Irish College of General Practitioners

Planning for the Future Irish General Practitioner Workforce

– informed by a national survey of GP trainees and recent GP graduates

AUTHORS

Dr Claire Collins, Dr Gerard Mansfield, Dr Darach O'Ciardha and Mr Kieran Ryan

Acknowledgements

We would like to thank all of the respondents who took the time to complete the survey and inform this topic. We are grateful to Tom Fahey and Mark O'Kelly for their contribution to the questionnaire design.

Summary

Irish general practice has been weathering a time of unprecedented uncertainty. With expanding co-morbidities and an ageing population, the demand for GP services in Ireland is expected to continue to increase[1].

The workforce in general practice is a major concern for government as they seek to move additional services into general practice and the community[2,3].

The aim of the surveys, which inform this report, was to provide data regarding the professional plans of GP trainees and recent GP graduates and on the current status of recent graduates.

Two separate online surveys were undertaken in March 2014: one of current GP trainees and one of GP graduates from 2010 to 2013. The response rates were 52.1% and 54.8% respectively.

Key findings from the trainee survey:

A near 60% majority of current trainee respondents are still undecided as to whether they will emigrate stating undecided or possibly while 12.3% of current trainees are definitely planning to emigrate. This leaves only one quarter planning to definitely stay in Ireland.

When we look at trainees' reasons for considering emigration, the viability of general practice (35%) and financial prospects (30%) feature predominately.

Only half of trainees see themselves working full-time five years post training, dropping to 41.5% 10 years post training.

There is a clear expectation among trainees to advance to secure working conditions within 10 years of graduation. Among 4th years, while 49.4% expect to be in the less secure positions one year post training, only 4.5% expect to still be in a part-time assistant, regular sessional or locum position 10 years later.

Key findings from the GP graduate survey:

Nine out of ten recent graduates are still working in general practice.

A total of 16.9% are currently working overseas. Of this group, only 17.1% are planning to return to Ireland to work.

Of those still in Ireland, in the region of 10% definitely plan to emigrate in the near future and another 17.2% will possibly do so. Among the reasons for considering emigration, the viability of general practice (42.6%) is predominant.

The analysis of career expectations of recent graduates shows the first five years to be pivotal as 62.2% seek to be a GP principal or salaried partner. Our survey shows no more than 1.7% see themselves as single handed practitioners.

With regard to productivity, one third of recent graduates are currently working less than eight half day sessions per week and almost half see themselves doing so within the next five years.

The subject of medical workforce planning is currently topical with a number of Department of Health and HSE committees considering the issue from different angles. We consider that the data reported here by GP trainees and recent graduates may inform these discussions. We surmise that there is an immediate GP workforce planning concern with a worryingly low percentage of current trainees and recent graduates committed to working in Ireland, due to concerns over the viability of general practice here, and a large proportion of both trainees and recent graduates having a desire to work less than full-time in the future.

Introduction

General practitioners (GPs) have an integral role in assessing the needs of their local populations and providing services to meet these needs[4]. They are responsible for assessing the majority of acutely ill patients with up to two-thirds of primary care contacts being for acute problems[5]. Most of the care of chronic disease in Ireland takes place in primary care[6]. Chronic disease accounts for a significant proportion of the disease burden and an increasing workload for GPs, accounting for up to 60% of visits by patients 45 years and older[7]. The global prevalence of all leading chronic diseases is continuously increasing. In 2008, 63% of deaths were attributable to chronic diseases with an expected increase of 15% globally between 2010 and 2020[8]. Samb et al[9] predict that an increasing number of individuals will have multiple chronic conditions in their lifetime. With expanding co-morbidities and an ageing population, the demand for GP services in Ireland is expected to continue to increase[1]. Current estimates are that there are in the region of 14 million visits to GPs in Ireland annually[10] and figures show that the number of GPs per capita in Ireland[11,12] is lower than the European average.

Furthermore, it is clear that the health services in Ireland are undergoing a transformation with universal health care and chronic disease management in the community being integral to these changes[2,3]. Within this context, Irish general practice has been weathering a time of unprecedented uncertainty. For current trainees and recent graduates, this manifests in three key areas: career progression, professional role and the future of Irish general practice. Irish Government policy in recent years has the expectation of Irish general practice performing at the same level as much higher ranked healthcare systems, such as those in France and Canada. When we consider the workforce in both these countries, the ratio of general practitioners (GPs) is over 100 per 100,000 head of population and comprises some 50% of their total registered physicians[11]. Ireland's allocation of GPs per head of population was in line with the OECD average at 52 per 100,000 population in 2009[11]. However the distribution of physicians as a percentage of total physicians showed Ireland (12%) to have a lower ratio of GPs compared with the OECD (20%) average[11]. Recent research in 2013[12] suggests the number of GPs per head of population in Ireland may be a little higher than the 2009 OECD figures at 64.4 per 100,000 population and an absolute number of 2,954.

Within this, we must consider productivity and this is heavily influenced by the number of GPs:

(i) Working part-time

Irish general practice has 22% of its workforce working part-time, according to the Irish Medical Council Workforce Intelligence Report[13]. To give context to this we note the proportions for several other specialities are higher, for example clinical pharmacology (50%), genito-urinary medicine (43%) and public health medicine (30%).There is an age related increase in the percentage of all doctors working part-time. Under 35 years, 6.1% of males and 7.3% of females work part-time. This figure increases for females in the 35–44 age bracket with 4.4% of males and 23% of females working part-time and increases further in the 55–64 age bracket to 9.8% and 36% respectively. In 2012, 59% new specialist entrants to the general practice division of the specialist register were female. This corresponds to the total number of female medical graduates from Irish medical schools. Currently female doctors are twice as likely to work part-time as their male counterparts.

(ii) Succession planning

The 2013 ICGP membership data shows 258 GPs in the 65–69 year age group. With state contracts all ending at 70 years, it is reasonable to assume the majority of these GPs will retire at 70 years of age. This represents an approximate 12% of current members less than 70 years of age.

In 2010, the number of available training places in general practice increased from 129 to 157. Training duration is four years and so the first year of graduation since expansion occurs in 2014.

The general practice workforce is a major concern for government as they seek to move additional services into general practice and the community. The purpose of this report is to contribute to the knowledge base in this regard, updating and expanding some aspects of previous work, by presenting the findings from surveys of GP trainees and recent graduates.

Aims and Objectives

The aim of the surveys, which inform this report, was to provide data regarding the professional plans of GP trainees and recent GP graduates and on the current status of recent graduates.

Within this, the specific objectives were:

- To establish the career aspirations of both groups both in terms of clinical commitment and employment status;
- To document the emigration plans of both groups and to establish the current emigration status of recent graduates;
- To ascertain the relative importance of a set list of factors influencing the decision to emigrate or remain in Ireland.

Methodology

Two separate surveys were undertaken in March 2014:

- An online survey was emailed to all 649 current GP trainees with a reminder issued one week later.
- An online survey was emailed to all 445 GP graduates from 2010 to 2013 with a reminder issued one week later.

Overall, 338 GP trainees responded representing a 52.1% response rate while 244 recent graduates responded representing a 54.8% response rate. These response rates, which may be considered as marginally low are in fact typical of these groups and are as good or better than the norm[14–17]. Low response rates raise concerns about bias and certainly it may be the case with such a survey, that estimates of, for example, current emigration status may be underestimated in the case of current graduates as non-responders may be more likely to have already emigrated. However, the concern of bias is somewhat negated by the distribution across all trainee and graduate years and further so as the demographic distribution is representative.

Results

GP trainee survey

Basic demographics are shown in Table 1 across all years.

Table 1: Profile of respondents

	%	N
Year		
1st	19.8%	66
2nd	23.1%	77
3rd	28.4%	95
4th	28.7%	96
Age Group		
25–29	38.4%	128
30–34	45.0%	150
35–39	12.9%	43
40+	3.6%	12
Gender		
Male	35.7%	119
Female	64.3%	214
Relationship Status		
Single	31.2%	104
Married or with Partner	68.8%	229
Children		
Yes	27.8%	92
No	72.2%	239

Over one quarter of respondents do not plan to emigrate and almost another quarter are undecided with 12.3% definitely planning to do so (Table 2). Emigration intention is not significantly related to age group, sex or having children but is to relationship status ($p<0.01$) with 32.3% of those married/with partner compared to 18.4% of single respondents definitely not planning to emigrate. While there is also a significant relationship ($p<0.01$) with year of training, this is not a linear relationship. From 1st to 3rd year, a decreasing proportion have definite plans to emigrate with the proportion increasing in 4th year – this trend is similar for both relationship groups although it does not reach statistical significance among the single group. With regard to 4th years, 12.8% definitely plan to emigrate, 28.7% possibly plan to emigrate, 20.2% are undecided and 38.3% do not have any plans to emigrate.

For those who definitely plan to emigrate, Australia (40%) and Canada (37.5%) are the most popular locations (Figure 1). Those who definitely or possibly plan to emigrate were asked to indicate their main reason (one only) from a provided list for this decision – concern regarding the viability of general practice (35.3%) and financial prospects (30.1%) were the most often selected reasons (Figure 2). The planned timeframe abroad is undecided for one in five with 10% planning to emigrate permanently.

Table 2: Emigration plans

	%	N
Plan to Emigrate		
Yes definitely	12.3%	41
Yes, possibly	35.5%	118
Undecided	24.4%	81
No	27.7%	92
Timeframe abroad if definitely or possibly plan to emigrate		
<1 year	0.0%	0
1 year	6.3%	10
2 years	26.9%	43
3 years	10.6%	17
4 years	5.0%	8
5 years	2.5%	4
6 years+	3.1%	5
Permanently	10.0%	16
Unknown	41.3%	66

Figure 1: Planned location of those who definitely plan to emigrate post training (n=38)

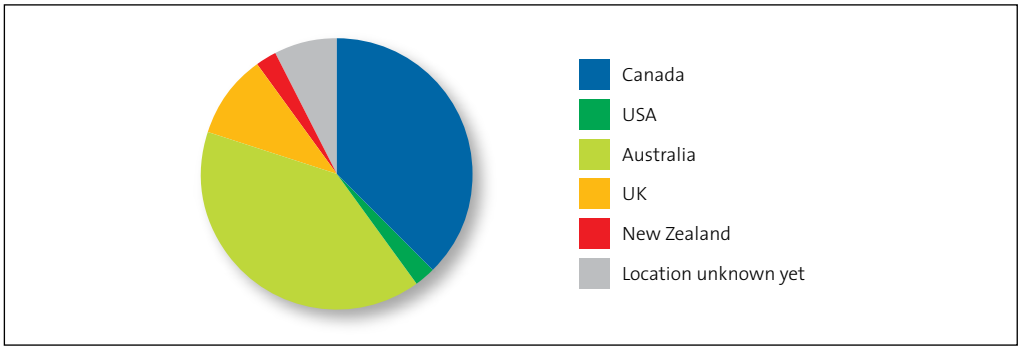
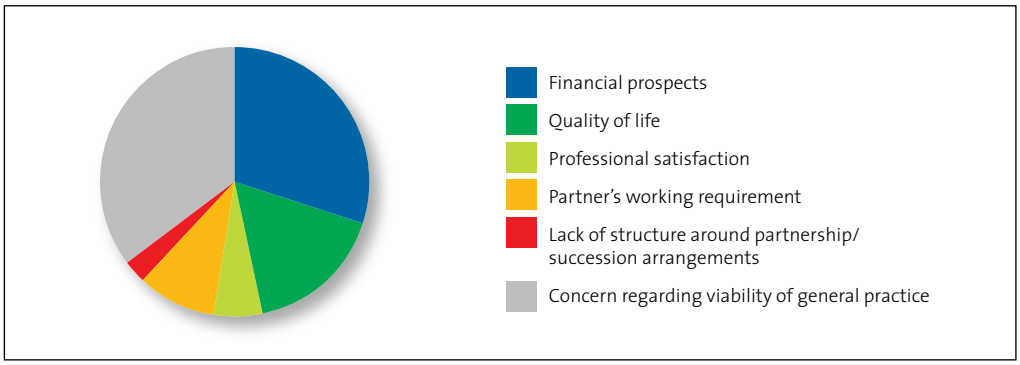


Figure 2: Main reason for emigrating if definitely or probably plan to emigrate post training (n=186)



For those not planning to emigrate, over half (56.1%) plan to stay in the same area where they are conducting their GP training while 9.9% plan to move to an urban area, 20.5% to another area within Ireland and 13.5% are as yet undecided. This is not related to any of the demographic data or to year of training.

The majority, 63.5%, of all respondents definitely plan to remain in general practice post training, 21.3% will possibly do so while 13.1% are undecided. Only 2.1% definitely do not plan to remain in general practice post training. The decision to remain in general practice is not related to year of training or any of the demographic variables. Of those who provided an alternative career among those who definitely plan to leave general practice or are undecided, the majority (n=13; 41.9%) intend to practice hospital medicine; the reasons selected for this choice were most often concern over the viability of general practice (n=20; 44.4%) and professional satisfaction (n=12; 26.7%).

All respondents were asked what position they saw themselves in one and 10 years after completion of training. Locum GP and full assistantships most often feature in ambitions for one year post training while being a GP principal or salaried partner are anticipated by 10 years post training (Table 3).

Table 3: Anticipated position one and 10 years post training

	1 YEAR POST TRAINING	10 YEARS POST TRAINING
GP principal in a partnership or group practice/ Equity partner	2.3%	48.7%
Salaried partner	6.1%	18.8%
Single-handed GP principal	1.0%	2.2%
Full time assistant	27.3%	3.5%
Part time assistant	9.6%	3.8%
Regular sessional GP	16.1%	2.5%
Locum GP	29.3%	1.3%
Combined clinical/academic general practice	4.8%	9.2%
Academic general practice	0.0%	0.3%
Combined clinical/general practice training role (PD/APD)	1.0%	6.4%
Not working in general practice in any capacity	2.6%	3.2%

Significant differences in expectations emerge with year of training; for example the proportion predicting a position of salaried partner one year post training decreases with current year of training – 15% of 1st years compared to 2.3% of 4th years predict this will be their position one year post training.

Focussing in on those in fourth year, we see that while 49.4% expect to be in the less secure positions one year post training, the majority expect to be in secure positions ten years post training with only 4.5% expecting to still be in a part-time assistant, regular sessional or locum position (Table 4).

Table 4: 4th year trainees anticipated position one and 10 years post training

	1 YEAR POST TRAINING	10 YEARS POST TRAINING
GP principal in a partnership or group practice/ Equity partner	3.4%	47.7%
Salaried partner	2.3%	12.5%
Single-handed GP principal	2.3%	3.4%
Combined clinical/academic general practice	9.2%	15.9%
Combined clinical/general practice training role (PD/APD)	1.1%	10.2%
Full time assistant	27.6%	1.1%
Part time assistant	11.5%	3.4%
Regular sessional GP	14.9%	0%
Locum GP	23.0%	1.1%
Not in general practice	4.6%	4.5%

Only 6.6% of respondents foresee that they will be abroad 10 years post training, however over one third (34.3%) do not know and 59.1% anticipate that they will be in Ireland at that time. No significant differences were observed by year of training. This is significantly related ($p<0.01$) to current intentions with those definitely or possibly planning to emigrate more likely to see themselves abroad in 10 years.

In terms of the number of sessions trainees see themselves working in five and 10 years post training, we see a slight shift in terms of 5–7 sessions and 8–10 sessions, showing a net reduction of 10% anticipating working 8–10 sessions in this time period across all years. For fourth years, this net reduction is 14%.

Table 5:
Number of clinical sessions trainees envisage working five and 10 years post training

	5 YEAR POST TRAINING	10 YEARS POST TRAINING
None	0.9%	0.9%
1 – 4	5.3%	4.7%
5 – 7	43.1%	52.8%
8 – 10	50.6%	41.5%

Gender shows a significant relationship with the number of clinical sessions at five and 10 years – with more males seeing themselves working 8–10 sessions (83.0% and 68.8% respectively for five and 10 years) compared to females (33.8% and 26.8% respectively); but this also shows a greater net reduction of those working 8–10 sessions among males compared to females over the five year period.

Recent Graduate Survey

Basic demographics are shown in Table 6.

Table 6: Profile of respondents

	%	N
Year		
2010	22.1%	54
2011	29.5%	72
2012	19.7%	48
2013	28.7%	70
Age Group		
25–29	2.5%	6
30–34	69.7%	170
35–39	24.6%	60
40+	3.3%	8
Gender		
Male	32.6%	78
Female	67.4%	161
Relationship Status		
Single	17.4%	42
Married or with partner	82.6%	200
Children		
Yes	50.4%	121
No	49.6%	119

Overall, 16.9% of recent graduates who responded are currently working abroad – this was not significantly related to any of the above demographics although trends were visible, for example 23.4% of males compared to 14.4% of females. In terms of year of graduation, 20.4% of those who graduated in 2010 are abroad reducing to 13% of those who graduated in 2013.

Of those still in Ireland, in the region of 10% definitely plan to emigrate in the near future and another 17.2% will possibly do so (Table 7). Planning to emigrate was significantly related ($p=0.012$) to gender with males more likely to report possibly emigrating (30.5% of males compared to 11.2% of females) and females more likely to be definitely not planning to emigrate (50% compared to 40.7% of males). Therefore, 26.5% of respondents are either currently working abroad or definitely plan to emigrate.

Of note is that in relation to year of graduation, no additional graduates from 2010 reported definitely planning to emigrate compared to 10% of graduates from 2013.

Of those already abroad, 55.3% are in Australia and 26.3% in Canada. For those who definitely plan to emigrate, Canada is the anticipated location for 55%.

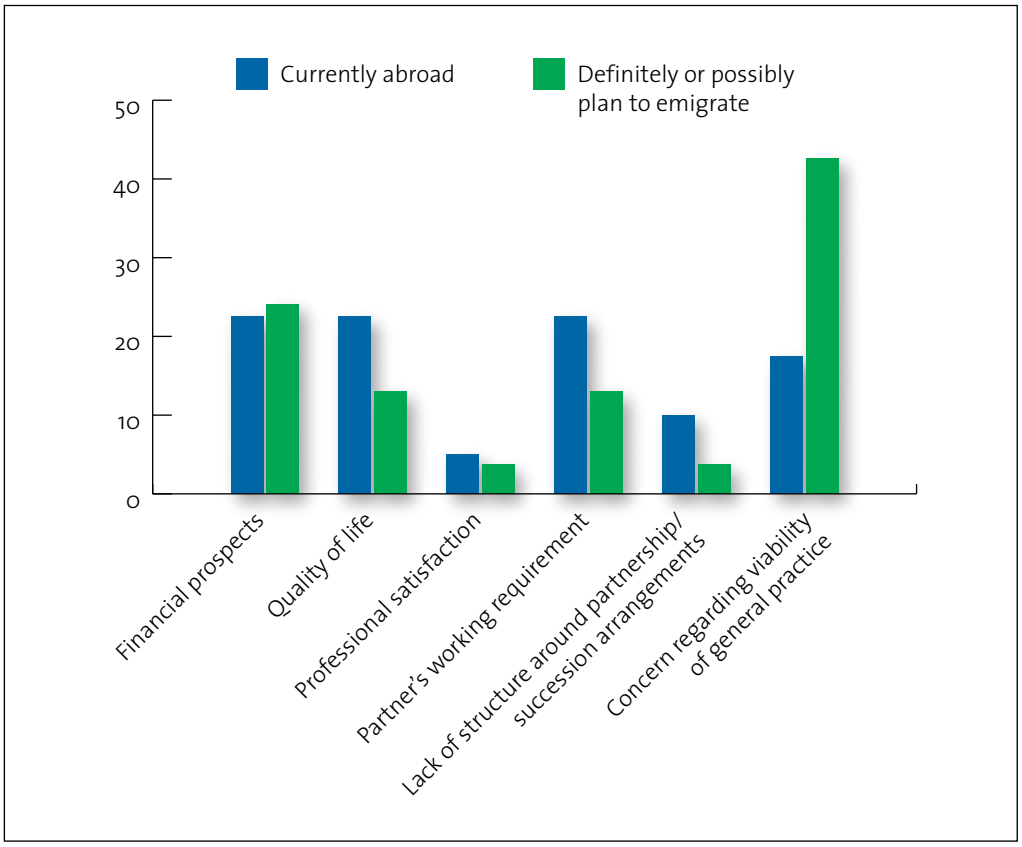
Table 7: Emigration status and plans

	%	N
Current Location		
Ireland	83.1%	201
Abroad	16.9%	41
Plan to Emigrate		
Yes definitely	9.6%	19
Yes, possibly	17.2%	34
Undecided	26.8%	53
No	46.5%	92

Those already abroad and those who definitely or possibly plan to emigrate were asked to indicate their main reason (one only) for this decision from a provided list – concern regarding the viability of general practice was most likely cited by those currently in Ireland who are considering emigration (42.6%); whereas this was not one of the top three reasons cited by those who have already emigrated (Figure 3).

Almost one in five of those abroad (17.1%) have current plans to return to Ireland in the near future. One in ten (12.1%) of all survey respondents saw themselves abroad in five years time, 35.8% did not know and over half (52.1%) saw themselves in Ireland.

Figure 3: Reason for emigration



The planned timeframe abroad for those definitely or possibly planning to emigrate is undecided for almost one-third (n=17; 32.1%) and is currently estimated at 2–3 years for just less than one half (n=25; 47.2%). Just over half (n=21; 51.2%) of those already abroad have been there <1 year– and includes graduates from all years although more so those from 2012 and 2013.

Of those currently in Ireland, who have no definite or possible plans to emigrate, the majority (79.5%) ticked family reasons or partner's working requirements as the main reason for staying in Ireland with an additional 15.8% selecting quality of life.

The majority (90.2%) of all respondents are currently working in general practice. Of the 19 respondents who are not, 50% plan to return to general practice in the near future. The main reason selected from a list provided for staying in general practice was job/professional satisfaction (60.4%), family reasons (18.8%), quality of life (17.4%) and financial prospects (3.4%).

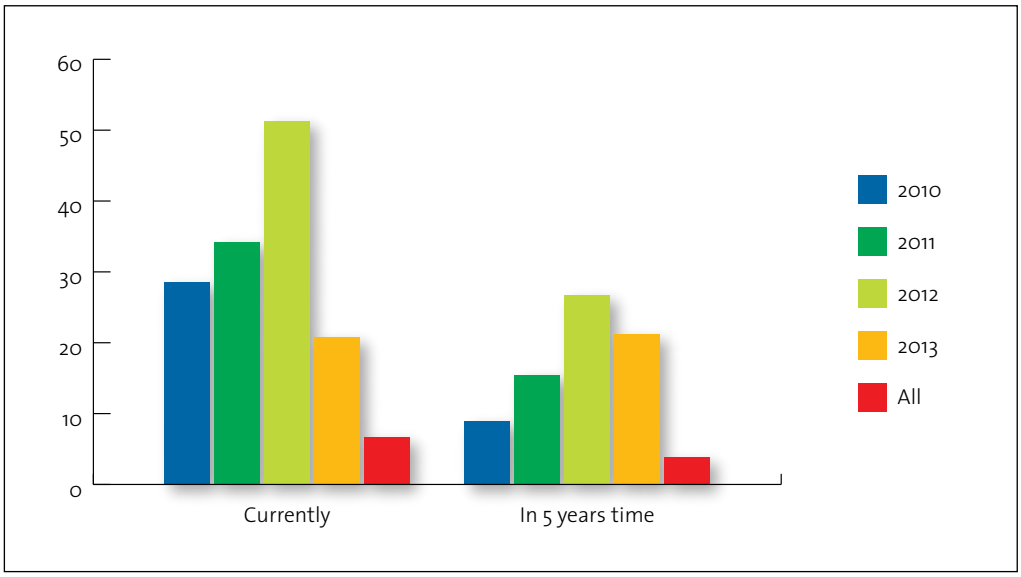
All respondents were asked their current position and what position they saw themselves in five years from now. Almost one quarter are currently full time GP assistants. The majority envisage they will be GP principals or salaried partners in five years times (Table 8). Current position is significantly related ($p<0.01$) to year of graduation, the proportion of current GP principals increasing from 6.2% to 24.5% within four years of graduation and salaried partner increasing from 3.1% to 14.3% and the rate of locum GPs reducing from 26.2% to 6.1%.

Table 8: Current position and anticipated position five years from now

	CURRENTLY	IN 5 YEARS
GP principal in a partnership or group practice/ Equity partner	14.2%	50.6%
Salaried partner	7.6%	11.6%
Single-handed GP principal	2.7%	1.7%
Full time assistant	24.0%	6.0%
Part time assistant	8.4%	7.3%
Regular sessional GP	16.9%	5.6%
Locum GP	15.6%	0.9%
Combined clinical/academic general practice	2.2%	9.9%
Academic general practice	0.9%	0.4%
Combined clinical/general practice training role (PD/APD)	0.9%	2.1%
Not working in general practice in any capacity	6.7%	3.9%

Taking the more insecure positions of part time assistant, regular sessional work and locum work together, a clear trend is visible by year of graduation with a higher proportion of recent graduates in these positions (50.8% of those graduated in 2013) compared to earlier graduates (28.5% of those graduated in 2010). Across all years, this is anticipated by the respondents to reduce further by about 50% in each year respectively (Figure 4).

Figure 4: Proportion of graduates in part-time assistant, regular sessional and locum work currently and aspired to in five years time



In terms of the number of clinical sessions, there is no significant relationship between the year of graduation and the proportion working 8–10 sessions with 64.2% of 2010 graduates compared to 65.2% of 2013 graduates working 8–10 sessions per week. In terms of a five-year plan, there is clearly a shift with more aiming for the 5–7 rather than 8–10 as time passes (Table 9) with a net reduction of over one fifth hoping to reduce from 8–10 to 5–7 clinical sessions. However, this varies from 7.6% of those who graduated in 2010 to 15.2% of those who graduated in 2013.

The number of clinical sessions currently worked was significantly related to gender (p=0.014) but not to age group or having children – 59% of females work 8–10 sessions and 27.6% work 5–7 sessions while 78.9% of males work 8–10 clinical sessions weekly. The number of clinical sessions the respondent envisages working in five years time was also significantly related to gender but not to the other factors with 56% of females seeing themselves working 5–7 sessions and 37.7% working 8–10 sessions. The figures for males were 76% and 16% respectively.

Table 9: Number of clinical sessions currently worked and envisaged in 5 years

	CURRENTLY	IN 5 YEARS
None	7.2%	2.5%
1 – 4	4.7%	4.2%
5 – 7	22.5%	43.1%
8 – 10	65.7%	50.2%

Commentary

While we recognise that this is a self-reported snap shot and not a comprehensive exploration of all significant factors influencing career choices and decisions, there are noteworthy findings aligned with the aim of the surveys and which inform the current evidence base.

There is an immediate workforce planning concern, a worryingly low percentage of current trainees and recent graduates are committed to working in Ireland. This is not due to a desire to change their professional role as over 90% of recent graduates are working in general practice.

With regard to the issue of emigration, 12.3% of current trainees are planning to definitely emigrate and worryingly a quarter of respondents are undecided with only one quarter planning to definitely stay in Ireland. This last group have a higher tendency to be married/have a partner and to have children. Among graduate respondents, 16.9% are currently working overseas. Of this group, only 17.1% are planning to return to Ireland to work.

A near 60% majority of trainee respondents are still undecided as to whether they will emigrate stating undecided or possibly. A previous study[14] found that 1% of GP trainees saw themselves abroad 10 years after graduation, our findings suggest this figure has increased.

While 83.1% of graduate respondents remain in Ireland, 44% of these are not convinced they will stay in Ireland; this mirrors the trainee majority. Among the graduate respondents still in Ireland, 79.5% gave family or their partner's work as there most important reason for staying.

When we look at reasons from both trainees and graduates as to why they may or plan to emigrate, there is a strong emphasis on the viability of general practice followed by financial concerns.

The analysis of career expectations of recent graduates shows the first five years to be pivotal as 62.2% seek to be a GP principal or salaried partner. By this point the percentage being satisfied with temporary or locum work has decreased and there is a strong desire for the secure positions of salaried partner or equity partner. The former is a relatively new and less prevalent career possibility in Ireland. How feasible respondents felt this to be is undetermined and we would see the combination of these two choices as being an indication of a desire for employment security, career autonomy and a voice in the design of their professional lives.

We can also see how respondents value modern group practice. Our survey shows no more than 1.7% see themselves as single handed practitioners. This has a significant impact on the current single handed practices in both rural and urban settings. It also raises questions as to whether there will be local centralisation of general practice services, where a 2–5 full time equivalent model is sustainable. How this may impact healthcare in remote communities, potentially having to travel further for GP access or indeed the expectation or need of patients for GPs to travel extended distances to deliver care, is important to patients and general practice health care professionals.

With regard to productivity, one third of recent graduates are currently working less than eight half day sessions per week and almost half see themselves doing so in the future. Our results with regard to trainees' aspirations in respect of full-time working in ten years time are consistent across males and females when compared

with a similar study of trainees in 2012[14] and show that at most two-thirds of male trainees and one third of female trainees see themselves working full time 10 years after graduation.

This reflects a significant reduction from the traditional role; the cohort of GPs facing retirement in the next ten years have always worked a minimum of eight such sessions and more often nine or more sessions. With such a large percentage planning to work less than eight half day sessions per week, we must consider the reasons behind this and it warrants further investigation. With few consultations having less than three presenting complaints and a growing time pressure and thus stress in GPs' working lives, do these respondents fear burnout? The current full time working week of Irish general practitioners is no fewer than eight half day clinical sessions. There is the additional administrative time and management time required for everything involved in being part of a small or medium sized business. How much time respondents' perceive is required to fulfil the traditional role of GP employer of practice administrative, management, nursing and medical staff is not quantified in our survey but may indeed have influenced their response to the clinical session commitment. Elsewhere, it has been estimated to take 7.4 hours per working day to provide all recommended preventive care to a panel of 2,500 patients, plus 10.6 hours to manage all chronic conditions adequately[18,19].

Our trainees and graduates are looking at the stable, organised healthcare systems in countries such as Canada. There, when they decided to bring increasing responsibility for healthcare provision into general practice, a coordinated strategy was implemented. OECD data in 2011 shows Canada with 50% of their total physicians being in general practice[20]. The Canadian Government ensured to promote the career at all levels of medical training and allocated the required resources to make it a professionally attractive choice.

Conclusion

Irish general practitioners have traditionally utilised their autonomy, as small and medium sized enterprises, to optimise care for their patients and their community. Successive resource cuts within the General Medical Services (GMS) have significantly reduced the nursing and administrative infrastructure employed by GPs. Training practices expecting to expand necessary infrastructure have seen reduced private income as Ireland entered financial recession. The desire of the Health Service Executive (HSE) for GPs to move into purpose built buildings and thus incur significant additional cost, without offering any financial support, has seen few practices being able to move. Thus co-located primary care teams are a rare entity.

Trainees in the specialty of general practice spend the final two years of training in general practice. This learning environment opens trainees' eyes to the reality of Irish general practice. This reality, and that which they project is coming in their near future, has caused a growing number to seek more stable and rewarding practice environments overseas. The data above illustrates how the first five years post-graduation from specialist training in general practice are where our young talented doctors seek to fulfil their professional aspirations. During this time, a significant majority establish personal relationships and have families, once these events occur they are loathe to emigrate. Traditionally this move from establishing to being an established practitioner happened in Ireland and people enjoyed long

dynamic careers in their role as general practitioners in their local communities. Worryingly, our survey suggests a large percentage will now do this overseas and they see little to draw them back to Ireland.

The subject of medical workforce planning is currently topical with a number of Department of Health and HSE committees considering the issue from different angles[21-22]. The most notable is the ongoing work being under taken by Professor Brian MacCraith on behalf of the Department of Health, which includes a Strategic Review of Medical Training and Career Structure. Given that the final phase of that work, which is soon to commence, is to focus on general practice, the data reported above by GP trainees and recent graduates may inform their recommendations to the Minister.

References

1. Layte R, Barry M, Bennett K, Brick A, Morgenroth E, Normand C, O' Reilly J, Thomas J, Tilson L, Wiley M, Wren MA. *Projecting the impact of demographic change on the demand for and the delivery of health care in Ireland*. Research Series No. 13, 2009. Economic and Social Research Institute, Dublin.
2. Department of the Taoiseach. *Programme for Government 2011* [Internet]. 2011. Available from: *http://www.taoiseach.gov.ie/eng/Taoiseach_and_Government/Programme_for_Government/*
3. Department of Health. *Future Health. A Strategic Framework for Reform of the Health Service 2012–2015* [Internet]. 2012. Available from: *http://www.dohc.ie/publications/Future_Health.html*
4. Pearson N, O'Brien J, Thomas H, Ewings P, Gallier L, Bussey A. Collecting morbidity data in general practice: the Somerset morbidity project. *British Medical Journal* 1996;312:1517–1520.
5. Jones R, White P, Armstrong D, Ashworth M, Peters M. *Managing Acute Illness: An Inquiry into the Quality of General Practice in England*. UK: The King's Fund, 2010.
6. Department of Health & Children. *Health in Ireland: Key Trends 2009*. Dublin: Department of Health and Children, 2009.
7. Britt E, Miller GC, Charles J, Henderson J, Bayram C, Harrison C, Valenti L, Fahridin S, Pan Y, O'Halloran F. *General practice activity in Australia 1998–99 to 2007–08: 10 year data tables. General Practice Series Number 26*. Canberra, Australian Institute of Health and Welfare and the University of Sydney, 2009.
8. WHO (World Health Organisation). *Global status report on non-communicable diseases 2010*. April 2011.
9. Samb B, Desai N, Nishtar S, Mendis S, Bekedam H, Wright A, et al. Prevention and management of chronic disease: a litmus test for health-systems strengthening in low-income and middle-income countries. *Lancet*. 2010 Nov 20;376(9754):1785–97.
10. Teljeur C, Thomas S, O'Kelly F, O'Dowd T. General practitioner workforce planning: assessment of four policy directions. *BMC Health Serv Res* 2010 Jun; 10(148):1–10. doi: 10.1186/1472-6963-10-148.
11. OECD (2009) *Achieving Better Value for Money in Health Care*. OECD Health Policy Studies, OECD Publishing. doi: 10.1787/9789264074231-en

12. Teljeur C, Tyrrell E, Kelly A, O'Dowd T, Thomas S. Getting a handle on the general practice workforce in Ireland. *Irish Journal of Medical Science.* 2014 Jun;183(2):207–13. doi: 10.1007/s11845-013-0991-1. Epub 2013 Jul 31.

13. Medical Council (2013) *Medical Workforce Intelligence Report. A Report on the Annual Registration Retention Survey 2012.* Dublin: Medical Council. Available Online: *http://www.medicalcouncil.ie/News-and-Publications/Publications/Annual-Reports-Statistics-/Medical-workforce-intelligence-report-.pdf*

14. O'Kelly M, O'Kelly F, O'Ciardha D. *A National Survey of GP Trainees*. Irish College of General Practitioners, 2012.

15. Britt H, Miller GC, Charles J, et al. General practice activity in Australia 2008–09. BEACH: Bettering the Evaluation and Care of Health. General Practice Series No. 25. Cat No. GEP 25. Canberra: AIHW, 2009.

16. Cummings SM, Savitz LA, Konrad TR. Reported response rates to mailed physician questionnaires. Health Serv Res 2001;35:1347–55.

17. Asch DA, Jedrziewski MK, Christakis NA. Response rates to mail surveys published in medical journals. J Clin Epidemiol 1997;50:1129–36.

18. Ostbye T, Yarnall KS, Krause KM, Pollak KI, Gradison M, Michener JL. Is there time for management of patients with chronic diseases in primary care? *Ann Fam Med* 2005;3(3):209–214.

19. Yarnall KS, Pollak KI, Ostbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention? *Am J Public Health* 2003;93(4):635–641.

20. *Scott's Medical Database*. Ottawa, ON: Canadian Institute for Health Information (CIHI), 2011.

21. Health Services Executive (HSE). *Medical Workforce Planning: Population Based Ratios of Specialists in Ireland and Internationally. An Information Source to Support Medical Workforce Planning*. Dublin: Medical Education & Training Unit, HR Directorate, Health Service Executive; July 2014.

22. Health Services Executive (HSE). *Medical Workforce Planning: Second Interim Project Report*. Dublin: Medical Education & Training Unit, HR Directorate, Health Service Executive; July 2014.