for the under 6s.

Two testable propositions emerge from this discussion:

- First, in view of the higher costs of applying for a means tested as opposed to a free GP Visit Card, other things being equal, a smaller proportion of the eligible population for a means tested GP Visit Card will hold a GP Visit Card compared to the corresponding take up percentage of those eligible for a free GP Visit Card.
- Second, the greater the frequency with which a patient is likely to visit a GP, the more likely it is an eligible patient will apply for a GP Visit Card. In other words, in deciding whether or not to apply for a means tested or a free GP Visit Card the patient will compare the costs, in terms of time and effort, of completing the application form with the benefits – avoiding the payment, on average, of €50 per GP visit.

Taken together, if these two propositions hold, the GP visiting rates of means tested GP Visit Card holders will be higher than the GP visiting rates of patients likely to be in receipt of a free GP Visit Card, even if the underlying demand for GP services is the same in the population of those eligible for means tested and free GP Visit Cards.

In terms of the first proposition, Callan *et al.* (2015, Table 8, p. 17), find only one-in-four of those eligible for means tested GP Visit Cards have such a card. In contrast, for those under 6, between 1 July 2015 and 31 December 2015, 220,890 under 6s, or 80 to 90 per cent of those eligible for a free GP Visit Card, had signed up for the free GP Visit Card.[7] At the same time, 93 per cent of GPs already on the GMS contract had signed the under-six GP contract by 2 November 2015.[8] The GP sign-up rate varied from 100 per cent of GPs in Roscommon to 77 per cent in Dun Laoghaire. Hence the first proposition is consistent with the data.

In terms of the second proposition, we do not have evidence of the health of those holding a means tested GP Visit Card as compared to those eligible for a means tested GP Visit Card, but not in possession of such a card. However, Callan *et al.* (2015) provide such indicators but with respect to the Medical Card. The same reasoning that applies to the means tested GP Visit Card also applies to the Medical Card. The evidence suggests that those with a Medical Card are in a worse state of health as compared to those persons eligible for a Medical Card but not in receipt of one (Table 2). For example, 50 per cent of those with a Medical Card reported as having a chronic illness, whereas amongst those eligible but without a Medical Card, only 16 per cent reported having a chronic illness.

[7] These estimates are based on: CSO (2012, Table 2, pp. 36-37); HSE (2014, Table 7, pp. 30-37; Table 8, pp. 38-45); and, HSE, personnel communication, 29 January 2016.
[8] HSE, personnel communication, 8 December 2015. The data refer to those GPs signed up as of 2 November 2015.

Table 2: Medical Card, Eligibility and Take-Up, Health Indicators, Population Over 15, Ireland, 2010

Health Indicator	*Eligible and Hold Medical Card*	*Eligible and Do Not Hold a Medical Card*
% Very good/good health	67	93
% fair, bad/very bad health	33	7
% with a chronic illness	50	16

Source: Callan *et al.* (2015, Table 5, p. 15).

The issue thus becomes how to adjust the annual GP visit rate of 5.06 of holders of means tested GP Visit Cards so that it is representative of all those eligible for means tested GP Visit Card. The adjusted GP visit rate will be the weighted average of the GP visit rate of the one-in-four of those eligible and holding a means tested GP Visit Card (i.e. 0.25×5.06) plus the three-in-four of those eligible for but not holding a means tested GP Visit Card (i.e. $0.75 \times Y$). The issue is thus the magnitude of Y.

The patient in applying for a means tested GP Visit Card will consider the benefits in terms of avoiding a €50 per GP visit charge with the time and effort of completing the means tested GP Visit Card form. We assume that the patient values his/her time at (say) €10 per hour, somewhat above the national minimum hourly wage which increased from €9.15 per hour in 2016 to €9.55 per hour in 2018. Thus if completion of the application form for a means tested GP Visit Card, including any time to seek assistance from a Citizens Advice Bureau or a local TD, takes less than five hours the benefits of competing the form would be greater than the costs if the patient anticipated visiting a GP at least once in the next year; less than ten hours, twice in the next year.

Assuming an upper bound of ten hours to complete a means tested GP Visit Card implies a cost of €100, which at €50 per GP visit implies that once a patient expects to visit a GP two or more times a year it is worth completing a means tested GP Visit Card application. In other words, $Y = 2$. The adjusted rate for means tested GP Visit Card is not 5.06 but rather 2.8 (i.e. $0.25 \times 5.06 + 0.75 \times 2$). This is similar to the current GP visit rate of private patients, 3.35. In other words, Behan *et al.* estimates of the impact of free GP care are likely to be biased upward.

2.3 Counting Private Patients

The six GP practices in the survey record the number of visits per patient over a year. However, if a private patient does not visit then the GP practice may not know why – relocation, death, switching to another GP in the same area or in good health thus not requiring the GP's services. If a correction is not made for private patients who do not visit the GP, administrative GP records will overestimate GP visiting rates for private patients.

Behan *et al.* (2013, p. 298) correct for unrecorded private patients:

> *We estimated the number of 'private' patients in each practice from the number of unique private patient attendances during the 12-month study period and dividing by 0.7 (derived from 2010 CSO NQHS data which estimated that 70 per cent of non-GMS patients attended their GP in the previous 12 months).*

Across the six GP practices used by Behan *et al.* (2013), the average number of GP consultations for those private patients over 18 that visited these practices in 2012-2013 was 4.8.[9] However, the corrected rate, taking into account the fact that some private patients did not visit the GP practice in the year in question, was 3.35.

There has been a small number of studies, mostly in the US, which have compared annual GP visits for the same sample of patients, based on patient recall (used by the 2010 CSO QNHS) and administrative records (Behan *et al.,* 2013; 2014). These studies suggest that self-reported GP visits tend to underreport actual GP visit rates derived from administrative data.[10]

This suggests that the 0.7 correction factor used by Behan *et al.* is biased downward, the corollary of which is that the GP visit rate for private patients of 3.35 is also biased downward. If, for example, the correction factor was 0.8 rather than 0.7, the private patient GP visit rate would be 3.84 not 3.35. The broader implication is that Behan *et al.*'s estimates of the increase in the number of GP visits due to free GP care are biased upward.

2.4 Health Status/Demand for GP Services

The methodology used by Behan *et al.* to estimate the impact of free GP care makes the assumption that public (i.e. those patients with a GP Visit Card)[11] and private (i.e. those patients without a GP Visit Card or a Medical Card) would visit the GP with the same frequency *but* for the fact that private patients do not have access to free GP care. Implicit in this approach is the view that public and private patients share the same characteristics that determine the demand for GP services in terms of patient 'need,' socio-economic factors and financial incentives,[12] except for the fact that one group has to pay for GP services. According to this line of argument

[9] Behan *et al.* (2013, Table 2) estimate the average number of GP visits per private patient over 18 as 3.35. Given a 0.70 correction factor implies that the average number of GP visits for those private patients that visited one of the six GP practices was 4.8.

[10] For the US see Cleary and Jette (1984), Roberts *et al.* (1996), and Ritter *et al.* (2001); Australia, Dalzeil *et al.*(2015); and England, Hippisley-Cox and Vinogradova (2009). All these papers measured patient recall over a year, the period used in Behan *et al.* (2013; 2014). On the issue of patient recall see also Bhandari and Wagner (2006) and Gaskell *et al.* (2000).

[11] The same reasoning applies to a Medical Card.

[12] See Supplementary Tables A.5 (over 18, QNHS), A.8 (Infant Cohort, GUI), and A.9 (for over 50, TILDA). See also Nolan and Nolan (2007, Table 3.17, p. 49, Table 3.18, p. 49 and Table 3.22, p 50).

once private patients are in receipt of a free GP Visit Card they will visit GPs with the same frequency as those currently in receipt of such a card.

Behan *et al.* (2013) offer no evidence that those private patients without a GP Visit Card share similar characteristics to those with a GP Visit Card with respect to the demand for GP services, merely stating that "[W]ere private patients to attend at the same rate as GPVC [GP Visit Card] patients, then one might anticipate an increase …"[13] Furthermore, while Behan *et al.* acknowledge some limitations in their estimates, different characteristics between private and public patients are not listed. In contrast, Williams (2015, para. 51), who approvingly cites Behan *et al.*, states when considering the impact of the extension of free GP care for the under 6s that it will result in "far too much of GPs' scarce time and resources … [being devoted] to a large cohort of newly imported 'patients' in rude health …"

The administrative records of Behan *et al.* do not permit an examination of the characteristics of patients by the status of their GP cover. However, *Growing Up in Ireland* (GUI), the Irish Longitudinal Study on Aging (TILDA) and special modules of the Quarterly National Household Survey (QNHS) do permit such an exploration.[14] These surveys are based on patient self-reporting (or recall) over a year. Public patients are broken down into those with private health insurance (PHI) and those with no cover (No Cover). Furthermore patients holding a Medical Card or GP Visit Card are usually combined into one category.

The findings from these surveys can be summarised as follows:

- Persons on a Medical/GP Visit Card have a lower health status, lower levels of education and lower levels of income. In other words, they have a higher demand for GP services than those with PHI or No Cover. Factors such as health status explain a considerable proportion of the variance in GP visiting rates.
- Taking into account these determinants of GP visits (i.e. patient 'need,' socio-economic characteristics and financial incentives)[15] results in a reduction in the difference between the GP visit rates of public and private patients. For example, for the over 50s, the difference in annual GP visits for a private patient with no private health insurance as compared to a public patient (Medical/GP Visit Card) falls from 4.1 to 1.5.[16]

Hence it is inappropriate to argue that if all those on No Cover or PHI (i.e. private patients) were to receive a Medical/GP Visit Card that they would replicate the same GP visiting rates as those with a Medical/GP Visit Card. Indeed, the latter is

[13] A similar statement appears in Behan *et al.* (2014).

[14] For further information concerning GUI see http://www.esri.ie/growing-up-in-ireland/, for TILDA, Nolan *et al.* (2014) and https://tilda.tcd.ie/, for QNHS, CSO (2011a).

[15] This threefold categorisation follows Nolan and Nolan (2007).

[16] Hudson and Nolan (2015, Table 4, pp. 33-34). For a comparable exercise for those under six see Denny (2015) and Nolan and Layte (2017, Table 2.2, pp. 29-31).

very much an upper bound of the likely impact of rolling out free GP care across the population.

III ALTERNATIVE ESTIMATES

3.1 Introduction

Estimates of the impact of free GP care on the utilisation of GP services in Ireland have been made as part of exercises with respect to medical manpower planning and in quantifying the potential costs of universal healthcare. In both cases reliance is placed on retrospective patient self-reporting surveys.

3.2 Medical Workforce Planning

3.2.1 *Introduction*

McGovern (2015) estimates that extending free GP care to all in 2015 would have resulted in an increase in the number of GP visits by 3.4 million or 23 per cent (*ibid*, Table 6, pp. 21-23). McGovern relies on the "best available data"- GUI, TILDA, QNHS and Survey of Income and Living Conditions (SILC) (*ibid*, p. 20)[17] – and states that in

> *estimating the change in consultation rates should free GP care be introduced, adjustments were made to account for the association between deprivation and poor health outcomes, among other factors* (ibid, p. 20).

The paper presents a table detailing, for seven age groups, the annual number of GP visits for public and private patients for 2015, together with an estimate of the impact of free GP care for each age group (Columns 1 and 3, respectively, Table 3).

3.2.2 *Data Sources*[18]

McGovern (2015) relies on patient recall surveys, which in contrast to Behan *et al.*, use methodically valid sample selection procedures, reviewed by international experts (GUI, TILDA) and, in the case of QNHS and SILC, to standards set by

[17] The Centre for Health Policy and Management, Trinity College Dublin supplied the estimates (ibid, p. 20). On SILC see http://www.cso.ie/en/silc/aboutthesilc.

[18] This paper does not directly discuss recent estimates of baseline GP care in Ireland included in Wren *et al.* (2017), O'Dowd *et al.* (2017) and the DoH (2018), which are derived from the 2015, 2016 and 2017 Ipsos MRBI Healthy Ireland Surveys (the Surveys), for a number of reasons. First, in assessing the impact of free GP care the appropriate baseline is prior to 2015, otherwise the baseline includes the policy impact. Second, the patient recall methodology used in the Surveys to estimate annual GP visits – 13 × the number of visits over the past four weeks for those that visited the GP in the past year – contains a methodological inconsistency. If a patient is considered capable of recalling whether or not they visited a GP in the past year, then they should surely be considered capable of recalling the frequency of GP visits over that period.

Continued

Eurostat. As noted above, GP visit rates based on patient recall surveys may be biased downward. However, there are a number of reasons for concluding that respondents to GUI and TILDA and, to a lesser extent, QNHS are less subject to these recall problems.

First, all three surveys are conducted on a face-to-face basis as compared to a telephone or postal survey. This should provide ample opportunity not only for clarification of any questions but also facilitate and encourage the respondent to access any documents that might provide the relevant information. Cleary and Jette (1984), which compared GP visit rates between a face-to-face survey and administrative records find, on average, quite a low level of underreporting by self-reported GP visits.

Second, participants in GUI and TILDA are involved in the survey on an ongoing basis and hence likely to become familiar with the survey and the issues raised, although this applies much less, if at all, to QNHS where the health model is only included every few years.

Third, in the case of GUI and TILDA there is ongoing contact between participants and the survey, strengthening bonds between GUI/TILDA and participants who, as a result, are more likely to take the exercise seriously, thus noting down some information that might be expected to be collected by GUI/TILDA.

3.2.3 *Methodology*

In Columns 2 and 4 of Table 3 we present Alternative estimates. For Column 2 we rely on published sources such as Williams *et al.* (2009) and CSO (2011a), but also on tabulations prepared by GUI and TILDA (Supplementary Tables).

The estimates in Columns 4 use Propensity Score Matching (PSM) methods. Nolan and Layte (2017, p. 18) describe PSM methods as follows:

> *These methods are a non-parametric estimation technique that analyse the impact of a treatment (e.g. loss of a full Medical Card) on an outcome of interest (e.g. GP visiting). Treatment and control observations are matched*

18 *Continued*

(I am grateful to the Health and Wellbeing Programme, Department of Health for information on the Surveys methodology in an email exchange in April 2016). Third, although the Surveys gather data based on face-to-face interviews, they are not a panel dataset and do not share the advantages of ongoing contact that characterises GUI and TILDA. Fourth, while the Surveys annual GP visit rates are more similar but less than Behan *et al.* as compared to GUI, TILDA and QNHS, in those instances where comparisons can be made based on published information (Supplementary Table A.11) the import of this finding is not at all clear. Does it mean, for example, that some of the upward bias in Behan *et al.*'s results suggested in this paper also applies to the Surveys? What is important is not so much whether source A agrees with source B, but rather the veracity of the underlying methodology. On these grounds it appears that GUI, TILDA and, to a lesser extent, QNHS, are preferred. However, they do not cover certain age groups necessitating reliance on data sources such as the Surveys.

on observable characteristics (e.g. health, household income, etc.), so that an estimate of the treatment effect can be made. As the method is non-parametric, it does not impose any functional form assumptions on the data.

These Alternative estimates, drawing on Nolan *et al.* (2016), Nolan and Layte (2017) and Ma and Nolan (2017), rely on more recent studies than appear available to McGovern (2015). A similar comment applies to the estimates of Wren *et al.* (2015) discussed in Section 3.3.

3.2.4 *A Comparison Between McGovern/Alternative Estimates*

While there is considerable agreement between the McGovern and Alternative estimates, there are nevertheless some striking differences. Apart from those aged 0-5, McGovern (2015) typically predicts that the provision of free GP care will result in a larger percentage increase than the Alternative estimates, although the absolute difference is the same for those aged 45-64. In four of the seven age groups McGovern (2015) predicts an 80 per cent or more increase; in five or more age groups, a 60 per cent or more increase. In contrast, the Alternative results suggest a range of 25 to 43 per cent.[19]

McGovern (2015) suggests that the number of GP visits increases comparing those aged 45-64 (1.3) with those aged 65-69 (2.1), and 70+ (2.1). However, the Alternative estimates suggest that the GP visit rate remains constant at 1.3 (comparing 45-64 with 65-69) or declines slightly to 1.1/1.2 (comparing 45-64 with 70+). Furthermore, for those 70+ McGovern (2015) predicts that if private patients were given free GP care their GP visit rate would increase from 4.1 to 6.2 (i.e. 4.1 + 2.1 = 6.2), which is *above* the GP visit rate of 5.6 for public patients of this age group. This does not seem a plausible result in view of the generally better health of private as compared to public patients 70+.[20]

3.3 Potential Costs of Universal Health Insurance

Wren *et al.* (2015, pp. 32-3), as part of a larger study into the impact of universal health insurance in Ireland, estimate that extending free GP care to all in 2013 would have resulted in an increase in the annual number of GP visits by 2.5 million or 18.2 per cent. Wren *et al.* (2015) rely on retrospective self-reporting surveys: GUI (0-13 years), Living in Ireland Surveys (LIS), a forerunner of SILC (18-49 years)[21] and TILDA (50 years and above) as well as QNHS. The use of six GP practice administrative records was not adopted due to, inter alia, sample size and selection issues (*ibid*, p. 32 footnote 25).

[19] This conclusion is strengthened by results reported in the next section which suggest that the increase in the number of GP visits of 0.37 for 13-year-olds; 1.1 for those over 18 years of age.

[20] For details see Supplementary Table A.9.

[21] LIS ran from 1994 to 2001.

In estimating the increase in GP visits Wren *et al.* (2015, p. 32) take into account "age, gender, socio-economic factors, rurality and health status" and rely on techniques such as PSM.

Wren *et al.* (2015, p. 32 footnote 26) estimate the annual number of additional visits occasioned by private patients receiving free GP care as: 0.8 for three year olds; 0.37 for 13 year olds; 1.1 for those over 18 years of age; and, 1.2 for those over 50 years of age. These are then added to the mean visiting rates for private patients in the 2010 QNHS.

Table 3: Estimates of GP Visits Rates, Public and Private Cover, Impact of Free GP Care, by Age Group, Ireland, 2009-2013

Eligibility	*Age*	*No of GP visits per year*		*Increase in GP visits if private patients received free GP care: no & %*	
		McGovern (1)	*Alternative (2)*	*McGovern (3)*	*Alternative (4)*
Medical/GP Visit Card	0-5	3.2	3.5	0.1 or	0.6 or
Private Patient		3.0	2.3	3.3%	25%
Medical/GP Visit Card	6-11	2.6	1.4	0.7 or	–
Private Patient		0.8	0.8	87.5%	
Medical/GP Visit Card	12-17	2.8	–	1.2 or	–
Private Patient		1.5	–	80%	
Medical/GP Visit Card	18-44	4.8	4.6	1.3 or	–
Private Patient		2.1	2.0	61.9%	
Medical/GP Visit Card	45-64	5.8	5.7	1.3 or	1.3 or
Private Patient		2.1	2.4	61.9%	43%
Medical/GP Visit Card	65-69	5.2	5.6	2.1 or	1.3 or
Private Patient		2.6	3.2	80.8%	43%
Medical/GP Visit Card	70+	5.6	5.4	2.1 or	1.1/1.2 or
Private Patient		4.1	3.0	51.2%	38%

Source: See notes.

Notes: Columns 1 and 3 are drawn from McGovern (2015, Table 6, pp. 21-23); Column 4 from Nolan and Layte (2017, p. 67), Nolan *et al.* (2016, Table 4, p. 12) and Ma and Nolan (2017, p. 1422); and, Column 2 from Supplementary Tables A.1 to A.4, Williams *et al.* (2009, Figure 5.2, p.67), HSE (2008), CSO (2011a, 2012). Supplementary Table A.10 provides much greater detail on the derivation of Columns 2 and 4, including the time period to which the estimates refer, generally 2009-2013.

Wren *et al.* (2015) results, apart from the 0.8 increase for three-years-olds, are typically below those of McGovern (2015) and, to a much lesser extent, the Alternative estimates. For example, Wren *et al.* (2015) forecast an increase in the number of GP visits of 0.37 for 13-year-olds, and 1.2 for those over 50; the corresponding estimates for McGovern (2015) are 1.2 and 1.3/2.1, respectively; for the Alternative estimates 1.1/1.3 for those over 50.

3.4 Which Estimate?

McGovern (2015, Table 6, pp. 21-23) predicts, for private patients, an increase of GP visits of 55 per cent – from 6.11 million to 9.47 million – due to the extension of free GP care for all. In contrast, Wren *et al.* (2015, p. 33, footnote 27) predict an increase of 48 per cent, from 5.13 million to 7.62 million. Thus McGovern predicts an extra 3.4 million GP visits, while Wren *et al.*'s estimate is considerably lower at 2.5 million.

Using the Alternative estimates as the benchmark, Wren *et al's.* (2015) estimates on the impact of free GP care are to be preferred to those of McGovern (2015). The estimates of Wren *et al.* (2015) match more closely the Alternative estimates in Column 4 of Table 3 than do those of McGovern (2015). However, this conclusion is tentative in view of the absence of Alternative estimates for those aged six to 44 in Column 4 of Table 3.

There is, however, one caveat that suggests that these estimates are upper bounds.[22] This reflects the fact that what is typically being quantified in Table 3 and by Wren *et al.* (2015) is the effect of receiving a Medical Card or a GP Visit Card, rather than just a GP Visit Card. As Ma and Nolan (2017) point out gaining a Medical Card entitles the holder to prescription medicine coverage which is not included when a private patient is granted a free GP Visit Card. Ma and Nolan (*ibid*, p. 1425) cite evidence which finds that "prescription drug coverage affects GP visiting rates."

IV CONCLUSION

In the absence of national registration and associated administrative data, we must resort to other data sources for assessing the impact of the extension of free GP care to all private patients.[23] Available estimates of the impact of free GP care vary from an additional 4.4 million GP visits to 2.5 million. While the former estimate, for reasons set out in Section 2, is biased upwards, probably substantially, it nevertheless has gained wide currency.

[22] This caveat does not apply to Behan et al. (2013; 2014).

[23] Of course, once free GP care is rolled out to all age groups then it should be possible for the HSE through the GP contract to put in place such a system.

These estimates are likely to result in different implications for the delivery of GP services. The lower the likely increase in GP visits the more likely it is that the increased demand could be accommodated within existing capacity and structures. However, even here it has been claimed that the extension of free GP care to under 6s will place considerable pressure on a system that was already close to capacity.[24]

On the other hand, accommodating a substantial increase in the demand for GP services is less likely to be satisfied within current constraints. To meet the extra demand the supply of GPs could be increased and/or the current structures for delivering GP services could be reformed. In a recent report on primary care, for example, O'Dowd *et al.* (2017, p. 3) states that Ireland has the "lowest practice based staff ratio of the countries we studied." This suggests perhaps an opportunity for increasing such staff to complement the GP's role and in some cases to undertake some routine GP tasks so as to free the GP to tasks where they enjoy a comparative advantage. However, this is part of a wider debate over the role of GPs and primary care in the Irish health system. Providing free GP care to all simply brings these issues into sharper relief.

Supplementary Tables

The set of Supplementary Tables referred to in the text are available from the author via email: pkgorecki@gmail.com

REFERENCES

Behan, W., D. Molony, C. Beame and W. Cullen (2013). "Are Irish Adult General Practice Consultation Rates as Low as Official Records Suggest? A Cross Sectional Study of Six General Practices", *Irish Medical Journal*, Vol. 106, No. 10, Nov/Dec, pp. 297-299.

Behan, W., D. Molony, C. Beame and W. Cullen (2014). "Does Eliminating Fees at Point of Access Affect Irish General Practice Attendance Rates in the Under 6 Years Old Population? A Cross Sectional A Study of Six General Practices", *Irish Medical Journal*, Vol. 107, No. 4, April, pp. 121-122.

Bhandari, A. and T. Wagner (2006). "Self-Reported Utilization of Health Care Services: Improving Measurement and Accuracy", *Medical Care Research and Review*, Vol. 63, No. 2, April, pp. 217-235.

Callan, T., B. Colgan, C. Keane and J. R. Walsh (2015). *Modeling Eligibility for Medical Cards and GP Visit Cards: Methods and Baseline Results*, Working Paper 515. Dublin: Economic and Social Research Council.

Central Statistical Office (CSO) (2011a). *Health Status and Health Service Utilisation. Quarter 3 2010*, Cork: CSO. http://www.cso.ie/en/media/csoie/releasespublications/documents/labourmarket/2010/healthstatusq32010.pdf.

[24] The Irish College of General Practitioners (ICGP, 2015, p. 1), which is the body responsible for education, training and standards in general practice, stated in response to the publication of the GP contract for the provision of free GP care for the under 6s, that "general practitioners are stretched to capacity at present and any increase [in demand], however small, will have an impact on access to general practitioners for everyone."

Central Statistical Office (CSO) (2011b). *Consumer Price Index. Detailed Sub-Indices*, December 2011. Cork: CSO.

Central Statistical Office (CSO) (2012). *Profile 2. Older and Younger,* Dublin: Stationery Office.

Central Statistical Office (CSO) (2015). *Consumer Price Index* May 2015, CSO Statistical Release. 11 June. Cork: CSO.

Cleary, P. and A. Jette (1984). "The Validity of Self-Reported Physician Utilization Measures", *Medical Care,* Vol. 22, No. 9, Sept, pp. 796-803.

Competition Authority (2010). *General Medical Practitioners*. *Competition in Professional Services*, Dublin: Competition Authority.

Dalzeil, K., P. Clarke, A. Scott and J. Li (2015). "Accuracy of Patient Recall for Self-Reported Doctor Visits: Is Shorter Recall Better?", Abstract of Paper presented at International Health Economics Association, Milan, July.

Denny, K. (2015). "On the Possible Effects of Free GP Care for Under 6s", *The Irish Economy*, 17 June. http://www.irisheconomy.ie/index.php/2015/06/17/on-the-possible-effect-of-free-gp-care-for-under-6s/

Department of Health (DOH) (2018). *Health Service Capacity Review 2018*, Dublin: the Department.

Gaskell, G., D. Wright and C. O'Muircheartaigh (2000). "Telescoping of Landmark Events. Implications for Survey Research", *Public Opinion Quarterly*. Vol. 64, Issue 1, March, pp. 77-89.

Gorecki, P. (2016). *The Impact of Free GP Care on the Utilisation of GP Services in Ireland: An Evaluation of Different Approaches*, Working Paper 534. Dublin: The Economic and Social Research Institute.

Health Service Executive, Primary Care Reimbursement (HSE) (2008). *Statistical Analysis of Claims and Payments 2007*, Dublin: HSE**.**

Health Service Executive, Primary Care Reimbursement (HSE) (2014). *Statistical Analysis of Claims and Payments 2013*, Dublin: HSE**.**

Hippisley-Cox, J. and Y. Vinogradova (2009). *Trends in Consultation Rates in General Practice 1995/1996 to 2008/2009: Analysis of the QResearch Database*, Final Report to the NHS Information Centre and Department of Health. London: NHS.

Hudson, E. and A. Nolan (2015). "Public Healthcare Eligibility and the Utilisation of GP Services by Older People in Ireland", *Journal of the Economics of Aging*, Vol. 6, Dec. pp. 24-43.

Ipsos MRBI (2015). *Healthy Ireland Survey 2015. Summary of Findings*, Dublin: Stationery Office.

Ipsos MRBI (2016). *Healthy Ireland Survey 2016. Summary of Findings*, Dublin: Stationery Office.

Ipsos MRBI (2017). *Healthy Ireland Survey 2017. Summary of Findings*, Dublin: Stationery Office.

Irish College of General Practitioners (ICGP) (2015). "ICGP Response to the Publication of the GP Contract for the Provision of Free GP Care to Children Under Six", *Press Release*. 28 April 2015. Dublin: ICGP.

Irish Medical Organisation (IMO) (2014). "Research Suggests Extending Free GP Visit Cards to Children Could Lead to 750,000 Extra GP Visits a Year", *Press Release*. 14 April 2014. Dublin: IMO.

Ma, Y. and A. Nolan (2017). "Public Healthcare Entitlements and Healthcare Utilisation Among the Older Population in Ireland", *Health Economics*, Vol. 25, Issue 11, November, pp. 1412-1428.

McGovern, E. (2015). *Future Demand for General Practitioners 2015-2025*, Medical Workforce Planning. National Training and Planning, HR Directorate. Dublin: HSE.

National Consumer Agency (NCA) (2010). *Doctors and Dentists Survey*, Dublin: NCA.

Nolan, A. and B. Nolan (2007). "The Utilisation of GP Services" in Brian Nolan (ed.), *The Provision and Use of Health Services, Health Inequalities and Health and Social Gain*, Dublin: The Economic and Social Research Institute, pp. 35-62.

Nolan, A. and R. Layte (2017). *Understanding Use of General Practitioner Services Among Children in Ireland*. *Evidence from the Infant Cohort of the Growing Up in Ireland Survey*, Dublin: The Economic and Social Research Institute.

Nolan, A., C. O'Regan, C. Dooley, D. Wallace, A. Hever, H. Cronin, E. Hudson and R. A. Kenny (Eds.) (2014). *The Over 50s in a Changing Ireland. Economic Circumstances, Health and Well-Being,* Dublin: TILDA.

Nolan, A., Y. Ma and P. Moore (2016). *Changes in Public Healthcare Entitlement and Healthcare Utilisation among the Older Population in Ireland*, Dublin: TILDA.

O'Dowd, T., J-H. Ivers and D. Hand (2017). *A Future Together. Building Better GP and Primary Care*, Dublin: HSE.

Ritter, P., A. Stewart, H. Kaymaz, D. Sobel, D. Block and K. Lorig (2016). "Self-reports of Health Care Utilization Compared to Provider Records", *Journal of Clinical Epidemiology*. Vol. 49, No. 9, Sept. pp. 989-995.

Roberts, R., E. Bergstralh, L. Schmidt and S. Jacobsen (1996). "Comparison of Self-Reported and Medical Record Health Care Utilization Measures", *Journal of Clinical Epidemiology*, Vol. 54, No. 2, Feb. pp. 136-141.

Williams, J., S. Greene, E. Doyle, E. Harris, R. Layte, S. McCoy, C. McCrory, A. Murray, E. Nixon, T. O'Dowd, M. O'Moore, A. Quail, E. Smyth, L. Swords and M. Thornton (2009). *The Lives of 9-Year-Olds,* Dublin: Stationery Office.

Williams, Y. (2015). *Supplementary Affidavit of Yvonne Williams*. High Court Case between Yvonne Williams and Health Service Executive, Record No. 2015/4064P, Affidavit dated 27 May 2015.

Wren, M-A., C. Keegan, B. Walsh, A. Bergin, J. Eighan, A. Brick, S. Connolly, D. Watson and J. Banks (2017). *Predictions of Demand for Healthcare in Ireland, 2015-2030. First Report from the Hippocrates Model*, Research Series No 67. Dublin: The Economic and Social Research Institute.

Wren, M-A., S. Connolly, N. Cunningham (2015). *An Examination of the Potential Costs of Universal Health Insurance in Ireland,* Research Series No 45, Dublin: The Economic and Social Research Institute.