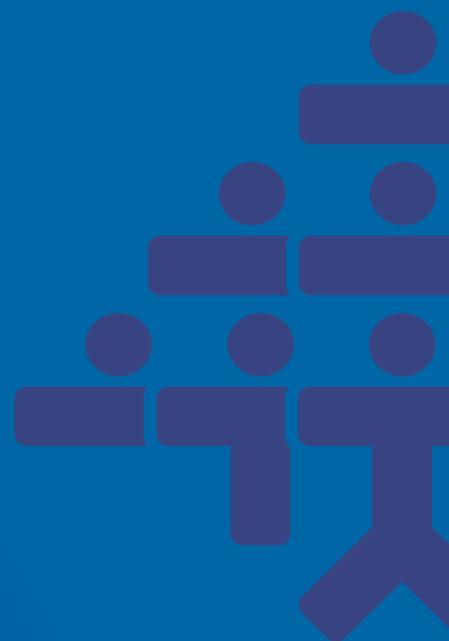


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**A Picture of General Practice  
Research in Ireland 2012/2013  
Through Research and Audit Activity**



## **Acknowledgements**

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## **Notes**

References and further information are available on request from the author(s). The lists from other sources are complete and hence there may be an overlap between lists. The related abstracts may also have been submitted for inclusion.

## **Disclaimer**

The contents of this document are intended as a snapshot guide only and although every effort has been made to ensure that the contents are correct, the ICGP and its agents cannot be held responsible for inaccuracies or incompleteness. The contents are based on submissions following a national call for abstracts for research taking place in 2012/2013.

## TABLE OF CONTENTS

### Abstracts Submitted

<i>Cardiovascular</i>	1
<i>Dermatology</i>	6
<i>Diabetes</i>	7
<i>Health Promotion</i>	17
<i>Lifestyle Factors</i>	20
<i>Mental Health</i>	22
<i>Obstetrics &amp; Gynaecology/Women's Health</i>	28
<i>Paediatrics</i>	35
<i>Palliative Care</i>	40
<i>Practice Management</i>	41
<i>Respiratory</i>	48
<i>Sexual Health</i>	51
<i>Vaccination</i>	52
<i>Other</i>	56

### Listings of Research From Other Sources

<i>ICGP Research Ethics Approved Projects 2012/2013</i>	77
<i>Projects Approved for Funding Under the ICGP Research and Education Foundation Grant Scheme 2012/2013</i>	81
<i>Projects Approved to Access the ICGP Membership Database 2012/2013</i>	82

## CARDIOVASCULAR

### Primary care innovation in INR monitoring

*Dr Siobhán Crowley, Dr David Molony, Mr Carl Beame*

Warfarin is a very commonly used and effective anticoagulant, which has the potential for devastating consequences if it is not monitored appropriately. For economic and practical reasons, there has been a shift of various procedures and investigations from the hospital setting to primary care, INR monitoring being one of these.

The British Haematological Society and ICGP would recommend that INR should be within 0.5 of target at least 60% of the time, i.e. a time in therapeutic range (TTR) of 60% or more.

The Rosendaal method is cited as being the most robust method of calculating TTR and is recommended by the British Committee for Standards in Haematology.

Computer decision support software has been shown to greatly increase TTR. A new system of INR monitoring at Mallow Primary Healthcare Centre, in operation since July 2011, uses Decision Support Software created by Complete GP and the Rosendaal Interpolation Method. It has cut down the number of steps involved in checking a patient's INR and prescribing their warfarin dose from 13 (old system) to four (new system).

Fewer steps mean less chance of error. A printed label further prevents error. There are savings for the practice including secretary time and resources. Patient satisfaction is high (74% of 172 patients surveyed gave a satisfaction rating of 10/10). TTR has improved from 60.5% (2009) to 65.7% (November 2011).

## To investigate the diagnosis and management of hypertension in a general practice and evaluating the role of ambulatory blood pressure monitoring (ABPM) as a diagnostic tool

*Aisling Byrne, Dr Paschal Larney, Dr Nick Breen*

### Methods

Patients who had received an ABPM in Farney Practice, Carrickmacross were identified from the HealthOne database. This information was gathered retrospectively. In these patients, three clinic blood pressure readings prior to ABPM were noted and the subsequent average ABPM reading was compared to these initial readings. The patients' management plan following ABPM was noted.

### Results

The number of patients in the practice was approx 2,300. Of these, 44 patients had received ABPM in the past 2 years. The results of the analysis of these patients showed:

NUMBER OF PATIENTS		
Taking AH prior to using ABPM ( <i>Group A</i> )	32	(73%)
Not taking AH prior to using ABPM ( <i>Group B</i> )	12	(27%)
Group A		
Patients whose medication was changed post ABPM	13	(41%)
Patients whose medication remained the same post ABPM	19	(59%)
Group B		
Patients treated as result of high ABPM readings	3	(23%)
Patients not requiring treatment as a result of ABPM	9	(77%)

\*AH= Anti-hypertensive medication

### Conclusions and Recommendations

There is no record of the number of patients in the practice with diagnosed hypertension. A total of 70% of the patients who had used the monitor had already been started on antihypertensive medication. The results show that a high proportion of patients did not require further treatment or additive treatment following an ABPM. This data shows the value of using ABPM in a general practice for both diagnosing and monitoring of hypertension.

The patients who were identified as having white coat hypertension following the monitor should be flagged in their notes so that subsequent clinic readings take this into account. Patients with a diagnosis of essential hypertension should be coded for in the Health One system to ensure easy retrieval of information for subsequent audit.

## Monitoring for hepatotoxicity in our patients on statin medication

*Dr Aoife Storan, Dr Paul Ryan*

### Objectives

To establish what current clinical guidelines are available in relation to screening for hepatotoxicity in those patients taking statin medications. Are these guidelines being met in my practice?

### Setting

Large rural practice in North Tipperary with 5 doctors (2 principles, 1 assistant, 1 GP registrar and 1 part-time GP) and 3 practice nurses.

### Results

A search of the Health One database identified 947 patients who were prescribed statin medication. Once exclusion criteria were applied 81 patients were suitable for analysis. Having researched clinical guidelines, the NICE clinical guideline from May 2008 was agreed as the standard we should be aiming to meet in our practice. This guideline states that liver function testing (LFTs) should be performed at the outset when commencing a patient on statin medication, after 3 months and again after 12 months of treatment. If LFTs are normal at 12 months, there is no need for continued LFT monitoring. If there is any dose change LFTs should be re-checked.

Overall, 10 patients met the standard as set by the NICE Clinical Guideline from May 2008.

### Outcome

A total of 58% of patients are having unnecessary LFTs performed despite LFTs being normal at 12 months of treatment. It is suffice to perform ALT (96 cents) or AST (95 cents) alone rather than performing full LFT panel (€4.36). A total of 13.5% of patients had their statin stopped unnecessarily as LFTs were not raised > 3 times the upper limit of normal.

### Conclusion

By adhering to the NICE guideline there are significant savings to be made.

## The identification and management of atrial fibrillation in general practice

*Jennifer Fagan, Dr Nick Breen*

### Background

The risk of stroke with atrial fibrillation is significant, and can be reduced with detection and appropriate anticoagulation. Research suggests discordance between guidelines and practice.

### Aims

To evaluate the use of ECG and routine pulse examination in the detection of atrial fibrillation. To evaluate the use of antithrombotic therapy in patients with atrial fibrillation, based on the European Society of Cardiology (ESC) guidelines.

### Methods

Three hundred patients, over the age of 65, and who had a consultation during the previous year, were randomly selected. Data was collected from patient records. Variables analysed included pulse examination in the last year; ECG recording; atrial fibrillation diagnosis; anti-thrombotic therapy; CHADS<sub>2</sub> score; CHA<sub>2</sub>DS<sub>2</sub>VASc score and HASBLED score.

### Results

Of the patients included in the audit (n=300), 9% had a diagnosis of atrial fibrillation. Of those in the 65–79 age group (n=236) and the 80+ age group (n=47), the diagnosis of atrial fibrillation was 6% and 15%, respectively. Nineteen percent (n=56) had their pulse rate recorded in the last year and 13% (n=40) had their pulse regularity recorded. Fifty-six percent (n=132) had an ECG performed. All patients with atrial fibrillation (n=27) had a CHA<sub>2</sub>DS<sub>2</sub>VASc score  $\geq 2$ , and thus satisfied the ESC criteria for oral anticoagulation. Of those with atrial fibrillation, 33% (n=9) were on warfarin, 33% (n=9) were on dabigatran, 30% (n=8) were on an anti-platelet agent only, 15% (n=4) were on both an anti-coagulant and anti-platelet agent, and 4% (n=1) were on no anti-thrombotic therapy. Sixty-six percent (n=12) of those on warfarin or dabigatran had a high risk of bleeding, based on their HASBLED score.

### Conclusions

Pulse rate and regularity should be checked and documented with blood pressure recording. Documentation and a regular review of CHA<sub>2</sub>DS<sub>2</sub>VASc and HASBLED scores in general practice may encourage better implementation of the ESC guidelines on anticoagulation.

### References

White S, Feely J, O'Neill D. Community based study of atrial fibrillation and stroke prevention. *Ir Med J* 2004; 97: 10–2.

Guidelines for the management of atrial fibrillation. *European Heart Journal* 2010; 31: 2369–2429

## General practitioners' perception of heart failure services in Ireland highlights ready access to diagnostics and opinion as major deficiency

*Marsden P, Gallagher J, Ledwidge M, Weakliam D, Collins C, O'Riordan M, White B, McDonald K*

### **Purpose**

To obtain the opinions and perceptions of general practitioners of heart failure and heart failure service provision in Ireland.

### **Methods**

Postal survey of a representative sample of 600 general practitioners (GPs) addressing five topics: characteristics of the practice, new diagnosis of heart failure, chronic management of heart failure, management of acute decompensated heart failure (ADHF) and use of heart failure guidelines.

### **Results**

The response rate was 39% (n=233). The demographics of the respondents in terms of years in practice, number of GPs in the practice, practice location, practice nurse and distance from nearest hospital are consistent with national and other survey data available. GPs saw a median of 450 patients per month (IQR=320–600) with an estimation that a median of five patients were directly related to heart failure which represents approximately 1% of the GPs workload. Regarding new diagnosis of heart failure, there was limited access to echocardiography (0.7%), natriuretic peptide (NP) testing (45.9%) and 24 hour ECG (53.2%) while there was adequate access to chest x-ray (99%) general laboratory studies (94%) and electrocardiography (86%). Waiting times for an outpatient appointment were a major barrier to early diagnosis as 60% of GPs refer over half their suspected heart failure patients for specialist review. GPs were in favour of the availability of direct access echocardiography (92%), community based NP testing (82%) and specialist clinics (78%) in community. The level of information that the GP receives from the hospital is generally poor and not received in a timely fashion. Inability to access diagnostics (88%) and specialist advice (82%) were major concerns in managing acute decompensation, often resulting in ER referral. Access to same day specialist advice and availability of a community based heart failure nurse would reduce referrals to the emergency department (ED). A substantial proportion (80%) felt that they required further education on ADHF management, a result backed up by the fact that only 40% of GPs reported using heart failure guidelines in their practice.

### **Conclusions**

Delivery of heart failure care in the community by GPs in Ireland is constrained by limited access to diagnostics and timely access to opinion and help during acute decompensation. The GPs were of the opinion that the availability of community based services such as echocardiography, NP testing and specialist clinics would facilitate earlier diagnosis and reduce referrals to the ED.

## DERMATOLOGY

### Improving communication between primary and secondary care: an audit of GP referrals to a dermatology department

*Dr Karen Reidy, Dr Trevor Markham*

#### **Background**

Dermatology presentations are frequently seen in general practice, accounting for 15% of consultations<sup>1</sup>. General practitioners in Ireland have a gate keeper function, therefore effective communication between primary and secondary care is essential. Studies in other areas have shown that distribution of guidelines for referral with standard referral forms improve the referral process.<sup>2</sup>

#### **Aims**

To assess eight main areas of information in dermatology referral letters from primary care. Secondly, to introduce a referral letter template and to reassess if its distribution improved the information given in the referrals.

#### **Methods**

Consultants in the dermatology department selected eight areas that they felt should be included in the referral of skin rashes: site, duration, pattern, body surface area, severity, previous treatment and past medical history. A referral letter template was created. Referral letters from GPs to the dermatology department were collected over a 16 week period (time period A). These GPs were then asked to use the referral letter template and letters from these GPs were then collected for a further 14 weeks (time period B). Letters were assessed looking for information in the eight selected areas.

#### **Results**

Two hundred and eighty seven letters and 141 letters were collected in time period A and B respectively. In time period A, a minority of the letters (13%) gave information in six to eight of the desired areas. In time period B, this had increased to 31%. Similar numbers covered three to five of the areas pre and post template, 75% and 64% respectively. Letters with minimal information (less than two areas covered) were reduced from 12% to 5% in time period B. Areas that were neglected in letters in time period A were severity (included in 16%) and extent of the rash (included in 6%) and these areas vastly improved with 35% and 27% of letters including them in time period B.

#### **Conclusions**

We found that although there was a poor uptake of the referral template (used in 13% of referrals), all the letters examined in time period B improved in the quantity and quality of information given.

#### **References**

1. T Basarab, S E Munn, R Russel Jones. Diagnostic accuracy and appropriateness of general practitioner referrals to a dermatology out patient clinic. *British Journal of Dermatology* 1996; 135: 70–73.
2. Akbari A, Mayhew A, Al-Alawi MA, Grimshaw J, Winkens R, Glidewell E, Pritchard C, Thomas R, Fraser C. Are there effective methods to improve the process of referring patients to specialised care? *Cochrane Database Syst Rev* 2008 Oct 8; (4)

## DIABETES

### Adherence to the NICE Guidelines in the screening for nephropathy, retinopathy and neuropathy in those with type 2 diabetes

*Brendan McAuliffe, Dr Majella Perry, Dr Nick Breen*

#### Aim

To review adherence in general practice to NICE Guideline 66 (criteria 42,46,48) in the screening for the microvascular complications (nephropathy, retinopathy and neuropathy) of type 2 diabetes.

#### Methods

A random sample of 50 patients with type 2 diabetes was generated from the 132 patients with type 2 diabetes in the practice. Each patient's clinical notes were then examined to ascertain the practice's adherence to criteria 42, 46 and 48 of Nice Clinical Guideline 66.

#### Results

The results will be detailed individually by criterion. The sample size was 50 (n=50).

YES	NO	TOTAL (N)	PERCENTAGE
<i>Criterion 42: 'Annual screening for diabetic nephropathy': Albumin: creatinine ratio (ACR) estimation on first-pass urine or spot sample if necessary.</i>			
8	42	50	16%
<i>Serum creatinine measurement</i>			
37	13	50	74%
<i>GFR estimate (eGFR)</i>			
11	39	50	22%
<i>Criterion 46: 'Eye Screening should be repeated at least annually.'</i>			
19	31	50	38%
<i>Criterion 48: 'Neuropathic symptoms should be recorded annually.'</i>			
16	34	50	32%

#### Discussion

Reasons for the results above included the lack of an up to date diabetic register and incomplete use of the Diabetic Protocol within the practice software. An additional reason included the manner in which test results from tertiary healthcare providers were recorded resulting in them being time consuming to access within patients electronic files.

#### Conclusions

Recommendations include the formation and maintenance of a complete diabetic register, universal use of the diabetic protocol within the practice software, recording of test results carried out in tertiary care within the diabetic protocol and routine diabetic reviews in primary care every 6–12 months for all Type 2 DM patients.

## Control of type 2 diabetes in an Irish general practice

*Ciara Corr, Dr Geraldine Farrell, Dr Nick Breen*

### **Background**

Management of type 2 diabetes by the GP is becoming increasingly more important due to the rising prevalence of the disease in the Irish population.

### **Aim**

To ascertain glycaemic control of type 2 diabetics in a GP setting by reviewing the levels and frequency of HbA<sub>1c</sub> recordings and comparing them with best practice guidelines.

### **Method**

A sample of 56 type 2 diabetics was randomly selected from the 289 coded type 2 diabetics in a practice. Data was then collected and analysed from the computerised patient records. The principle categories examined were: HbA<sub>1c</sub> levels, dates of these recordings and basic demographic information.

### **Results**

Of the patients included 68% were male, 32% were female and the mean age was 65.8 years. Almost half (47%) of these patients had HbA<sub>1c</sub> levels of less than 7%, 32% had HbA<sub>1c</sub> levels between 7% and 8%, and 21% had HbA<sub>1c</sub> levels of greater than 8%. Regarding frequency of HbA<sub>1c</sub> recordings, 49% of all patients sampled met the American Diabetes Association's guideline of biannual HbA<sub>1c</sub> levels, 41% of patients had their levels tested only once in previous year with 10% having had no HbA<sub>1c</sub> test in the previous year.

### **Conclusion**

Glycaemic control in the practice proved to be sub-optimal with 47% of the sample meeting the ADA target of less than 7%. However recent trials such as the ACCORD study<sup>1</sup> have suggested that too strict glycaemic control may have a harmful effect particularly on cardiovascular outcome. Therefore it is imperative to individualise glycaemic goals according to the patient's age, duration of diabetes and cardiovascular risk factors. Only 49% met the ADA target of biannual HbA<sub>1c</sub> levels. Through increased education of patients, opportunistic testing of HbA<sub>1c</sub> and a recall system, the monitoring of HbA<sub>1c</sub> could be increased in the future and thus improve GP management of type 2 diabetes.

### **References**

1. The Action to Control Cardiovascular Risk in Diabetes Study Group. N Engl J Med 2008; 358:2545–2559

## Diabetes and pre-diabetes prevalence rates in the Survey of Lifestyles, Attitude & Nutrition (SLAN) 2007

*C Buckley, P Kearney, S McHugh, J Harrington, I J Perry, C P Bradley*

To date, estimates of the prevalence of diabetes in Ireland have been based on models of UK data. Since 2009, the International Expert Committee has recommended that the diagnosis of diabetes and pre-diabetes can be made on the basis of HbA<sub>1c</sub> levels. The purpose of this study is to estimate the prevalence of diabetes and pre-diabetes in Ireland based on HbA<sub>1c</sub>.

Estimates were based on a nationally representative sample of participants in the Survey of Lifestyles, Attitude & Nutrition (SLAN) who provided a blood sample at the physical examination. Diabetes was diagnosed based on a HbA<sub>1c</sub> level  $\geq 6.5\%$  or self-report of occurrence of diabetes or reporting of diabetes medications. Pre-diabetes was diagnosed based on HbA<sub>1c</sub> level  $\geq 5.7\%$  and  $< 6.5\%$  and no self-report of diabetes or taking diabetes medications.

Analysis was performed on 1,140 participants  $> 45$  years. The overall prevalence of diabetes was 7.7% (95% CI 6.2–9.4) and of pre-diabetes was 18.7% (95% CI 16.5–21). Prevalence of both diabetes and pre-diabetes was higher among men than women. A logistic regression model was used to investigate risk factors for undiagnosed diabetes.

### *Prevalence of diabetes by age and gender*

	MEN	WOMEN	
Age group	N (%)	N (%)	p-value
45–64	33 (10.6)	18 (4)	0.0004
$\geq 65$	23 (12.2)	13 (6.9)	0.08

The prevalence of diabetes and pre-diabetes in this study is high. Despite efforts to increase awareness and screening for diabetes, some individuals with diabetes remain undiagnosed. Increased efforts are required to improve the detection of diabetes and pre-diabetes and thus, identify this high-risk population.

## Evaluation of a community-based diabetic retinopathy screening initiative

*S McHugh, C Buckley, K Murphy, S Doherty, G O’Keeffe, J Alade, E Keane, M Horgan, M James, C Coughlan, J Traynor, C P Bradley, I J Perry, J Moran, D Quinlan<sup>2</sup>*

### Introduction

At present, there is no population-based diabetic retinopathy screening available in Ireland. In anticipation of a national screening programme, a community-based initiative was established in the south of Ireland which utilised existing optometry/ophthalmology services. The aim of this study was to evaluate this community-based model of diabetic retinopathy screening.

### Methods

A convenience sample of 32 practices was recruited from Diabetes in General Practice (DiGP), a local general practice-led diabetes initiative. An invitation letter to attend a free eye examination was sent by each practice to all eligible adult patients registered with diabetes (N=3,598). Fifteen community optometry clinics and two community ophthalmologists provided retinopathy screening. The screening programme was evaluated in terms of the structure, processes and outcomes and the results were benchmarked against the standards outlined in the National Diabetic Retinopathy Framework to assure the quality of the service.

### Results

Overall 30 practices took part in the screening initiative (94%). At the time of evaluation 49% of patients (n=1763) were screened following one invitation letter and no reminder. Twenty-two percent of those screened during the initiative had not received previous screening (n=336). One quarter of patients had some level of retinopathy detected during screening (26%, n=395). Twenty-two percent had background retinopathy (R1), 3% had pre-proliferative retinopathy (R2) and 1% had proliferative retinopathy (R3).

### Conclusions

This initiative has demonstrated that it is possible to address some of the current screening deficit using existing resources in the community. In the absence of a national retinopathy screening programme, the initiative will continue in 2012.

## HbA1c monitoring and diabetic control in a non-computerised general practice

*Emma Clarke, Dr James Devereux, Dr Nick Breen*

### **Aim**

To assess the compliance with HbA1c monitoring guidelines in the practice and the diabetic control of patients attending the practice.

### **Methods**

An estimated 1,400 charts were manually reviewed. Patients identified in the audit (n=141) included those with diabetes mellitus or impaired glucose tolerance as shown by an abnormal HbA1c or OGTT. Data collected on these patients included the most recent HbA1c result, frequency of attendance for HbA1c monitoring, and recent adjustments of medication..

### **Results**

A total of 141 patients were identified. Seventy-eight percent (n=110) had attended for HbA1c testing in the previous six months. Of these patients, 81.8% (n=90) attended regularly, with at least two results recorded for the previous year.

For 66.6% (n=94) of all identified patients the most recent HbA1c was 6.5% or lower, meeting ICGP guidelines.

Of those patients with a HbA1c higher than 6.5%, 23.9% (n=11) had no HbA1c measurement in the previous six months. A further nine patients had opportunistic testing in the previous six months but were not attending regularly (total of 43.5%, n=20).

Of the remaining 26 patients with a high HbA1c who attended regularly, nine patients are having their HbA1c rechecked and medication reviewed on an ongoing basis and one is documented as having severe hypoglycaemic episodes when on higher doses of metformin. Four have type 1 diabetes and are attending a diabetic clinic for review of medication. For the remaining twelve patients there was no record of recent changes to their medication, despite elevated HbA1c results.

### **Conclusions**

Over 80% of patients with diabetes in this practice attend regularly, although only 66.6% have a HbA1c 6.5% or lower.

### **Recommendations**

To contact non-attenders and patients with a HbA1c over 6.5% regarding HbA1c monitoring and medication review; to clearly mark the files of diabetic patients; to create a register of diabetic patients; and to computerise records to facilitate future management.

## Diabetes Structured Care – closing the audit cycle

Liz Dunbar, Dr Jerry O'Flynn

### Introduction

The practice has been part of Midlands Health Board Diabetes Structured Care Programme (MHBDS CP), established in 1997/8 (1). The practice has a highly developed structured care plan for diabetics, based on current 'A Practical Guide To Integrated Type 2 Diabetes Care' produced in 2008 (2). This work compared figures from the audit in 2003 and English national averages (3) to the current performance of diabetic management within the practice. Additional indicators included ACE inhibitor or A2 receptor antagonist prescribed for proteinuria/microalbuminuria and weekly exercise.

### Methods

This was a retrospective audit of 100 patients, randomly selected, from the practice register of 477 type 2 diabetes. Data collection included: process of care measures including diabetic and microalbuminuria control, documentation of variables such as HbA<sub>1c</sub>, BP and BMI as well as screening; outcome of care measures including HbA<sub>1c</sub> targets, smoking status, lipid targets and BMI.

Results: Documentation of HbA<sub>1c</sub>, BP and fasting cholesterol were at 93%, 94% and 95% respectively. BMI was recorded in 73% of cases and patient targets in 19%. It was found that 57% of patients had HbA<sub>1c</sub> < 6.5%, 9% were current smokers and 83% < 5mmol/L total cholesterol and 10% had a BMI < 25. 24 patients have recorded microalbuminuria, all of whom were prescribed an ACE inhibitor.

### Conclusion

The practice are achieving best practice targets in most areas of diabetes management, with excellent levels of variable recording, high numbers reaching therapeutic targets for glycaemic, BP and lipid control and low complication rates, comparing favourably with both the 2003 audit and England national averages. Areas that performed less optimally included ophthalmology review, recording of targets and dietician/chiropractic review in the patients electronic notes. Recording of these outcomes would facilitate ease of audit in the future and give a more complete picture of diabetic care within the practice.

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2. QOF online results database website for 2009/2010. [www.qof.ic.nhs.uk](http://www.qof.ic.nhs.uk). [Online]
3. Harkins, V. *A Practical Guide To Integrated Type 2 Diabetes Care*. Dublin : HSE, 2008.

## **Roles, attitudes and concerns of practice nurses in the management of patients with type 2 diabetes in primary care in the HSE Midland Area**

*Mairead Mannion, Paul Marsden, Mairead Walsh*

### **Introduction**

The HSE Service Plan 2012 has provided a commitment for the roll out of a chronic disease management programme for diabetes during 2012. These developments for the management of diabetes in primary care are likely to have a substantial effect on the role of the practice nurse. This study investigates the current roles, attitudes and concerns of practice nurses in the management of patients with type 2 diabetes.

### **Methods**

Part 1 of this study was a postal survey to all known practice nurses (n=123) in the HSE Midland Area addressing practice demographics, practice nurse experience, current management of type 2 diabetes and education issues.

### **Results**

The response rate was 49% (n=60). Respondents were primarily from mixed or rural practices with a median of 4,500 patients registered per practice.

Management of type 2 diabetes is a large component of the respondents work load with 93% reporting involvement in diabetes care for a median of five hours per week. This care involved explaining diabetes and supporting patient self care (90%), blood testing (98%), blood pressure monitoring and dietary advice (88%). Poor patient motivation was seen as a major barrier to achieving good glycaemic control in addition to poor medication compliance and poor understanding of the condition. Practice nurses believed that they could favourably influence the length of, and the quality of life of their patients with diabetes.

Practice nurses recognised their educational requirements in diabetes management with 55% having completed an accredited Diabetes Nursing Module. 89% of respondents reported that they required further ongoing education and 85% felt it was possible to improve diabetes education of patients in their practice.

### **Conclusion**

The survey element of this study has highlighted the role of the practice nurse in the management of type 2 diabetes. Concerns were noted regarding the management of type 2 diabetes care in particular the further education needs of practice nurses. These and other themes will be further explored in the focus group component of this study.

## Care of type 2 diabetes in unresourced general practice: current practice in the Irish Mid-West

*O'Connor R, Mannix M, Cullen W, O'Sullivan G, Saunders J, Healy M, Griffin M, Mullen J*

### Introduction

The prevalence of diabetes is increasing worldwide. In Ireland, it is estimated that 5% of the population have diabetes and 90% of these have type 2 diabetes. Provision of structured diabetes care in general practice, has been shown to provide equivalent standards of care to that achieved by hospitals, with an enhanced diabetes quality of life.

The HSE announced its intention to move the care of type 2 diabetes to general practice by the end of 2012. This move has been proposed without the provision of additional resources or funding. This research set about looking at how well type 2 diabetes is managed in the community at present.

### Methods

12 GP teaching practices attached to the University of Limerick General Practice Training Scheme and the Graduate Entry Medical School in the Mid-West of Ireland took part in this study.

The practice files of these patients were accessed using an audit tool designed for the study. On average, 50 randomly selected patients from each practice were studied in detail.

### Results

842 patients were identified (62% male, 38% female).

The mean age was 66 years. 75% were GMS eligible.

Known practice prevalence of diabetes had a mean value of 2.5%. A practice protocol was present in 71% of cases.

Cholesterol, creatinine HbA<sub>1c</sub> and SBP measurements are well documented and well controlled. However the rates of and mean intervals for foot review, BMI measurement, retinopathy screening and influenza vaccination were unacceptable.

### Conclusions

Much GP management of type 2 diabetes in the community is unstructured. Known prevalence of diabetes is low. Certain clinical parameters are measured and are well controlled. Many important parameters are not measured.

Management of type 2 diabetes in unresourced general practices is suboptimal.

This needs to be addressed before handover of routine care of diabetes to general practice.

## Management of T2DM exclusively in primary care

*Dr Tommy Fitzgerald*

### Background

Management of chronic disease such as diabetes is changing, with more emphasis on management in a primary care setting.

### Aim

To assess the quality of care offered to patients with type 2 diabetes Mellitus (T2DM) being managed exclusively in primary care, and to compare targets of care with recent data on patients attending SVUH Diabetes Service, and East Coast Area Diabetes Shared Care Programme (ECAD).

### Methods

Anonymised data was collected from Socrates healthcare information system of patients who attended for annual review with the practice during an 18 month period prior to our audit. We performed a retrospective analysis of risk factor surveillance and management in the sampled population.

### Results/Comparisons

Ninety-five patients were included in the audit.

Gender distribution was 49.5% male and 50.5% female. The average age was 67 years.

72.6% had HbA<sub>1c</sub> readings less than or equal to 7%. A further 11.5% had a HbA<sub>1c</sub> level between 7 – 7.5% ie. 84.1% had good to reasonable glycaemic control. This compares to 63% in SVUH group and 77% in ECAD group.

74.6% were overweight or obese, compared to 83% in ECAD group, and 70.6% in SVUH group. Of those recorded 71.5% were non-smokers and 28.5% were smokers.

87.4% had urinalysis recorded with 6.0% having proteinuria.

46% had systolic bp <130, with 70% <140 - this compares with 46% <130 and 80% <140 in ECAD group; and 46% <130 and 76% <140 in SVUH group.

Of those recorded 41.8% had LDL at target – compared to 24% in ECAD group and 37% in SVUH group.

### Conclusions

Glycaemic control is very good in the primary care cohort and compares favourably to ECAD and SVUH groups. Blood pressure control was similar between the groups but cholesterol management was better controlled in the primary care cohort. Lifestyle factors continue to be an area we can improve on.

## Audit of HBA<sub>1</sub>C and blood pressure levels in Type 2 Diabetics in practice in Tralee, Co. Kerry

*O Morain C, McGrath M*

### Background

It is estimated about 200,000 people in Ireland have diabetes. Diabetes costs €2,468 for every patient in Ireland every year. Two thirds of the cost is spent on dealing with complications of the disease. HBA<sub>1</sub>C and BP levels are the cornerstone of diabetic management.

### Aim

To investigate HBA<sub>1</sub>C and BP levels in type 2 diabetics and to compare these to results released by IPCRN (Irish Primary Care Research Network)

### Methods

Inclusion Criteria were active type 2 diabetics. A search of the database revealed 56 patients. Guidelines used were ICGP and NICE guidelines. Standards used were type 2 diabetic results produced by IPCRN.

### Results

In cycle 1 – HBA<sub>1</sub>C was recorded in 96% of cases. This was above the IPCRN (62%). 46% were controlled diabetics (below IPCRN figure of 54%). 65% of controlled diabetics had a HBA<sub>1</sub>C level recorded within the past year. Blood pressure was recorded in 100% of patients (IPCRN 56%). 71% of these were <130/80 (IPCRN 38%). 68% were recorded within the correct timeframe.

Interventions were:

1. Diabetic management template with a link to NICE guidelines
2. A separate diabetic check up appointment card was given to all Type 2 diabetics

Cycle 2 – In controlled diabetics HBA<sub>1</sub>C done within 1 year improved from 65% to 88%. Percentage of control decreased from 46% to 45%. Recording of BP in correct timeframe increased from 68% to 77%. 70% of these were <130/80.

### Conclusions

Poor diabetic control results in the worsening of the clinical condition and is a drain on resources. This audit proved that the IPCRN can be used to compare our practice to others nationwide and that the use of a Diabetic Appointment Card can improve patient attendance. The recording of HBA<sub>1</sub>C and BP levels within the correct timeframe improved but as a consequence of closer monitoring control of both decreased.

## HEALTH PROMOTION

### Smoking and oral contraceptive pill (OCP) use in women over 35 years – are current guidelines being put into practice?

#### *Aims*

The OCP has been linked to an increase in vascular thromboembolic events<sup>1</sup>. This risk is exacerbated with smoking and therefore best practice in prescription of the OCP dictates that it should be ceased in smokers over the age of 35 years<sup>2</sup>. The aim of this audit was to investigate whether these recommendations are being adhered to.

#### *Methods*

An analysis of all women prescribed any type of OCP in a one year period (June 2011 to January 2012) was carried out. The age of the women was profiled and those over the age of 35 were identified with smoking status assessed.

#### *Results*

There were 108 women prescribed various OCP types in the practice. On assessment of smoking status of these women, 28.7% were documented smokers (n=31), 40.7% were documented non-smokers (n=44), while 30.5% did not have their smoking status documented (n=33).

Of the total population on the OCP, 20% (n=18) were over the age of 35 years and 20% of these were identified as smokers (n=4). In these women, it had been documented that all had been advised about the risks associated with smoking and OCP use and other contraceptive options had been discussed.

#### *Conclusion*

The guidelines on OCP use in women smokers over the age of 35 years are largely being put into practice. However better smoking documentation is required.

1. Sidney S, Petite DB, Soffi GA, Cundiff DL, Tolan KK, Quesenberry CP "Venous thromboembolic disease in users of low-estrogen combined estrogen-progestin oral contraceptives" 2004 *Contraception* 70 (3-10)
2. WHO Collaborative Study of Cardiovascular Disease and Steroid Hormone Contraception. "Ischaemic stroke and combined oral contraceptives: results of an international multicentre, case-control study" 1996 *Lancet* 348: 9026 (489-505)

## Does adding information on lung age to smoking cessation advice during routine consultations increase quit rate? – Know2quit multicenter randomised control trial

*Joseph Ojedokun, Sarah Keane, Kieran O'Connor, John Cox, Derek Forde, Martin Rouse*

### Objective

To assess the effects of telling smokers their lung age during routine consultations (using a Vitalograph lung age meter) on quit rate and progression on the wheel of change. Secondary outcome measures include evaluating the individual effects of co-morbidities, lung age difference and a smoker's stage on the wheel of change on quitting.

### Design

Multi-Centre Randomised Control Trial.

### Setting

Five general practices in the south east (Counties Wexford and Waterford), Ireland.

### Participants

A total of 402 active smokers aged over 18.

### Intervention

Smoking habit and stage on the wheel of change (WOC) were evaluated before consultation. All participants received standardised smoking cessation advice during routine consultations. The intervention arm, in addition, received lung age information using a lung age meter.

### Main outcome measures

Self-reported quit rates and progression on the WOC were assessed at 4 weeks post-intervention.

### Results

Attrition rate was 27.9%. Self-reported quit rates at 4 weeks in the control and intervention arms respectively were 12.0% and 22.1% (difference 10.1%,  $p=0.01$ , 95% CI 1.5% to 18.7%; number needed to treat 10). 12.1% of smokers in the intervention arm relapsed within one month. Net positive progression on the WOC in the control and intervention arms respectively were 7.3% and 29.1% (difference 21.8%,  $p=0.02$ , 95% CI 13.2% to 30.4%; number needed to treat 4.6). Telling smokers their lung age was equally effective in promoting quitting across all stages of the wheel of change. Smokers with poorer lung age values were just as likely to quit as those with normal lung ages. Smokers in the intervention group were more likely to request pharmacotherapy to support quitting ( $p<0.0001$ ). Cessation support interventions and lung age information had significant individual and synergistic effects on quitting. Patients with co-morbidity were more likely to reduce smoking and to relapse ( $p = 0.03$ ).

### Conclusion

When promoting smoking cessation in clinical consultations, providing lung age data to patients with a Vitalograph is a clinically effective intervention to foster quitting and intentions to change.

## Sun protection awareness and practice among an adult general practice population: a multi-site cross-sectional study

*Dr Triona deFaoite*

### **Background**

Skin cancer is the most commonly diagnosed cancer in Ireland and numbers are continuing to increase year by year. The main risk factor for development of skin cancer is exposure to sunlight. There is evidence to suggest that 90% of skin cancers can be prevented by optimal sun protection practices. Previous studies have shown that while knowledge is good, sun protection behaviour and practice tends to be poor.

### **Aims**

Our aim was to assess patients' knowledge and awareness of the importance of sun protection, level of sun exposure and sun protection practices and to examine any correlations between these factors and other demographic factors such as age, gender and occupation.

### **Methods**

This was a cross-sectional study involving 3 mixed rural-urban general practice populations located in the Munster region. A validated questionnaire entitled the Sun Exposure and Behaviour Inventory was posted to 440 randomly selected patients over 18 years with a 45% response rate. Ethical approval was received from the ICGP Ethical Committee.

### **Results**

Knowledge was high with over 90% scoring mod – high in knowledge scores. 57% report lifetime sun exposure to be moderate to very high.

75% report never having used a sunbed. 62% use sunscreen with 64% using SPF 15 or higher. However 13.6% used no sun protection at all.

People with low or moderate sun exposure tended to use more sun protection methods. There was no correlation between level of knowledge and amount of sun exposure but it was found that respondents with low knowledge scores used fewer, if any, sun protection methods.

### **Conclusion**

While knowledge levels were encouraging, sun protection practices were sub – optimal and indicated a need for further education and health promotion. GPs should be encouraged to take a more active role in promoting skin cancer awareness and optimal sun protection practices among their patients.

## LIFESTYLE FACTORS

### Exercise counselling habits and training of general practitioners in the Mid-West of Ireland: a cross-sectional study

Joyce CL, O'Tuathaigh CM

#### Background

Both NICE in 2006 and recent systematic reviews have established that brief interventions in primary care are both effective and economic at promoting physical activity. Lack of training has previously been identified as a barrier to lifestyle counselling in Ireland.

#### Aim

This study evaluates frequency of exercise counselling (EC) in patients with six chronic illnesses by general practitioners (GPs) in the Mid-West of Ireland and whether training in EC influences frequency of EC.

#### Methods

A cross-sectional questionnaire survey of general practitioners based in counties Limerick, Clare and North Tipperary was conducted during February and March 2012. The questionnaire was handed out to 39 GPs at two CME meetings and then posted to 120 other randomly selected GPs in the area.

#### Results

64% (n=102) of GPs responded. Frequency of exercise counselling varied among the chronic illnesses evaluated. Use of written advice and advice on resistance exercise in EC was low. Only 17% of GPs had previous training in EC. 94% of GPs would use guidelines to prescribe exercise in chronic illness if they were available to them. The association of previous training in EC with frequency of EC was variable, with significantly higher counselling rates found in type 2 diabetes mellitus, obesity and healthy adults (Mann Whitney U, all  $p < 0.05$ ) but no significant difference was found in other patient groups. Previous training in EC had a positive effect on the use of written advice and advice on resistance exercise.

#### Conclusions

GPs in the Mid-West of Ireland often advise their chronic illness patients about physical activity. Improved training of GPs and development of guidelines are two areas which may improve the frequency and quality of exercise counselling in Ireland.

## Physical activity assessment and promotion in primary care

*Heron N, McKinley M, Tully MA, Cupples ME*

### Background

Physical activity (PA) levels which substantially increase risk of chronic disease are reported by 66% of men and 75% of women. This feasibility study aims to explore the integration of brief assessment of PA into GP consultations and the experiences of patients in a randomised pedometer-based intervention.

### Method

Patients (2,154), aged 35–75, attending four general practices in socio-economically deprived areas of Belfast, were invited to complete a General Practice PA Questionnaire (GPPAQ). 192 questionnaires (8.9%) were completed. Health professionals (HP) invited those classed as 'inactive' (83) to participate in a pedometer-based intervention: 47 (56.5%) agreed; 41 completing baseline pedometer step-counts over a week period. Participants were then randomised to either group one (encouraged to increase their PA level to a self-determined goal agreed with the HP) or group two (given a specific goal of 2,500 steps/day above baseline). Both groups kept step-count diaries and had an approximately 2-weekly telephone follow-up. Step-counts were re-assessed after 12 weeks. Participants' and HPs' views regarding the intervention were sought via questionnaires and focus groups.

### Results

Practices chose different methods of GPPAQ administration: GP/nurse (n=2) or receptionist-led (n=2); computerised GPPAQ (n=1) or paper-based (n=3).

The increase in steps/day was greater in group 1 than group 2 – (mean 2,602 steps/day (SD 1,957) v 788 (SD 2,044) – p-value 0.007).

Both participants and HPs viewed the pedometer intervention positively and considered the GPPAQ as easy to use and incorporate into routine consultations. Participants suggested that pedometers were a more acceptable form of increasing physical activity than gymnasiums and perceived that realistic step-count goals, step diaries and telephone follow-up improved compliance. Only one HP was aware of current physical activity guidelines.

### Conclusions

PA assessment can be integrated into day-to-day general practice but there appear to be barriers in performing this in every consultation. This requires further exploration. A pedometer-based intervention is a feasible approach to promoting PA – an increase of 2,500 steps/day is achievable for inactive general practice patients.

Setting realistic step goals and addressing HPs' PA knowledge gap are important in addressing the physical inactivity epidemic.

## MENTAL HEALTH

### Quality initiative to reduce benzodiazepine and Z-drug prescribing in practice

*Dr Louise Campbell, Dr Kilian McGrogan*

#### Abstract

Benzodiazepines are safe when used short term but tolerance and dependence can develop after just 4 weeks of consecutive use. Long term use is associated with an increased risk of falls, confusion, insomnia and agitation. Over 10% of medical card patients receive a regular monthly prescription for benzodiazepines or hypnotics or both, and this figure is increasing. We undertook a quality initiative to address long term benzodiazepine and Z-drug prescribing in our practice. Previous attempts to reduce had been made on an *ad hoc* case by case basis, but with limited success. We were interested in a global approach that would achieve many different criteria namely education, opportunity to discuss and hopefully, managed reduction. Studies in the UK have shown that a letter to the patient from the general practitioner, can achieve significant reductions in benzodiazepine use among long term users. Based on this, we developed a simple, cost effective quality initiative which resulted in a 50% average daily dose reduction for 40% of patients receiving a regular benzodiazepine or hypnotic prescription.

#### **1 Give a brief description of the innovation/improvement that you have developed in the practice.**

We developed a simple, effective, quality initiative to reduce benzodiazepine prescribing in practice.

10% of the medical card population currently receive a regular prescription for benzodiazepines and/or sleeping tablets. This number is growing annually and although useful for the management of anxiety and sleep disturbances in the short term, dependence can develop after 2–4 weeks of consecutive use. Long term use is associated with addiction, memory disturbances, falls and sleep disturbance.

We identified 137 patients who were receiving regular prescriptions for benzodiazepines and contacted them by letter asking them to attend to discuss their prescription in person. This letter highlighted the risks with long term use and emphasised the benefits of reducing and/or eventually stopping. We enclosed a simple patient information leaflet advising how patients could gradually reduce medications themselves. A specific policy for benzodiazepine prescribing was also introduced in the practice.

After 3 months 70% of those contacted had been reviewed and 40% had agreed to a dose reduction. 8% stopped their medications completely. Of those who reduced, the average reduction was 50% of their starting dose.

#### **2 Give an outline of the situation in the practice before instituting your innovation/improvement.**

Prior to implementation, repeat prescriptions were issued on a 1 or 3 monthly basis. Individual patient review was at the prescriber's discretion. There was no

practice policy in place and, although it was known that there was a cohort of long term users, the exact number of such patients was not known.

**3 List what resources were required to implement the innovation/improvement and whether any further resources are required to maintain this innovation/improvement.**

Considerable time went into the overall design of the initiative. Although identifying the target group required considerable man hours, but other than photocopying and postage, this initiative was effectively cost neutral, yet achieved results that will have longstanding benefit to our patients, the practice and society. Maintenance will require commitment on the part of all staff to stick to the practice policy and to continue to encourage patients to reduce medications.

**4 Describe what effect this innovation / improvement has had on your practice.**

The practice policy has led to consistency and safer prescribing among doctors in the practice and therefore better care for patients. There is considerable evidence in the literature to support the benefit of any reduction in dose of long term benzodiazepines in terms of patient safety and wellbeing. We were encouraged by the level of reduction achieved after only 3 months.

We received considerable feedback from local pharmacies supporting our initiative and, following publication in Forum in December, we were contacted by 24 practices requesting further information and copies of the patient letter and information leaflet.

Our audit was subsequently summarised and included as an example of good practice in the March edition of Therapeutics Today and some of our documentation has also been included in the recently circulated ICGP Benzodiazepine Prescribing Audit Tool, as examples of templates for others interested in tackling this area.

We have been very happy to share these resources with other practices and are confident that this initiative will have an ongoing benefit to patients, individual practices and greater society.

## Looking after bodies as well as minds: an audit on antipsychotics and cardiovascular risk factors

*Dr L Freeman, Dr J Moore*

### **Introduction**

Mental illness has a strong association with physical health problems in particular coronary heart disease. Patients with schizophrenia die 10 to 25 years earlier than the general population. Antipsychotics are associated with weight gain, metabolic syndrome and diabetes. The ICGP Guidelines on Early Psychosis (2011) discusses multiple risk factors contributing to this increased mortality and produced a template for annual physical health monitoring, in particular cardiovascular (CV) risk factors.

### **Methods**

Retrospective review of all in person consultations of patients prescribed antipsychotics continuously for over 1 year from January 2011 to June 2012. Assess our compliance with monitoring of CV risk factors as suggested by the ICGP guideline. Ethical approval obtained from the ICGP.

### **Results**

60 patients were identified in a practice population of 4,000. The mean number of visits was 7 (SD +/-5.82). The duration of use of antipsychotics was over 5 years in over 70% of patients with the majority of patients prescribed atypical antipsychotics. Blood pressure, fasting cholesterol and glucose were the most commonly recorded variables in over 66% of patients. Alcohol use, waist measurement, BMI and smoking status were recorded in less than 5% of patients. 1 in 4 patients had raised lipid levels (n=13). Patients who live in supportive psychiatry accommodation are more likely to have their risk factors assessed, followed by those who attend psychiatry clinics with the lowest frequencies in patients who attend their GP alone.

### **Conclusions**

There is a discrepancy in CV risk management within different groups, depending on services attended. Screening should be encouraged with the development of a practice register and an annual recall of patients prescribed antipsychotics. Improved record keeping will improve the chances of opportunistic screening. Patients should be educated regarding the side effect profile of antipsychotics on commencing and continuing treatment. Lifestyle advice should be actively promoted at each review.

## ***They won't believe you until they feel a bit better: A mixed method evaluation of an exercise intervention in the management of depression***

***Carol Sinnott, Michael Morris***

### ***Introduction***

Depression is the fourth leading cause of disability worldwide. Many patients do not respond to pharmacological antidepressants alone, so behavioural approaches such as exercise and physical activity are also used. There is a lack of clarity from clinical trials on the efficacy of exercise in the management of depression. Furthermore, whether exercise interventions lead to tangible increases in activity levels is rarely described. In this study, an educational exercise intervention used in patients with depression was evaluated using mixed methods to examine **a)** the impact on well-being and activity and **b)** ways in which the intervention could be optimised.

### ***Methods***

35 patients with depression, attending general adult psychiatry services for the Kilkenny/Carlow area (catchment population 120,000), were enrolled. All participants completed the WHO 5 Well Being and the IPAQ questionnaires at enrolment and three months after receiving an educational exercise intervention. Open ended questions were used to identify barriers and solutions to increasing activity levels in this population, and responses were thematically analysed. Ethics approval was granted from UCC.

### ***Results***

Of 35 patients enrolled, 27/35 (77%) were female and the mean age was 43 years (SD 13ys). 17/35 (49%) had suboptimal self-reported activity levels and 22/35 (63%) had poor well-being scores at enrolment. 17/35 (49%) completed follow-up questionnaires three months after the educational exercise intervention. No significant changes in activity levels or well-being were observed. Barriers to increasing exercise included medical, practical and psychological issues. Suggested solutions to these problems included structured exercise programmes and alternative methods of information delivery.

### ***Discussion***

This study of a simple exercise intervention showed that delivery of exercise advice alone is insufficient to increasing activity levels in patients with depression. However, by incorporating qualitative techniques in the evaluation, refinement of the intervention is possible which will allow it to be more appropriately tailored to the target population.

## Educational needs assessment on suicide and deliberate self harm to shape a course in primary care

*Patrick McSharry, Pearse Finegan, Claire Collins*

### **Background**

Suicide is a major problem in Ireland with 486 suicides in 2010 and over 11,000 cases of deliberate self harm (DSH) seen in Irish emergency departments annually. With many presenting to primary care in the months prior to the event, it is an obvious area for intervention.

### **Research Question**

The aim of this project was to conduct an educational needs assessment of primary care team members in respect of dealing with patients who present with suicidal ideation and DSH to inform the training content and delivery of a course for primary care staff.

### **Methods**

An online survey of primary care and support staff and users and a consultation process with stakeholders were undertaken.

### **Results**

In total 117 questionnaires were returned. One in four of all responses said their current level of knowledge of suicide risk assessment was below average. Over two thirds of professionals reported that no member of their practice or service had formal training in suicide risk assessment and management. Only one third felt that they were adequately trained and prepared in the assessment of suicide and 58.2% felt they were not adequately informed as to the best available local resources. Only 7.8% of all respondents felt that primary care was adequately resourced to deal with suicidal patients.

### **Conclusions**

The current evidence shows physician education in depression recognition and treatment reduces suicide rates. Irish primary care service providers feel inadequately trained and prepared in the assessment of suicide risk. We have developed a blended course on suicide risk assessment and management in the format of evening CME or on-site in practice/service workshops together with an e-learning module. The introduction of such a course should be complimentary to other preventative interventions. We will demonstrate the module at the meeting.

### **Funding**

The funding to carry out this work was gratefully received from the HSE's National Office for Suicide Prevention.

## CBT training – does it work?

*Dr Joseph O’Keeffe*

### **Background**

Since 2006 the ICGP has offered a course titled “The practical application of CBT in general practice”. To date over 300 participants have completed a basic level course and 50 participants have completed an advanced level course in Cognitive Behavioural Therapy and have been awarded a certificate by the ICGP. Considering the cost and the time invested by the college and the trainees it is important to evaluate the training programme itself and its impact on current clinical practice.

### **Aim**

The aim of this study was to evaluate different methods of teaching utilised in the training course and to rate the level of application of CBT skills pre and post course.

### **Methods**

The methodology was a quantitative survey, and a questionnaire was used to gather data. 36 questionnaires were returned out of a total sample of 42 that were sent to members who had done the ICGP training programmes. The questionnaire looked at rating quality of teaching, quality of simulated learning, quality of lectures and theory, quality of support structures, quality of experiential learning and quality of supervision process.

### **Results**

36 questionnaires were returned out of a total sample of 42, indicating a response rate of 86%. Respondents returned consistently high ratings for different elements of the course, as can be seen on the table illustration on the poster presentation.

### **Conclusions**

The study suggests that the teaching methods were rated consistently high by the participants in the course and that the course was successful in increasing the utilisation of CBT skills within current clinical practice. The results are very encouraging for those involved in the delivery of the course as illustrated by the fact that participants reported a greatly increased use of CBT interventions following completion of the course.

## OBSTETRICS & GYNAECOLOGY/WOMEN'S HEALTH

### Clinical audit: pill check consultation – can we improve our current practice?

*Dr Marta Czerner, Dr Pat Daly*

#### **Introduction**

Oral contraception still remains the most popular method of contraception in Ireland. Appropriate and thorough follow-up of combined oral contraception pill (OCP) users is an essential part of women's health in general practice.

#### **Aims**

To establish evidence-based standards for 'routine' OCP consultations, to review current practice of combined OCP consultations in one GP practice, to implement the agreed standards, using a newly created "pill check consultation" template in the GP computer system, to measure the improvement during the re-audit phase.

#### **Methods**

The computer population analysis tool was used to identify the patient group using a brand name of the OCP as a searched item over a time frame of 12 months (Phase 1 of the audit). On 1 December 2011, the new OCP consultation template was adapted in the computerised patient notes and it was also the start of the re-audit phase, which was completed on 27 January 2012.

#### **Results**

Total number of patients: phase 1 -100, re-audit phase – 35. Adherence to the set standards: documentation of the blood pressure measurement improved from 95% in the phase 1 to 100% of the patients following the intervention (re-audit phase), breast awareness discussion from 37% to 85.7%, cervical smear test discussion from 25% to 97.14%, smoking status documentation from 56% to 100%, side effects discussion from 28% to 100%, special situations discussion from 12% to 100%, BMI documentation from 57% to 80% respectively.

## An audit of cervical smear uptake in women aged 55–60 years

*Dr Elizabeth Waugh*

### **Aim**

The aim of the audit was to target a defined group of women age 55 to 60 years so as to improve their rate of cervical smear uptake.

### **Introduction**

A 2010 report by the National Cancer Screening Service (NCSS) provided statistics for the first 12 months of the Cervical Check programme (September 1<sup>st</sup> 2008 to August 31<sup>st</sup> 2009). The NCSS statistical report revealed that the lowest level of uptake was among women aged 55 to 60 years. The average uptake in this age group was 6.8% nationally. It is suggested that a target smear uptake rate of 80% is needed to ensure a successful cervical cancer screening programme.

### **Methodology**

The audit was commenced in October 2010 following discussion and approval by all partners of the practice. Inclusion and exclusion criteria were first established for the audit. Inclusion criteria were defined as women who had no history of a cervical smear in over 5 years and women who had a smear in the last 3–5 years but with no previous regular smear history. Women who had a smear done within 2 years and were in the Cervical Check Programme, those who had a smear within 3–5 years with a good regular smear history previously, women who had a smear in the last 2–3 years (though maybe not yet in cervical check), and women who had a history of hysterectomy were excluded from the audit (some women require vault smears and this will be looked at separately at a later stage). Women who had not attended the practice since 2005 were deemed no longer active files and were also excluded.

The initial task of the audit was to identify women attending the practice in the age group 55 to 60 years who did not have an up to date cervical smear record. These women were to be sent a smear invitation letter and those who did not respond to the letter were to be followed up by phone call invitation approximately six weeks later.

### **Results**

A total of 155 patient files were extracted of women aged 55 to 60 years from the GP MAC database of Parklands Surgery. A total of 40 women either had no previous record of having a smear or were not up to date with their cervical smears. The overall smear rate achieved in the practice prior to the audit was 61 percent.

A total of 5 women responded positively to the invite letter and attended for a smear. One woman contacted the surgery on receipt of the letter to decline the smear test. The remaining 34 women were followed up with a phone call to invite them to attend for a smear. Of note half were phoned by a senior practice secretary and half by me. There was no difference in uptake in the two arms. A total of 12 women attended for smear following the phone call protocol (out of 34 women phoned). Two women reported on phoning that they had had smears done elsewhere thus a total response was achieved of 17 smears done out of a total of 38. This represents a post audit smear rate of 78%. Seventeen smear results have been

returned all with a negative smear result. One woman was referred to gynaecology for a suspicious vulval lesion identified while doing the smear. (This has been confirmed as a vulval carcinoma)

### **Discussion**

The outcome of the audit was assessed by smear rate achieved following the letter and phone call interventions. In the final analysis the smear rate was increased to 78% from the pre-audit smear rate of 61 per cent. This is very close to the standard of 80 per cent. This is a significant achievement in a group who are known to be poor attendees' for cervical smears.

The initial response by this group to the letter invite was poor however the follow up phone call intervention proved very valuable in actually encouraging women to attend for smears. The added personal verbal communication appears to be an influencing factor here.

On completion of the audit I would make a few recommendations for the future. The audit should be performed yearly and should be doctor led but essentially could be carried out by the practice nurse with the assistance of administrative practice staff. Regarding cost, the audit brought earnings of approximately 800 euro to the practice for payment of smears done which is significant income while the cost of the audit was low. It will now be repeated on an annual basis in the practice and would fulfil Medical Council Professional Competence requirements.

## **“There is no foot so small that it cannot leave an imprint on this world” – women’s experience of GP follow-up care after miscarriage**

*Dr Máire Curtin, Dr Bernardine Rochford, Dr Gerry Sullivan*

### **Objectives**

The aim of this study is to investigate what follow-up care women get from their GP within six weeks after miscarriage and what topics are covered during this visit. Swanson et al<sup>1</sup> found the most beneficial intervention to be the discussion of the experience of the miscarriage, feelings of self blame, the patient's emotions and her worries about future pregnancies. This study also evaluates whether or not GPs discuss these four issues with their patients in the follow up visit.

### **Methods**

53 women who had a miscarriage in the past 5 years participated in the study. They were recruited by convenience sampling when participants attended their GP and had a positive history of miscarriage. An original questionnaire was used to obtain information about follow up care after their miscarriage. Ethical approval was granted by the ICGP prior to commencement.

### **Results**

42% of patients had no follow up care after miscarriage and 63% of these regretted this. Of those that had follow up, 80% found it helpful. Of the four topics of content for discussion in the follow up visit, each of these was discussed in 74–90% of patients.

### **Discussion**

Counselling after miscarriage should focus on listening, explanation and advice. GPs are ideally placed to provide this service validated by this study in which 80% found the visit helpful. However only 58% of women received this service suggesting that women who have had a miscarriage are being underserved. Following these results, the author suggests that women should be offered scheduled follow-up care six weeks after miscarriage.

## Termination of pregnancy: attitudes and clinical experiences of Irish GPs and GPs-in-training

*Mark Murphy, Akke Elinga, Scott Walkin, Maeve MacDermott*

### **Background**

Termination of Pregnancy (ToP) is currently illegal in Ireland. In 2010, more than 4,000 women travelled from Ireland to the UK for a ToP.

### **Objectives**

The aims of this study were to assess the attitudes and clinical experiences of Irish general practitioners (GPs) and GPs-in-training (GPRs) towards ToP.

### **Methods**

A postal survey was sent to 500 GPs in Ireland. An internet-based survey was sent to 244 GPRs. Quantitative and qualitative analysis was performed.

### **Results**

Overall response was 44%. Four groups could be identified: abortion can never be allowed (10%), abortion can be allowed in limited circumstances (25%), abortion should be available to all women (51%) and a group without a strong opinion (14%). The groups who indicated abortion should never or only in limited situations be allowed, were older and more often Catholic. Of the group that felt ToP should be available to all women, 66% indicated an upper gestational limit of a maximum of 16 weeks. More than 40% of respondents had a consultation specifically dealing with ToP within the past six months and 43% agreed with the statement that women's health suffers due to the travel related to ToP.

### **Conclusion**

The qualitative analysis of the survey showed that the terms pro-life and pro-choice do not aptly describe the spectrum of opinions. The majority of respondents (75%) support the provision of ToP in Ireland in certain circumstances. This study highlights clinical situations in which women's health may be adversely affected due to the requirement to travel for ToP.

## Evaluating the clinical efficacy of primary care physician referrals to a tertiary referral centre for breast disease

*Nathan Wall*

### *Introduction*

Currently a patient with a symptomatic breast condition requires a referral from their Primary Care Physician (PCP) to a Specialist Breast Clinic (SBC) prior to any breast imaging. This process creates an enormous volume of patients that mandate a repeat clinical exam in an SBC to determine the priority level for the relevant imaging.

### *Hypothesis*

Could patients with symptomatic breast conditions proceed directly to breast imaging and avoid a repeat clinical exam in the SBC setting?

### *Methods*

A prospective database of symptomatic breast patients referred to a SBC by their PCP was evaluated. The clinical findings as per the PCP referral form were compared with the SBC clinical findings. No patients were excluded.

### *Results*

A total of 186 consecutive patients attending an SBC were assessed. The accuracy and positive predictive value of the PCP clinical exam was 74.73% and 74.03% respectively.

### *Conclusion*

Breast clinical exam by PCP is relatively accurate and consideration should be given to allowing patients bypass a repeat clinical exam in the SBC and proceed directly to relevant imaging. This should reduce cost and expedite patient care.

## Appropriate folate prescription and BMI measurement in pregnancy

*Coakley M*

### *Background*

Maternal obesity is now one of the most common risk factors in modern obstetrics. Maternal obesity is associated with many complications including an increased incidence of neural tube defects in the person's offspring. The HSE/RCPI published guidelines in 2011 entitled 'Obesity & pregnancy'. These guidelines recommended the use of 5mg folic acid pre-conceptually and for the first three months of pregnancy in those with a BMI  $\geq 29.9$ kg/m<sup>2</sup>. It recommends all women should have BMI recorded at the first antenatal check (or sooner if they present for pre-conceptual counselling).

### *Aim*

To evaluate awareness of the above guidelines in a general practice by assessing BMI monitoring and folate recommendations in antenatal patients.

### *Methods*

The first data collection was performed from August to November 2012. An intervention was then performed which included a staff meeting with education about the current guidelines, written information, regular reminders and ensuring appropriate measurement equipment in all rooms. The second cycle was conducted from Dec '12 to March '13. A standard of 70% was set.

### *Results*

In the first cycle, 2 out of 14 (14%) of women had a recorded BMI. 57% had documented advice to start folic acid if not already on same. No prescriptions for folic acid 5mg were given.

In the second cycle, BMI documentation increased to 47% (10/19). 33% of these patients had a BMI  $\geq 30$  and 100% of these patients were appropriately prescribed 5mg folic acid. 74% of the antenatal patients had a documented discussion on folate use.

### *Conclusions*

Monitoring of BMI and appropriate folate prescription improved but the standard set was not achieved. There is room for improvement and re-audit. Increased awareness of these recommendations is needed amongst GPs and women of child-bearing age.

## PAEDIATRICS

### Audit on prevention of childhood obesity: are we detecting at risk children?

*Young C, Peters J*

#### **Background**

The Growing Up in Ireland study shows 26% of 9-year-old children are overweight or obese. Childhood obesity has serious implications for present and future health. Our own national guidelines advise that primary care is the ideal place to detect and intervene.

#### **Aim**

To measure height and weight at least annually with the BMI calculated and plotted on the UK 1990 BMI centile charts.

#### **Methods**

In cycle one, a randomised sample of 100 children aged 4–18 years that visited in the past year was generated. We checked the following 4 parameters:

- Are we measuring height, weight and calculating BMI annually?
- Are we plotting them on the UK 1990 BMI charts?
- Is there a clinical intervention when BMI  $\geq$  91<sup>st</sup> centile (overweight)?
- Is there assessment of co-morbidities when BMI  $\geq$  98<sup>th</sup> centile (obese)?

To implement change, an alert was developed on the Healthone system each time the file of a patient aged 4–18 was opened. The alert reminded clinicians to use the Paediatric Growth Parameter sequence which was developed to include weight, height, BMI, BMI centile, and plan. The UK 1990 BMI centile charts were laminated and at bedside. After three months, cycle two results were generated as per cycle one.

#### **Results**

Cycle one: 36% height measured, 39% weight measured, and 22% BMI calculated. No BMI centiles were plotted and as such no one was identified as being overweight or obese.

Cycle two: 77% height measured, 77% weight measured, and 77% BMI calculated. 75% of BMI centiles plotted and 11% were identified as being overweight or obese. All those identified as overweight/obese resulted in a clinical intervention. Of the obese, a third had their co-morbidities assessed.

#### **Conclusions**

Measurements of height, weight, BMI calculation and plotting on BMI centile charts is now routine in our practice allowing for identification and management of overweight and obese children.

## Paediatric asthma severity and control in primary care

*Jeanne Cloonan, Dr Nick Breen, Dr Derek Forde*

### **Aim**

To assess paediatric asthma severity and control in a primary care practice.

### **Methods**

The practice database of Slaney Medical Centre was searched for children aged between 2 and 16 prescribed salbutamol over a 3 year period. The following data was recorded on a randomised sample: age, gender, number of lower respiratory/asthma presentations to the practice, attendance at an emergency department, admission to hospital, admission to intensive care, or outpatient review by a paediatrician related to asthma. Asthma medication and frequency of prescription were also recorded.

### **Results**

The total number of children with asthma between 2 and 16 was 335. The prevalence of asthma in this population was found to be 14.7% (335/2285).

A randomised sample of 67 (20%) was used for data collection (33 female and 34 male). Twenty-one percent (n=14) were 5 years or less, 58% (n=39) were aged between 6 and 11 and 21% (n=14) were aged between 12 and 16.

The mean number of asthma-related presentations was 1.1 over 1 year and 3.4 over 3 years.

Eight children (11.8%) had presented to an emergency department with an asthma related complaint at least once; 7.5% (n=5) had been admitted to hospital; none had been admitted to the intensive care unit and 7.5% had been reviewed by a paediatrician in an outpatient setting.

Salbutamol alone was prescribed for 52.2% (n=35); the remainder were on two or more medications.

### **Discussion / Conclusions**

Paediatric asthma is an important primary care issue and its adequate control is important for children's health and quality of life.

The small percentage of those admitted to hospital and attending an outpatient service reflects that the majority of paediatric asthma is managed in a primary care setting. Annual review of asthma control and symptoms in primary care may be useful to optimise treatment.

## Primary prevention of childhood obesity by education at 13 month vaccinations: a feasibility and acceptability study in a general practice setting

*Dr Eithne Doorley*

### **Background**

By school-entry, over 20% of 2–4 year old children are overweight or obese. The preschool period is understood to be critically important as an opportunity in primary prevention of obesity. Early community-based interventions have been shown to be effective in reducing BMI at 2 years.

### **Aim**

The aim of this pilot study is to assess the feasibility and acceptability of general practitioner delivered healthy lifestyle education at 13 month vaccinations.

### **Methods**

At 13 month vaccinations parents were invited to participate and provided with a baseline survey. This included questions on the child's eating habits, fruit and vegetable intake, snack intake and consumption of fizzy drinks and fruit juices. The questionnaire also asked about the parent's fruit and vegetable intake, exercise and smoking status. The child's weight was measured at initial contact and plotted on the UK-WHO 0–4 centile charts. A healthy lifestyle for toddlers handout was given and discussed at consultation. Parents were followed up after 3 months with a phone call and a further survey was administered. This included repeated questions from the baseline questionnaire on healthy eating and lifestyle. Parents were also asked about acceptability and usefulness of the intervention.

### **Results**

Snack intake improved from 15% to 21% receiving no snacks. Timing of fruit juice intake improved from 30% to 58% having juice with meals only. TV watching improved from 13% watching over 2 hours TV/day at baseline to 0% at follow up. Exercise improved from 69% to 89% getting 30 minutes of supervised physical activity per day. All parents found the intervention acceptable. Over 90% reported the discussion and advice sheet to be helpful or very helpful.

### **Conclusions**

Results indicate this intervention at 13 months is both acceptable and feasible in the context of general practice, and indicate improvement in healthy lifestyle parameters in toddlers through parent education.

## To assess and improve the compliance rates of vitamin D supplementation at the six week baby check

*Crowley J, Keogh C, Molony D, Brennan K*

### **Background**

Infant vitamin D supplementation continues to be topical. Routine supplementation and indications, as well as rationale for measuring and replacing vitamin D in cases of deficiency, are fraught with controversy, confusion and questioning of the supporting evidence.

### **Aim**

To determine and improve the compliance levels of vitamin D among new born babies in the practice.

### **Methods**

The target population was new born babies to the practice. The sample was chosen by who attended the 6 week baby check. Data collection was retrospective for phase 1 of the audit and prospective for phase 2.

All 6 week baby checks in the audit period were included. The data collected was retrieved from CompleteGP Primary Care Software Programme and analysed using Microsoft Excel. Phase 1 and 2 were 4 months each. The month of September was used for staff and patient educational intervention.

### **Results**

Phase 1 highlighted 21 babies. Case notes were studied to determine if the parents of these babies were asked by our staff if they were giving vitamin D. 100% (n=21) of the parents were not asked.

Phase 2 highlighted 20 babies. 45% (n = 9) of the parents were asked about vitamin D supplementation, 55% (n = 11) were not.

Of the parents that were asked post intervention (n=9), 89% (n=8) were giving vitamin D to their babies, 11% (n=1) were not.

### **Conclusions**

Considering new born babies rely on their parents for their vitamin D supplementation and with the low levels of vitamin D in Ireland, further staff and parent education should be provided during the ante-natal period in primary and secondary care.

We were aware of the limitations of the study, they included small patient cohort, short intervention educational period, use of one family practice and the relatively new policy of vitamin D supplementation.

## Paediatric emergencies in general practice

*Crealey M, Mc Namara W*

### Background

GPs deal with a spectrum of emergencies in primary care, from the immediately life-threatening to the smaller but urgent problems that arise in General practice<sup>1</sup>. General practice serves as the entry point into the emergency care system and as such, GPs are vital members of the emergency team.. This is particularly relevant to rural practices where there may a delay or large distance from the nearest Emergency Department. Studies show that children continue to be brought to a family physician at the time of emergency<sup>2</sup>.

### Aim

To identify the type and frequency of paediatric emergencies occurring among the 21 training practices on the Dublin North General Practice Scheme.

### Methods

This prospective descriptive study took place over ten weeks. Information regarding medications and equipment used and whether the emergency services were called were also sought. Each practice was asked to fill out a short questionnaire on each emergency and involved 8 questions on the emergency: type, setting, age of child, time of day, skills used, equipment/meds and outcome.

### Results

24 emergencies were documented over the 10 week study period. These were divided into 4 categories (acute abdomen n=4; pyrexia n=7; trauma n=3; respiratory n= 3; other n=7). The majority were between 1–10 years (n=17). Only 2 practices carried out mock emergency drills within the practice and 14 practices used some form of written emergency protocol. Analgesia, penicillin, steroids or bronchodilators were used in 16 cases. GPs solely managed 4 cases with the remaining 20 being referred to the Emergency Department. Emergency services were called in 4 cases.

### Conclusions

The 24 paediatric emergencies represent cases at the minor end of the emergency spectrum but illustrate that urgent care continues to be a part of a GP's everyday caseload. The collaborative network basis of this study allowed for the documentation of an otherwise rare presentation to the family physician.

### References

1. Klig JE, O'Malley PJ. Paediatric office emergencies. *Curr Opin Pediatr.* 2007 Oct;19(5):591–6.
2. Fuchs S, Jaffe DM, Christoffel KK. Paediatric emergencies in the office practices: prevalence and office preparedness. *Paediatrics.* 1989;83:931–93.

## PALLIATIVE CARE

### Palliative care within general practice: building capacity

*Dr Paul Gregan, Dr Emer Loughrey, Marie Lynch*

#### *Introduction*

The ICGP, HSE and IHF report 'Primary Palliative Care in Ireland: Identifying improvements in primary care to support the care of those in their last year of life' was published in Nov 2011. It's recommendations were based on research amongst GPs and community based health care professionals as well as international developments. This abstract outlines the initial work streams which will build capacity amongst GPs to respond to palliative care needs of their patients.

#### *Identifying patients with palliative care needs in the community*

Specialist palliative care supports 40% of the 6,750 of the community based deaths every year. Assessment, identification and responses systems will be put in place to ensure the palliative care needs of the other 4,000 deaths in community settings are met.

#### *Introducing an electronic palliative handover between GPs and Out of Hours (OOH) Providers*

OOH services frequently respond to patients with palliative care needs. However, they are often unaware of the patient's history or care preferences, and this can lead to inappropriate interventions and unnecessary hospital admissions. Introducing electronic palliative handover form, which is based on the GP general referral software, will assist in the anticipation of and response to palliative care needs of patients during out of hours, and is supported by 96% of GPs surveyed in HSE south.

#### *Clarifying and enabling access to 24 hour advice from specialist palliative care*

There is a lack of awareness as to the extent and nature of guidance and advice available from specialists in palliative care to GPs and OOH providers. Mapping this network and enhancing access methods to this service will assist in a more responsive and targeted provision to patients with palliative care needs in these settings.

#### *Summary*

All these quality improvement initiatives will include an evaluative framework and are linked with the ICGP network and HSE Clinical Programmes.

## PRACTICE MANAGEMENT

### **Are general practices in Kerry adequately prepared to deal with cardiac arrest and are there any practice factors which influence the level of preparedness?**

*Dr Sarah O'Neill, Dr Linda McMahon, Dr Mark Henderson,*

#### **Background**

General practice is at the forefront of managing medical emergencies, especially in a rural area like Kerry. In recent times there have been many exciting developments in this area such as the MERIT project, PHECC, Immediate Care Course. We wanted to highlight current work and explore the potential for the future.

#### **Methods**

A questionnaire-based observational study. Questionnaires were sent to all GP practices in Kerry in October 2011, looking at practice demographics, equipment, facilities, protocols etc. A preparedness score based on these factors was devised.

#### **Results**

46 out of 51 questionnaires were returned, giving a response rate of 86%. 48% of practices had dealt with 1 or more cardiac arrest in the past year. 68% of practices were classified as well prepared, based on our scoring system. Higher preparedness scores were significantly associated with larger practices (both in terms of patient population and number of doctors), being a training practice and participating in the MERIT project.

#### **Conclusions**

Overall general practices in Kerry are well prepared for managing cardiac arrest, with bigger populations, a larger number of doctors and active participation in education increasing the level of preparedness. We feel this study supports increasing resources and training to practices, so as to increase participation in pre-hospital care by general practice.

## Pre-hospital trauma management and the general practitioner: confidence in skills and associated factors

*Dr Suzanne Ryan*

### **Background**

GPs in Ireland at present have a sporadic role in the early management of trauma. The Hanley Report in 2003 advised closure of local Hospital Emergency Departments in favour of centralisation of services to Regional Hospitals. It is unclear what effect this would have on the general practitioner in pre hospital care of seriously injured patients. This study assessed general practitioners' self rated confidence in skills used in the pre hospital setting for a trauma patient. It also assessed if there were any factors that appeared to influence confidence level.

### **Methods**

A 2 page anonymous questionnaire with a cover letter was distributed to general practitioners attending continuing medical education meetings in County Wexford in December 2011. The questionnaire consisted of questions related to demographic details and a list of 16 skills validated for use in trauma cases. The GP was asked to rate their confidence for each skill based on score criteria of 0–4 given. Data was analysed using Microsoft Excel. Ethical approval was granted from the ICGP.

### **Results**

Of the 35 attendees at CME meetings, 34 participants completed the questionnaire. GPs reported attending an average of 3.1 trauma cases per year, 60% occurred within surgery hours. Their confidence in skills was highest for IV cannulation, cervical spine immobilisation and ventilation. Lowest confidence was rated for cricothyroidotomy, alleviation of tension pneumothorax and intraosseous needle insertion. Higher confidence overall was associated with higher frequency of cases, completion of post graduate course and in GPs who provide medical cover for events.

### **Conclusion**

Participants reported higher confidence in basic skills. Overall, there was a wide range of confidence described. If the exposure to these cases is likely to increase, regular refresher courses are required to maintain skills as the frequency of use is low.

## Waiting room times in Greystones Harbour Family Practice by Maeve Judge

*Dr Nick Breen*

### **Background**

The Health Service Executive ran the 'Insight 2007 Survey' to assess the effect of policy initiatives on patient satisfaction. It was established that the quality of care rating decreased as waiting time increased.<sup>1</sup> With this in mind, I decided to assess whether or not the time spent in the general practice waiting room had a direct effect on overall patient satisfaction.

### **Aim**

To assess how long patients waited to be seen by a doctor in the Greystones Harbour Practice and to establish whether this length of time had an effect on their satisfaction with the consultation.

### **Methods**

A questionnaire distributed to patients in January 2012 included questions on:

- Age,
- GMS status,
- Waiting room time; their opinion of this,
- Consultation time; their opinion of this,
- Patient delays and
- Overall satisfaction.

### **Results**

Seventy-seven questionnaires were distributed and 73 were retrieved, giving a response rate of 95%. Of these, 4 were family visits, which brought the total number of patients to 78.

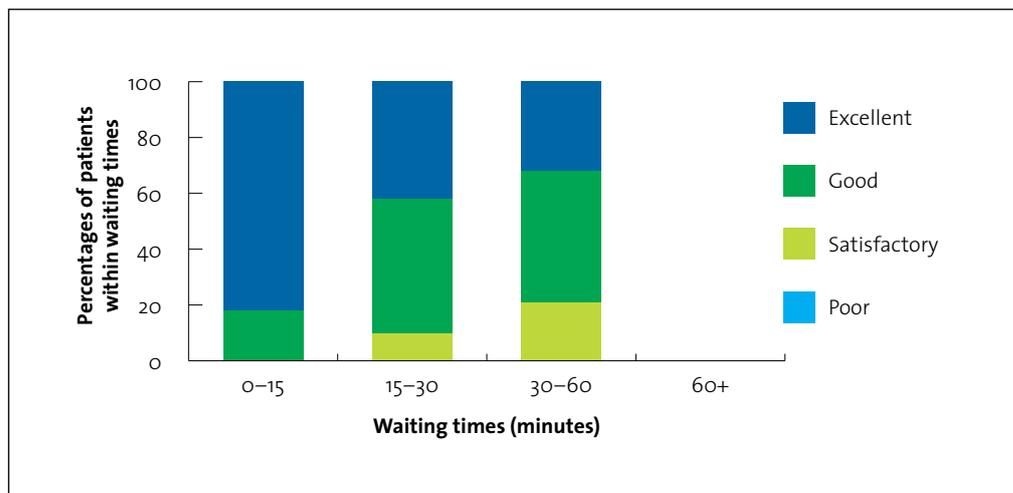
All who were seen within 15 minutes (38.5% of total number) believed this was an acceptable waiting time; 78% of those seen between 15–30 minutes (32.1%) and 47% of those seen within 60 minutes (19.2%) believed this to be acceptable. No one had to wait more than an hour to be seen.

All patients who waited less than 15 minutes rated their overall experience as either excellent or good. This level of satisfaction dropped to 92% of patients who waited 15–30 minutes and 73% of those waiting 30–60 minutes. No one rated his or her experience as poor.

Sixty-three percent of patients spent longer than the scheduled 10 minutes in their consultation.

### **Graph: Correlation of Waiting Time with Patient Satisfaction:**

(Over leaf)



**Conclusion**

Patient satisfaction is inversely proportional to time spent in the surgery waiting room.

**Recommendations**

Aim to stay within the 10 minutes scheduled per consult when possible, schedule fewer appointments per day and to set aside specific time for phone calls to avoid using time between consults.

**References**

1. Health Service Executive, Insight 2007 Survey, 'Health and Social Services in Ireland – a survey of consumer satisfaction'. Available at <http://www.hse.ie/eng/>

## General practitioners' awareness of the cost of medication and how this influences their prescribing practice

*Dr Ruth Cooney, Dr Claire Cusack, Dr Gobnait Kearney*

### **Objectives**

The aim of this study was to assess GPs' knowledge of the cost of commonly prescribed medication in primary care, and to assess how this may influence their prescribing practice.

### **Method**

This study was conducted through distribution of questionnaires at CME meetings in the South-East. The questionnaires were then reviewed, and the results were statistically analysed.

### **Results**

This study had 65 respondents. Analysis of the questionnaires completed revealed that the majority of GPs felt they considered the cost of medication when prescribing (80% agree/strongly agree), but less than half of all GPs surveyed felt that they have a good knowledge of the cost of medication they prescribe (48% agree/strongly agree, 15% no opinion, 37% disagree/strongly disagree).

For GMS prescriptions, on average 10% of estimates were accurate, with 54% underestimating GMS cost and 36% overestimating GMS prescription cost. Private prescription cost estimations were more accurate, with 20% of estimations within the acceptable range. 38% of prescriptions were underestimated and 42% of prescriptions were overestimated.

### **Discussion**

The conclusion from my research is that GPs have a poor knowledge of the cost of commonly prescribed medication. There is need for education in this area for GPs. It is important to recognise the importance of the cost of the medication with medication compliance, and by doctors increasing their awareness of drug costs, this could benefit patients with compliance rates with courses of treatments.

## Audit – completing the cycle

*Janice Sweeney*

### **Background**

Audit is a “systematic review and evaluation of current practice with reference to research based standards [and designed] to improve patient care,”<sup>1</sup> that aims to influence activity at a local level.<sup>2,3</sup> Two-thirds of general practice audits reviewed led to change within the practice.<sup>4</sup> A 2007 Cochrane Review noted that the provision of information alone resulted in little to no change in practice. Thus, for an audit to affect change, it is necessary to include targeted feedback and complete the audit cycle, including re-audit.<sup>5</sup>

### **Aim**

To evaluate whether completing the audit cycle has improved patient care in Livinghealth Clinic (LHC). To identify audits completed to date, to implement a structured re-audit programme, and to disseminate audit recommendations to GPs.

### **Methods**

A review was undertaken to identify all completed audits. One area of patient care was chosen for detailed examination. An audit conducted in February 2012 on warfarin therapy recording demonstrated the following results:

Target range and indication for warfarin therapy were not well-documented.

Recommendation was made to undertake formal re-audit to evaluate EHR for ICPC-2 coding of indication for warfarin therapy and target INR.

April 2012 re-audit demonstrated an improvement – 42% of EHR had the warfarin indication ICPC-2 coded and 2% had the target INR documented. November 2012 re-audit demonstrated marked improvement – 93% warfarin indication ICPC-2 coded and 53% target INR documented.

### **Results**

In LHC 79 audits have been undertaken since 2009. The majority looked to improve management of chronic disease, and prescribing practice. 85% of audits made clear recommendations in line with ICGP guidelines. 92% of audit cycles are scheduled for re-audit in 2013.

### **Conclusions**

Completing the audit cycle has potentially improved patient care in LHC. A structured re-audit programme has been implemented, and audit recommendations are circulated monthly. Audits can impact on patient care and closing the audit cycle is beneficial.

## Measuring the quality of note taking in general practice: a comparison of video and electronic records in a series of general practice consultations

*Dr John Paul Hickey*

### **Background**

Documentation is an important index of good clinical practice but deficiencies in recording clinical information are a widespread problem.

### **Aim**

To compare the content of consultations to the electronic patient record. It was hypothesised that a significant proportion of the information elicited and imparted during a consultation is not documented.

### **Methods**

Participants were eight general practice registrars and the patients they recruited for video case analysis. Data endpoints in both the consultation and the documentation were defined and collected. These data were recorded in Microsoft Excel and Pearson's product moment correlation coefficient was calculated for each of the relevant variables in the consultation and the notes.

### **Results**

The average duration of the consultations was 14 minutes and 34 seconds, with an average allocated time of 15 minutes. On average, the doctor's words occupied 59% of the consultation; the patient's words 41%. On average, 2234 words were spoken, 4.38 themes were raised and 59 points of information were elicited in the course the consultations. The comparative figures for the documentation were 92 words, 3.25 themes and 18 points of information. Pearson correlation coefficients indicated a strong positive correlation between spoken and documented themes, points, impression and follow-up. A strong negative correlation was demonstrated for information given to patients.

### **Conclusions**

Registrars' time keeping was optimal. The consultation contained a significant amount of information – an average of 160 words per minute spoken. On average, the doctor spoke more than the patient. Much of the verbal information was irrelevant, repetitive or not recorded, as the average word count in the notes was twenty times less than the word count in the consultations. Objective information, impression, plan of action and follow-up were well recorded. Subjective information and advice, explanation and reassurances were poorly recorded.

## RESPIRATORY

### An audit of COPD management in a general practice

*Dr Ann Kiely, Dr Tony Sills*

#### **Introduction**

COPD is a common condition. COPD management occurs primarily in the community. The audit aims were to assess how we were managing patients with COPD and to hopefully improve on patient care based on current guidelines.

Guidelines criteria: The ICGP Management of COPD in GP guidelines provide national standards of patient care for COPD. These include each patient with COPD should have spirometry performed at least once, influenza and pneumococcal vaccinations need to be up-to-date, smoking status needs to be determined, documented and reviewed regularly with smoking cessation advice given.

#### **Methodology**

I discussed the audit with Dr Sills, my GP trainer. A standard of 85% was agreed.

Ethical approval was sought and obtained in Sept 2011. The initial data was collected historically from a Health One database of patient records. 22 patients were found and results were analysed. A comparison was made between our practice and current guidelines. Following this a practice meeting took place and an intervention was planned in the form of inviting patients with either established or clinically suspected diagnosis of COPD to attend for annual COPD review. A total of 21 patients agreed to the review. Following this a re-audit took place.

#### **Results**

At initial audit, smoking status was documented for 82% patients, smoking history in 14.3% patients and smoking cessation measures in 5% cases. 4.5% of patients had spirometry completed and documented in the notes. Influenza and pneumococcal vaccinations were up-to-date to 2010 in 82% and 45.5% of patients respectively.

At re-audit of 21 patients, 100% of patients had smoking status, smoking history, smoking cessation measures reviewed and documented. Annual review and spirometry was completed in 100% of patients. Influenza and pneumococcal vaccinations were up to date for 100% and 75% of patients respectively.

#### **Conclusion**

This small but important audit in general practice has brought about an improvement in the care of patients with COPD.

## Clinical audit of patients with chronic obstructive pulmonary disease in an Irish general practice

*J Barnes, N Breen*

### Background

Chronic obstructive pulmonary disease (COPD) is increasingly prevalent worldwide and the substantial burden of this condition on the patient's health continues to escalate. The main responsibility in its prevention and management lies with general practitioners.

### Aim

To analyse the current standard of care of COPD patients in a suburban-rural general practice by examining ICGP criteria and comparing results with best practice guidelines.

### Methods

The existing coded population of active patients with COPD were telephoned and consent was obtained to ask a set of questions designed to examine certain criteria chosen from the ICGP COPD Quick Reference Guide<sup>1</sup>. Patient demographics were also analysed by examining individual patient files.

### Results

Of the patients included in the audit (n=39), 64% of patients were male, the mean age was 71 years (SD=11.6) and 82% were General Medical Service (GMS) patients.

Results of audit criteria examined as per ICGP COPD Quick Reference Guidelines.

CRITERION	YES	NO	CRITERION	YES	NO
Smoking status recorded	10%	90%	Influenza vaccine in last influenza season	80%	20%
Smoking cessation offered if current smoker	33%	66%	Pneumococcal vaccine during lifetime	46%	54%
Spirometry testing at least once	69%	31%	Osteoporosis prophylaxis if on steroids	25%	75%

### Discussion

There was poor recording of smoking status, a high uptake of influenza vaccines compared to international figures<sup>2</sup>, a lower uptake of pneumococcal vaccinations and an increased need for osteoporosis prophylaxis in patients on regular steroid medication. Vaccination reminders, smoking cessation advice and information leaflets have been posted to these patients. Development of protocols for coding and management have been implemented.

### Conclusion

General practitioners must focus on ensuring optimum management of COPD in the community. ICPC coding in general practice is essential as a basis for further audit and improvement in clinical practice. Audit is a useful tool to initiate change.

### References

1. ICGP COPD Quick Reference Guide. ICGP Quality in Practice Committee. Published May 2009.
2. Influenza Vaccination and COPD: Recommendations and Realities. Nicholas T Vozoris. AoRM 2009;000:(000). Month 2009.

## Community acquired pneumonia in Irish general practice: the challenges of diagnosis

*Claire Collins, Ailís Ní Riain*

### **Background**

While detailed information is available across Europe regarding hospital attendances, little is known regarding general practice for community acquired pneumonia (CAP). In addition, as many patients with CAP are treated out of hospital (although most of the studies are on hospitalised patients), the full extent of CAP is unknown. However, CAP is among the five major causes of death worldwide. Optimum management relies on accurate diagnosis. British Thoracic Society (BTS) Guidelines (2009) provide diagnostic criteria that do not rely on CXR, as this may not be readily available in the community setting. The overall aim of this project was to collect data regarding CAP in Irish general practice. This paper focuses on the specific challenges of identifying CAP cases in general practice, adhering strictly to the BTS diagnostic criteria.

### **Methods**

Following ethical approval, prospective data collection was undertaken over one year to document CAP symptoms and incidence as it presents to general practice in Ireland. Data analysis was carried out using the PASW statistical package.

### **Results**

Interim results presented here are based on the clinical notes recorded at the initial consultation from 14 practices whose profile was generally representative of Irish general practice. 209 cases were returned, ranging from 4–50 per practice. Demographic data suggests a typical patient profile for CAP. Strictly applying the BTS definition resulted in a definitive diagnosis in 29 cases (14%) with a further 108 cases (52%) likely to be CAP. Inclusion of known CXR results increases definite cases to 29%.

### **Conclusions**

In particular, this work has shed much light on the complexity of applying the definition of CAP in practice to determine cases and hence the resultant difficulties adhering to the care guidelines.

### **Acknowledgement**

This work has been carried out under an Investigator Initiated Research Grant from Pfizer.

## SEXUAL HEALTH

### STI knowledge among students – a survey in IT, Tralee

*Dr Siobhán Crowley, Dr Yvonne Nunan, Dr Bríd O'Brien*

#### **Abstract**

The number of cases of STI (sexually transmitted infection) among young people is increasing in Ireland. 86% of Irish third level students are sexually active, with the majority having engaged in unprotected sex. This study was carried out among students in Institute of Technology, Tralee, Co. Kerry.

The aims were as follows, by means of an anonymous questionnaire: 1) to assess both the actual and perceived level of knowledge among students about STIs and to determine whether students would like to increase their knowledge; 2) to determine how STI knowledge has been acquired to date and the preferred method of knowledge acquisition; 3) to assess attitudes towards STI in terms of source of worry versus pregnancy, and attitudes regarding contact tracing; 4) to look at five demographics, namely age, gender, rural/urban upbringing, ethnicity and religiousness and determine whether those factors have a bearing on STI knowledge levels, sources of information (previous and preferred) and attitudes towards STI vs pregnancy and contact tracing. 361 questionnaires were completed.

The results showed that, overall, the level of knowledge of STI among students in the IT, Tralee is good, and students have an accurate perception of their own knowledge levels. The majority of students would welcome more information on STIs. School has been the most important source of STI information to date, and sexual matters are discussed most commonly with friends. Providing STI information leaflets in fresher packs is the most appropriate way of making STI information available to students. Students are aware of the importance of contact tracing, and pregnancy is not more of a worry than contracting an STI. Demographic factors do not affect STI knowledge levels. Students do not see GPs as the most appropriate source of STI information, but they are amenable to discussing sex related matters with their doctor.

## VACCINATION

### Assessment of viral status (hepatitis A, B, C and HIV) and vaccination status (hepatitis A, B and influenza) of patients on a methadone maintenance programme

*Sorcha Turley, Dr Nick Breen, Dr Michael Doyle*

#### Background

Serological testing for HAV, HBV, HCV and HIV is advised for patients on a methadone programme as they are group at high risk for blood borne virus infection. Immunisation against HAV and HBV is recommended for patients who have not had past natural exposure, irrespective of their HCV status. Annual influenza vaccination is advised for all patients on a methadone programme.

#### Aims

To determine the HAV, HBV, HCV and HIV status of patients on a methadone programme and to assess the uptake of HAV, HBV and influenza vaccination among these patients.

#### Methods

Retrospective data collection by analysing computerised information on all of the patients in the practice of Dr Doyle on a methadone maintenance programme.

Criteria assessed were:

- HAV, HBV, HCV and HIV status
- HAV, HBV and Influenza immunisation in accordance with ICGP guidelines<sup>2</sup> standards set
- HAV, HBV, HCV and HIV status to be known in 100%
- Immunisation rates against HAV, HBV and Influenza of 95%

#### Results

HAV status was positive in 44% (22% positive due to immunisation), negative in 22% and unknown in the remaining 33%. HAV vaccination rate was 22%. HBV status was positive due to past exposure in 11%, negative in 78% and unknown in 11%. HBV vaccination rate was 78%. HCV status was positive in 56%, negative in 33% and unknown in 11%. HIV status was positive in 11%, negative in 78% and unknown in 11%. In 2011, the influenza immunisation rate was 78%.

#### Conclusions

The detection and prevention of infection with blood borne viruses and influenza infection is recommended for patients on a methadone programme. This audit shows that increased levels of serological testing and vaccination should be achieved in order to reach the set standards.

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## Recommendation and uptake of influenza and pneumococcal vaccinations among COPD patients in an Irish general practice

*Keara Clarke, Claire McNicholas, Nick Breen*

### Background

Chronic Obstructive Pulmonary Disease (COPD) is a major public health problem. The current Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines recommend influenza and pneumococcal vaccination for all COPD patients<sup>(1)</sup>. Cross-sectional Irish data indicates that vaccination uptake rates among at-risk groups, including COPD, fall below this recommendation<sup>(2)</sup>.

### Aims

1. To assess physician recommendation and patient uptake of influenza and pneumococcal vaccination in COPD patients
2. To promote vaccination in concordance with GOLD guidelines

### Methods

A patient register was generated of all patients within the practice who had a documented diagnosis of COPD. Patient demographics were recorded based on age, gender, GMS- and smoking-status. Rates of influenza and pneumococcal vaccination recommendation and uptake were also documented.

### Results

Forty-eight patients (3.2%) in the practice are currently diagnosed with COPD (11 males and 37 females). The mean age is 75 years. Twenty-five patients (52%) reported a history of smoking exposure, eight of whom are current smokers. Forty-four patients (92%) had attended the clinic during the 2011–2012 influenza season.

Influenza vaccination was offered to 38 patients (79%), of whom 33 (87%) accepted. Pneumococcal vaccination was offered to 36 patients (75%), of whom 31 (86%) accepted. Six of those not offered influenza vaccination, and eleven of those not offered pneumococcal vaccination had attended the clinic for another reason. Age, gender and GMS-status did not significantly influence the likelihood of being offered or accepting vaccination.

### Conclusion

Influenza and pneumococcal vaccinations are important primary preventative strategies in COPD. This audit showed that vaccination recommendation and uptake among COPD patients compared favourably with estimated national rates, but remains below current GOLD guidelines. Recommendations for improving vaccination uptake were implemented, with a view to re-evaluating the practice in the 2012–2013 influenza season.

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## Uptake of influenza and pneumococcal vaccines among coeliac patients: a general practice audit

*Ahern G, Tiernan D, Murphy M*

### **Background**

Coeliac Disease affects approximately 1% of the Irish population. International guidelines from institutions including the NHS, HSE and Coeliac UK have stipulated that annual influenza vaccinations and a once-off pneumococcal vaccine should form part of the long-term management of patients with coeliac disease.

### **Aim**

Our aims were to audit a) the level of uptake of influenza and pneumococcal vaccinations among patients of the Medicentre, Sligo with a biopsy proven diagnosis of coeliac disease and b) to assess what methods could be used to improve the uptake of the vaccination and bring it in line with the target uptake of 80% set by the practice for all vaccine eligible patients.

### **Methods**

A search of the HealthOne database in the practice allowed us to identify all patients with a diagnosis of coeliac disease and this was cross-matched with our records of those receiving the influenza and pneumococcal.

### **Results**

Of the total patient group in question, the uptake of the influenza and pneumococcal vaccinations was 50% and 26% respectively. When patients with other criteria for vaccination, such as being aged over-65, diabetes mellitus and ischaemic heart disease were removed the uptake for the influenza and pneumococcal vaccinations was 15% and 8% respectively.

### **Conclusions**

The uptake of vaccinations among coeliac patients in the practice was lower than anticipated. The practice already had a call-recall system in place to encourage uptake among these patients.

## OTHER

### Do patients have a preference for the gender of their doctor?

O'Neill M, Burgoyne L

#### Background

Increasing numbers of females have been graduating from Medicine both in Ireland and abroad<sup>1,2</sup>. However, there are still more male than female consultants in specialities such as obstetrics and gynaecology<sup>3</sup>. We decided to investigate whether obstetrics and gynaecology patients preferred a female doctor.

Aim: To determine if obstetrics and gynaecology patients have a higher preference for a female doctor than ophthalmology patients, and to establish the reasons behind any such preference.

#### Method

A semi structured questionnaire was generated, modified from measures published in a similar study<sup>4</sup>. This was piloted and then administered to 258 obstetrics and gynaecology patients and 154 ophthalmology patients attending clinics at Cork University Hospital.

#### Results

29.5% of obstetrics and gynaecology patients would prefer to be seen by a female doctor. If an examination was involved this percentage rose to 39.9% ( $p=0.000$ ). Over 90% of ophthalmology patients had no preference for doctor gender. Thematic qualitative analysis showed patients preferred female doctors for reasons of "security", "gender affiliation" and "circumstance". The main themes for no gender preference were "A doctor is a doctor" and "There are more important things than gender".

#### Conclusions

It is clear that some patients do have a preference for doctor gender. Consideration should be given to offering obstetrics and gynaecology patients the choice of a female doctor, particularly when an examination is needed. Additional studies should be undertaken to establish the doctor gender preferences of patients in other specialties, especially those which are seeing a rapid change in doctor gender such as general practice<sup>5</sup>.

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## Provision of phlebotomy services by general practitioners in Leinster and the southeast region: a comparison of rural versus urban practices

*Aileen B Byrne*

### **Background**

Phlebotomy services are an essential part of patient care in general practice, both to provide routine services such as Heartwatch and warfarin clinics, and to take urgent bloods. In August 2011 a number of practices were issued with a questionnaire with the objective of assessing GP phlebotomy services in both rural and urban practices.

### **Methods**

A postal survey was sent to 100 GP practices, and a further 100 GPs were invited to participate online using surveymonkey.

### **Results**

The overall response rate was 53%, with 78 responses by post and 29 via surveymonkey. Twenty percent of practices were in a rural setting, 36% in an urban area, and another 44% in a mixed location. Thirty nine percent of GPs were single-handed with the majority being group practices. Four percent sent their patients to hospital to have bloods done, 75% took bloods in the practice and 21% took bloods, but also sent patients to the hospital phlebotomy service. Practice nurses took the majority of bloods in the practices surveyed.

Overall 56% of practices had a specific time or clinic for phlebotomy. Of note 75% of rural practices compared to 59% of urban practices and 46% of mixed locations had a specific clinic for phlebotomy. Sixty nine percent of practices used a courier service to deliver bloods to the hospital laboratories. Of the GPs using the courier service there were an average of 3 collections per week. Thirty one percent delivered the bloods to the hospital themselves, driving an average of 6 miles. The average distance that a rural GP had to drive was 12 miles compared to 4 miles in a mixed location and 2 miles in urban areas.

### **Conclusion**

As evidenced by the results GPs provide excellent phlebotomy services to patients, going to such lengths as to drive considerable distances to deliver bloods to laboratories and in some cases paying for courier services themselves. This survey has provided valuable information on current phlebotomy services in Irish general practice.

## The role of U&E monitoring in patients on ACE inhibitors

*Catherine Neary, Dr Siobhan Garavaglia, Dr Nick Breen*

### **Aim**

To assess the effectiveness of monitoring of renal function in patients commencing ACE inhibitors in general practice.

### **Background**

The main risks of ACE inhibitor therapy are the deterioration of renal function, pre-renal acute renal failure and the development of hyperkalaemia. Particularly vulnerable groups include the elderly and heart failure patients. However acute renal failure is often only detected via a raised serum creatinine. In accordance with guidelines produced by SIGN (Scottish Intercollegiate Guidelines Network) when commencing an ACE inhibitor renal function must be known both at the time and re-checked 1–2 weeks after initiation.

### **Methods**

50 randomly selected patients who had been commenced on perindopril within the previous 3 years were obtained from the practice database. The dates of renal function testing were then obtained.

### **Results**

5/50 (10%) had U&Es checked both at initiation and within 2 weeks.

22/50 (44%) had U&Es checked 1 month prior to or at initiation.

11/50 (22%) had U&Es checked within 2 weeks of initiation.

17/50 (34%) had U&Es checked within 1 month of initiation.

25/50 (50%) had U&Es checked within 6 months of initiation.

### **Conclusion/Recommendations**

Only 10% of patients included met the current guidelines. It is good practice to raise patient awareness with regard to the importance of renal function testing with ACE inhibitors. At the start of treatment patients should have a follow up appointment made for within the next 2 weeks for U&Es, this could be done with a practice nurse. It is GPs who are at the frontline in detecting renal failure in their patients on ACE inhibitors and this is why it is vital to adhere to renal function monitoring guidelines.

## Management of hereditary haemochromatosis in a primary care setting

*Harrington E*

### **Background**

Hereditary haemochromatosis is an autosomal recessive inherited disorder of iron metabolism. Prevalence in Ireland is 1:83. It can result in iron overload, which results in deposition of iron in tissues if untreated. Complications include diabetes, cardiomyopathy, cirrhosis, hypogonadism and hypothyroidism.

### **Aim**

To compare the management of patients, known to have haemochromatosis, who attend a single-handed GP practice in west Donegal, with recent clinical guidelines from the European Association for the Study of the Liver.

### **Methods**

Patients were identified by searching the practice patient database and asking the GP principal. The following criteria were audited: ferritin checked in previous six months (audit standard: 80%), or previous year if never had venesection (standard: 80%), latest ferritin result, referred for venesection if ferritin >100 (standard: 90%), LFT, fasting blood glucose, TSH since diagnosis (standard: 90%), asked about erectile dysfunction (standard: 80%), asked about alcohol intake (standard: 80%).

### **Results**

26 patients were identified, 17 male, 9 female. 19 (73%) had had venesection. Of these, 15 (79%) had ferritin checked in the last 6 months. 5 (19%) never had venesection and of these, 3 (60%) had ferritin checked within the previous 12 months. 4 patients (50%) with ferritin >100 were referred for venesection. 25 patients (96%) had had LFT and fasting glucose testing since diagnosis. 21 (81%) had TFT testing. 2 patients (8%) had weekly alcohol intake >21 units, 3 (12%) had weekly alcohol intake <21 units. Alcohol intake or advice was not recorded for 21 patients (80%). Of male patients' records, 3 (18%) documented symptoms of testosterone deficiency.

### **Conclusions**

The standard was reached for screening for liver and diabetes complications but not for the other criteria. A proforma for an annual haemochromatosis review and a call/recall system would improve monitoring, facilitate timely treatment, and improve patient education about relevant lifestyle factors.

## General practice career intentions among graduate entry students: a cross-sectional study at Ireland's newest medical school

*G Lane, N O'Donovan, A English, C Hanrahan, R O'Connor, M Griffin, B O'Sullivan, C Dunne<sup>2</sup>, P Finucane, W Cullen*

### **Background**

The anticipated increase in care provision and clinical activity in general practice in Ireland will have considerable implications for manpower. Recent reforms in medical education, including an increased number of postgraduate trainees and increased exposure to general practice for medical students may help address this issue. In this study, we aimed to determine general practice career intentions among medical students at University of Limerick's Graduate-Entry Medical School (UL-GEMS) and factors which students on this programme view as important in determining career intentions.

### **Methods**

We conducted a cross sectional study of Year 1 and Year 4 students at UL-GEMS. The electronic study instrument (content informed by a similar study in Ireland, literature review and pilot study) collected data on general practice career intentions, student demographics and exposure to general practice. Participants were asked to rate factors influencing career intentions using a five-point Likert scale.

### **Results**

We received 139 responses – a 78% response rate (68% Year 1, 59% female, 71% Irish / EU and 58% aged 25–29). Forty-one (29%) indicated general practice was their current preferred career choice, while 26 (19%) indicated this was their preferred career choice on entry to medical school. The key factors that respondents indicated as being most important in determining career intentions were: job satisfaction, enthusiasm/commitment (for/to the speciality) and variety in practice.

### **Conclusions**

As the first study to present data on general practice career intentions among students on a graduate-entry programme in Ireland, this highlights general practice as a popular preferred career choice among students, both at entry to medical school and during the programme. Further research at other medical schools and longitudinally with students at UL-GEMS to determine if these career intentions are pursued over time is a priority.

## Uptake of the Long Term Illness scheme among eligible patients in a rural primary care unit

*Marafi H, Taaffe M, Clarke J*

### **Objective**

To assess the uptake of the Long Term Illness benefit scheme and/or GMS among eligible patients in a rural primary care setting in Ireland.

### **Methods**

A cohort study of the patients qualifying for care under the Long Term illness scheme in a large primary care unit in Summerhill, Co. Meath.

### **Results**

Overall, Summerhill surgery has 7141 patients. Of these, 1705 (23.87%) are known to have GMS cards. The total number of patients with long term illnesses, as defined by those covered by the Long Term Illness scheme is 288 (4.03%). More than half of these patients, 189 (62.6%), had GMS cards, 52 patients (18%) were known to have LTI cards. Only 9 patients (3.12%) had both GMS and LTI cards. 22 patients (7.6%) were confirmed to have neither cards. We were unable to clarify the LTI/GMS status of 16 patients (5.5%).

### **Conclusion**

The results showed that, of those with long term illnesses, around 86.8% carried the LTI card and/or the GMS card. Although, the vast majority of the patients are knowledgeable of the schemes available to them with regards to their illnesses, a significant percentage of the patient were unaware of the Long Term Illness scheme and the substantial impact on the lives of patients with long term illness and consequently on their future finances through providing them with medical care/medication/equipment free of charge.

## Hip Fracture & Bone Health 2010: an audit of assessment, treatment and follow-up in a South Dublin inner city teaching hospital

Liz Dunbar, Prof JB Walsh, Dr Joe Browne

### Background

Osteoporotic hip fracture remains one of the leading causes of increased morbidity and doubles the relative risk of mortality in the older population<sup>1</sup>. Management of bone health includes pharmacological interventions such as oral bisphosphonates, calcium and vitamin D supplementation. It remains suboptimal at primary and secondary level<sup>2</sup>. New Irish and international guidelines for the management of osteoporosis have recently been published<sup>2,3</sup>. Low levels of vitamin D have a multifactorial impact on fracture risk. Studies have shown that increased levels of supplementation may be required in older patients<sup>3</sup>.

### Methodology

This retrospective audit seeks to describe hip fracture and subsequent bone health management in the over 60's in St James's Hospital in 2010 and compare these findings to previous audit and the UK National Hip Fracture Database (NHFD-UK) and the National Audit of Falls and Bone Health in Older People 2010 (NAFBH).

### Results

140 patients over 60 fulfilled inclusion criteria, with a mean age of 79.4. Preadmission bone protection was recorded at 23% for calcium/vitamin D and at 24% for additional bone protection, generally oral bisphosphonates. Mean Bone Mineral Density (BMD) at the femur was -2.56SD, with only 6% having optimal bone mineral density. The mean serum vitamin D was found to be 54nmol/L and 72% had sub-optimal levels after 6 months of supplementation.

### Conclusion

Less than a quarter of the patient cohort was on bone protection medication on admission. Of perhaps more concern, less than 1 in 15 of the total population studied had optimal bone mineral density, underscoring the need for greater case finding and proactive treatment in primary care. Most patients in the group had suboptimal serum vitamin D levels despite 6 months of supplementation at 800IU. All patients in this population could benefit from increased supplementation in the community. This finding concurs with previous evidence that in the older population increased vitamin D supplementation is necessary.

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## Experiences and attitudes of GPs in the Midwest to the provision of care to their children aged 16 and younger

*Dr Niamh Meaney*

### **Introduction**

In 2009, the Irish Medical Council published “Guide to Professional Conduct and Ethics for Registered Medical Practitioners.” It stated that with regard to treating relatives that “except for minor illness and emergencies, it is not advisable for medical practitioners to treat members of family or issue prescriptions, sick certificates or reports.”

### **Objectives**

There are often conflicting experiences and feelings when treating family members including children and so for my research I decided to explore the experience, attitudes and feelings of GPs to treating their child/children in the Midwestern region where I presently work.

### **Methodology**

This questionnaire study was conducted between October and November 2011 at the Castleconnell Medical Centre, Castleconnell, Limerick, Ireland. I randomly selected 100 GPs including both GMS and private GPs in Co. Clare, Limerick City and County and north Tipperary from the Midwest HSE Database provided by the HSE Primary Care Unit. Each GP received a cover letter outlining the objectives of the study, the questionnaire and stamped addressed envelope for return. The questionnaire was anonymous. The questionnaire looked at the feelings and experiences of GPs in the Midwest to treating their own children. It also looked at GP demographics.

### **Results**

The total number of questionnaires posted was 100 and 65 responses were received, (65% response rate). 63 replies were complete and suitable for interpretation. 48% (30/63) of GPs surveyed attended a GP other than themselves when their child/children were younger than 16 years old. In the last year 76% of GPs (48/63) prescribed medications for their children. 97% of GPs (61/63) provided medical care to their children for which a non-medical parent would have attended a GP. 79% (50/63) of GPs were comfortable treating their own children. Several GPs commented that they would be comfortable “for minor ailments only” and that “major issues or personal issues should have another opinion.” Others commented that their “judgement can be clouded” and if they were “not comfortable they would seek a second opinion.” 59% of GPs surveyed felt that it was appropriate for GPs to treat their own children. Several commented that it was appropriate only “for minor ailments” and “for out of hours.” 67% of GPs surveyed were aware of the Irish Medical Council Guidelines with regard to treating family members.

### **Conclusion**

It is clear that there are conflicting experiences and feelings when treating family members including children amongst GPs in the Midwestern region.

## Long term management of gout in general practice – an audit

*Dr Triona de Faoite, Dr Adrian O'Gara*

### Introduction

Gout is becoming a more common problem in general practice with an increasing incidence over the past few decades in keeping with changing lifestyle habits. The most recent Irish figures show that this condition affects 3–4% of the population.

The most recent guidelines relating to the diagnosis and management of gout were published in 2006 by the European League against Rheumatism (EULAR) and these were the ones on which the audit was based.

### Aims

The aims were to carry out an audit assessing our practice compliance with the international guidelines, specifically:

- checking renal function and urate levels yearly
- maintaining urate levels <360 mmol/l
- monitoring other risk factors esp BP and BMI
- improving patients knowledge and understanding of the condition

### Methods

A database search was carried out to identify all patients with gout. Included in the audit were patients who had been seen at least once in the past year and who had a gout flare up within the past 3 years as well as all patients on urate-lowering therapy.

A letter was then sent out to all patients identified along with a patient information leaflet inviting them to attend for consult.

### Results

On initial analysis a total of 66% patients were on regular urate – lowering treatment and this rose to 71% on re-audit.

In the previous year, 69% of patients had renal function and urate levels checked but only 26% had urate levels at the recommended level ie. below 360 mmol/l.

On re-audit 91% of patients had renal function and urate levels checked and the percentage of patients with urate levels < 360 had risen to 45%.

### Discussion

The results show that while there was quite a good level of checking regular blood tests as well as documenting BP and BMI, there was definite scope for improvement with regard to starting patients on treatment and titrating the dose upwards in order to obtain urate levels of < 360 mmol/l.

## Chronic condition self-management (CCSM) learning package for GP trainees

*Claire Collins, Nick Fenlon, Andree Rochfort, Gerard Mansfield, Margaret O’Riordan*

### **Background**

Chronic disease accounts for a significant proportion of the disease burden and an increasing workload for GPs. Self-management is an important component of managing chronic conditions because of the complexity and increasing fragmentation of the management of chronic conditions. As of September 2011, the new (WONCA) EU definition of general practice includes as its 12<sup>th</sup> characteristic “Promotion of patient empowerment and self-care”. There is a need to enable GPs to fulfill this element of general practice.

### **Research question(s)**

The aim of the project was to develop an online learning package to assist GP trainees in facilitating self-management in patients with a chronic condition.

### **Methods**

A literature review, consultation process with stakeholders and piloting with the intended audience has taken place and an online training package has been developed.

### **Results**

The module contains six lessons, the content of which is generic and can be used for a range of chronic conditions. Each lesson starts with a list of learning objectives. Relevant examples from case studies and video clips of consultations are interspersed in each lesson to provide real world examples of what GPs can (and are) doing in chronic condition self-management. Practical tips and implementation strategies are provided to facilitate the uptake. Finally, a list of possible resources and references are included at the end of the each lesson. As part of the presentation, we will demonstrate the module.

### **Conclusion**

The module meets the recommended NICE characteristics of a good self-management curriculum. It has been developed in such a way to be flexible for adaption to other training sites once relevant case studies and video consultations are replaced. The development has also allowed for new material to be added at any stage and anyone who has already viewed the package will receive an email to advise that new/updated material has been added.

## **Systematic review: the effectiveness of educational interventions for primary care health professionals designed to improve self-management in patients with chronic conditions**

*Claire Collins, Sinead Beirne, Gillian Doran, Patricia Patton, Susan Smith, Jochen Gensichen, Ilkka Kunnamo, Tina Eriksson, Andree Rochfort*

### **Background**

In recent years, a development in chronic condition management is the involvement of patients in their own care to improve outcomes. However, the related literature focuses on patient education to improve knowledge of the illness, which does not by itself bring about patient engagement or patient empowerment for self-management of chronic conditions.

In order to create a structured approach to effective patient self-management of chronic conditions in primary care, it is necessary to specifically assess which educational interventions aimed at health professionals in primary care improve self-management by patients of their own chronic conditions.

### **Research question(s)**

The primary aim of this systematic review is to examine the effectiveness of professional educational interventions designed to improve self-management of chronic conditions.

The secondary aim is to inform the development of an educational programme for primary healthcare professionals across Europe which will be effective in empowering patients to improve their self-management of their chronic conditions (non-communicable disease).

### **Methods**

A systematic review using the following: PubMed, ERIC, EMBASE, CINAHL, PsycINFO, web searches, hand searches and bibliographies with specified inclusion and exclusion criteria and search terms.

This review is concerned with all chronic conditions as they occur generically in the primary care setting, rather than focusing on any specific chronic condition.

### **Results**

At the time of writing, the search of all outlined databases has been conducted. The PubMed search identified 2,625 abstracts – the first stage of the review of these identified 87 possibly relevant articles, the full text of each is currently being obtained.

### **Conclusion**

This systematic review has potential to contribute to improving patient outcomes through assessing the existing evidence for educating primary care clinicians in this domain.

## Does participation in CME influence medical practice? The experience of Irish doctors

*Stephanie Dowling, Annraoi Finegan, Claire Collins*

### **Background**

Is Continuing Medical Education (CME) effective today, and does physician life-long learning really improve clinical knowledge, physician performance and patient outcomes? Is CME simply a system to help physicians fulfill a requirement, or does it effectively improve physician practice and lead to better health care? How we as CME professionals address these questions, and how we create and approach new opportunities, will influence how CME moves forward. Understanding where CME is today and what the path ahead may hold begins with looking back at how the field of CME has developed over the years and also evaluating current participants' experiences with CME as delivered.

### **Research question(s)**

1. Is there evidence that CME changes a doctor's clinical practice as reported by CME participants?
2. Do changes in knowledge, attitudes, skills, practice behavior, or clinical practice outcomes occur at CME meetings as reported by doctors themselves?

### **Methods**

CME is delivered in Ireland by 37 tutors each delivering eight small group learning (SGL) sessions to between two and five groups per year totally between 1100 and 1700 attendees per month. A questionnaire was completed by all 37 CME tutors in Ireland during one of their bi-annual meetings to explore the delivery of CME in Ireland and how the curriculum is currently structured. All tutors agreed to administer a CME participant questionnaire to their attendees at their scheduled CME meetings in November/December 2012. This questionnaire aims to measure if and how participation in CME influences medical practice by recording a specific example of when and how this occurred.

### **Results**

The results of the CME-SGL participant questionnaire will be presented at the meeting.

### **Conclusion**

The results will provide specific topic examples of how CME-SGL has impacted on audit use of guidelines, prescribing and investigation.

## General Practitioners' Healthcare Access – a cross-sectional study

*Harrington E*

### **Background**

Doctors train and work in a culture where they are expected to be healthy. Self-treatment is endemic. Many GPs do not have their own GP. A number of barriers to GPs accessing healthcare for themselves exist. A need for specific training for doctors in treating other doctors has been identified.

### **Aims**

To identify factors affecting access to healthcare for GPs in the north-west of Ireland, to estimate the prevalence of self-treatment in this group, and to identify whether GPs feel there is a need for specific training for doctors to treat doctors.

### **Methods**

Cross-sectional study comprising an anonymous postal questionnaire distributed to 141 GPs in counties Sligo, Donegal and Leitrim.

### **Results**

The response rate was 62%. 40% of respondents were aged 55 or over. 26% were single handed GPs. 62% had their own GP. 51% worked when they felt they were too sick to work. 63% self-prescribed. Barriers to accessing healthcare included time away from the practice (74%), lack of locum cover (44%), family commitments (37%), fear of being treated differently as a doctor (31%), embarrassment about illness (28%) and confidentiality concerns (9%). Respondents were likely or very likely to attend a GP about red flag symptoms (84%), chronic illness (69%), a sick cert (38%), a general check-up (34%), low mood (24%), and work related stress (18%). 80% felt GPs should have training in being a patient, 77% in treating doctors, and 57% thought doctors have worse healthcare than non-doctors.

### **Conclusions**

Results indicate a high prevalence of self-treatment, working when sick and a belief that doctors have worse healthcare, among GPs working in the North-West of Ireland. A majority think doctors should have training in being a patient and treating other doctors. These results can inform the planning of doctor health supports, and undergraduate and postgraduate medical curricula.

## Systematic review of published guidelines for the management of subclinical hypothyroidism in older adults and starting dose of thyroxine

*Dr Audrey Russell*

### **Background**

Subclinical hypothyroidism (SCH) is defined as an elevated thyroid stimulating hormone (TSH) with a normal free thyroxine (T<sub>4</sub>) level. SCH is a common finding in general practice. The prevalence is around 8% in adult women and 3% in men, but the proportion of the population affected rises markedly with age. In epidemiological studies SCH has been associated with coronary heart disease events and death. It has also been associated with adverse psychiatric outcomes. Current treatment guidelines are based on observational data and a recent study showed that treatment strategies vary widely between GPs as well as between countries. These variations were in both the level of TSH at which treatment begins and the starting dose of thyroxine.

### **Objectives**

1. To review the current published guidelines on the management of subclinical hypothyroidism in older adults.
2. To review the recommended starting dose of thyroxine in the treatment of subclinical hypothyroidism.

### **Methods**

We searched the Cochrane Library, MEDLINE, PubMed, EMBASE, National Guidelines Clearing House, BMJ Best practice Guidelines and G-I-N Guidelines International Network. The grey literature was also reviewed. The search period was from 2000–present. Only English language publications were included.

Search terms included ‘guidelines’, ‘recommendation’, ‘statement’ and ‘subclinical’, ‘hypothyroidism’, ‘thyroid disease’. All published guidelines, clinical recommendations and consensus statements on subclinical hypothyroidism or thyroid disease were included. Guidelines related to subclinical hypothyroidism in pregnancy were excluded.

### **Data Collection**

Two authors independently assess guideline quality and extracted data.

### **Results**

13 guidelines, recommendations and consensus statements were identified. Authors are currently reviewing this literature and full results and conclusions will be available in June 2013.

## **GPs' perspectives on the management of patients with multimorbidity: systematic review and synthesis of qualitative research**

**Carol Sinnott**

### **Background**

Multi-morbidity refers to the co-existence of two or more long-term conditions in an individual patient, and is the norm amongst patients attending primary care for chronic disease management. Qualitative research shows that GPs experience challenges in the management of patients with multimorbidity, which are not experienced in the management of single chronic diseases. However, it is unclear how the challenges revealed by individual studies relate to each other and the overall problem of managing multimorbidity.

### **Aim**

The aim of this study was to establish the overarching challenges faced by GPs in the management of multimorbid patients, by systematically reviewing and synthesising the published literature in this field.

### **Methods**

A systematic literature search and synthesis was performed using the meta-ethnographic approach described by Noblit and Hare. This 7 step model involves a process of comparison and cross-interpretation between studies but allows the context of the primary data to be preserved.

### **Results**

The initial search yielded 1805 potential papers. Following screening, 10 papers were included in the review. Four overarching concepts emerged from these papers: 1) Organisation and Fragmentation of Health Care, 2) Conflict with evidence based medicine 3) Delivering patient centred care 4) Challenges in Shared Decision Making. Subthemes developed within the core concepts, and many cases of contradictory opinions were seen. By translating individual studies to the key concepts higher order interpretations were developed and a 'line of argument' was drawn. The line of argument pointed to GPs' sense of isolation in decision making for patients with multimorbidity.

### **Conclusions**

This systematic review and qualitative synthesis has generated a fuller understanding of the difficulties in managing multimorbidity than would be possible from a single study. It has generated novel findings, most strikingly that GPs feel professionally isolated when making decisions for multimorbid patients. Further research is required to explore the reasons for this in order to design interventions that may help GPs in this regard.

## Prevalence estimates and determinants of prediabetes in adults 45 years and over in Ireland: the Survey of Lifestyle, Attitudes & Nutrition in Ireland 2007

*Dr Claire M Buckley*

### **Background**

Prediabetes is an important indicator of future diabetes burden and many countries are reporting prevalence estimates of prediabetes. To date in Ireland, estimates of the prevalence of prediabetes were unavailable.

### **Aim**

Our aims were to estimate the prevalence of prediabetes in a nationally representative sample of Irish adults and to explore determinants of prediabetes.

### **Methods**

The Survey of Lifestyle Attitudes and Nutrition (SLAN) 2007 was a cross-sectional survey on health and lifestyle in a nationally representative sample of Irish adults. Analysis was performed on a subsample of 1,132 participants  $\geq 45$  years who provided blood samples. Determination of prediabetes was based on the American Diabetes Association (ADA) HbA<sub>1c</sub> cut-points (5.7–6.4% inclusive). To explore determinants, we modelled prediabetes prevalence as a function of a set of health system and socio-demographic variables using logistic regression.

### **Results**

The overall weighted prevalence estimate of prediabetes in participants  $\geq 45$  years was 19.8% (95% CI 16.4–23.9). There was no significant difference between age or gender-specific prevalence rates. Obesity was a significant risk factor for prediabetes on univariate and multivariate analysis. Population Attributable Fraction (PAF) estimates for excess BMI, physical inactivity and poor diet as causes of prediabetes were 31.3% (95% CI -3.9–54.5), 10.0% (95% CI -2.7–21.3) and 6.1% (95% CI -4.9–15.9) respectively.

### **Conclusions**

The high levels of prediabetes detected in this study are worrisome. Population level interventions to address diet and lifestyle factors are needed urgently to prevent progression to diabetes in high-risk individuals.

## The SIMPlE study: Supporting the Improvement and Management of Prescribing for UTIs in general practice

*Vellinga A, Duane S, Galvin S, Callan A, Domegan C, O'Shea E, Bennett K, Cormican M, Murphy AW*

### **Background**

Antibiotic resistance is on the rise and posing a threat to our healthcare system. Improving antibiotic prescribing is the first step to address this problem. An intervention was designed adopting a multidisciplinary approach combining epidemiology, microbiology, social marketing and health economic techniques to improve the quality and quantity of antibiotic prescribing for urinary tract infections (UTIs). UTIs are the second most common infections seen by GPs and an antibiotic is usually prescribed empirically. Even though guidelines to empiric prescribing are in place, less than 40% of the prescriptions are in accordance.

### **Methods**

Key barriers and precursors to behavioural change were identified through formative research including in-depth interviews, focus groups and collective intelligence with GPs and patients. This informed the design of the intervention.

The SIMPlE study integrates components for both GPs and patients. Interactive workshops, audit and feedback reports and automated electronic prompts summarising recommended first line antimicrobial treatment and, for one intervention arm, a recommendation to consider delayed antimicrobial prescribing were offered to the GP. Multimedia applications and information leaflets were available to patients.

### **Results**

30 practices were recruited into three groups: control, improved prescribing and improved, delayed prescribing. The study aims to increase prescribing according to the guidelines. Additionally, a reduction in prescribing as a result of delayed prescribing is expected in the third delayed prescribing group. Data is collected through a remote electronic anonymised data extraction system (iPCRn), mobile applications and through GP and patient interviews and surveys.

### **Conclusion**

The SIMPlE study is a social marketing informed complex intervention to support the improvement and management of prescribing for UTIs in the community. The feasibility and success of integrated GP support, automated audits and multimedia applications for support and data collection will be assessed.

## The role of the “General Check Up” in the asymptomatic adult – a study of GPs in the North West of Ireland

*Murphy M, McGloughlin M, Walkin S*

### **Background**

Asymptomatic General Check Ups (AGCUs) in primary care are common in Ireland. Detractors of AGCUs cite their poor evidence base and the harms of over-investigation. Proponents cite the opportunity for the GP to engage in health promotion and explore hidden concerns of the patient.

### **Aim**

Our aims were to research Irish GP experiences with AGCUs, including what is typically performed and assessing GP attitudes towards AGCUs.

### **Methods**

We performed an observational research project by means of a cross-sectional postal-survey of 136 GPs in the North West of Ireland. This was a mixed-method study with both qualitative and quantitative analysis.

### **Results**

There was a 57% response rate. AGCUs were common, comprising over 6% of consultations. 63% of GPs felt that AGCUs were useful. 70% did not agree with private companies offering AGCUs. Most GPs thought improved guidance on the area would help both doctors and patients. Large differences existed amongst GPs in what they deemed to be important aspects of the AGCU. Cardiovascular risk assessment and blood investigations were deemed the most important. GPs had concerns about the AGCU relating to patients being falsely reassured, about the workload and about overdiagnosis.

### **Conclusions**

GPs take very different approaches to such a consultation and they have frustrations about the evidence-base of the AGCU. The majority felt the AGCU can be clinically useful. The need to appropriately challenge misplaced health beliefs pertaining to the AGCU as part of the process of informed consent was highlighted. Where this leaves the AGCU, much like the evidence-base that underpins it, is uncertain.

## Irish GP referral rates and influencing factors

*Gouda Pishoy, Coyle E, Ghloinn S, Walkin S, Quinn R, Glynn L*

### **Background**

General practitioners (GPs) play a key role as the gatekeepers of access to secondary care in Ireland, and indeed in many healthcare systems worldwide. This role has been shown to be crucial in providing cost-effective healthcare delivery.

### **Aim**

Our study aimed to analyse the GP referral process and the factors by which they may be influenced, particularly those that are unique to the Irish healthcare system.

### **Methods**

Between July and November 2011, 80 GPs who were either members of the County Sligo General Practitioners' Society or the Sligo Specialist Training Programme in General Practice participated in our study. The following data was collected on 100 consecutive patients: patient age, gender, GMS status, whether or not the patient was referred, and if so, to which specialty they were referred. Statistical analysis was conducted using PASW Statistics 20.0.

### **Results**

Of the 7993 consultations, 936 (11.7%) patients were referred to secondary care. There was a wide spectrum of GP referral rates, ranging from 1% to 26%, with a mean average GP referral rate of 11.7% +/- .72%. GMS eligibility was found to be associated with referral rates, with 9.7% of GMS eligible patients referred to secondary care compare to 15.3% of GMS ineligible patients OR 1.67 (95% CI 1.45–1.92). GP gender was also associated with referral rates with female GPs having a referral rate of 13.2% +/- 6.1 compared to male GPs at 10.4% +/- 6.5 (p = 0.016).

### **Conclusions**

Previous work has concluded that rather than attempting to standardise referral rates, we should be striving to reduce inappropriate referral rates. As a result, future studies should aim to measure both the appropriateness of referrals as well as the outcomes of the referral. Although studies of this sort have been conducted in the UK, they have yet to be reproduced in Ireland.

## **A study into reducing prescribing costs in primary care by increasing rates of generic prescribing among general practitioners**

***Naughton T, Mid Leinster Specialist Training Programme in General Practice***

### ***Background***

There is a need to find methods of reducing expenditure in healthcare that is acceptable to all. Increasing rates of generic prescribing is considered a safe and effective method of reducing costs.

### ***Aim***

This study explored perceived barriers to generic prescribing among GPs in Ireland and methods of increasing generic prescribing rates.

### ***Methods***

A one page questionnaire was devised and circulated to established GPs and GP registrars on vocational GP training programmes. The questionnaire evaluated the physicians' knowledge of the generic names of commonly dispensed branded medications. The questionnaire then asked GPs for their view on perceived barriers to and methods of increasing generic prescribing.

### ***Results***

A total of 55 questionnaires were completed. 89% of those surveyed were able to correctly identify the generic equivalent to frequently dispensed branded medications. 51% more commonly prescribed these medications by generic name. Greater familiarity of the brand name of a medication was the most commonly identified barrier to generic prescribing. 100% of those surveyed believed establishing computer software packages which facilitate generic prescribing would be a beneficial method of increasing generic prescribing rates.

### ***Conclusions***

GPs continue to prescribe commonly dispensed medications by brand name despite knowledge of the name of their generic equivalent. The development of computer software packages that facilitate generic prescribing presents an opportunity to improve generic prescribing rates.

## Prescription of proton pump inhibitors (PPI) – a one billion euro question!

*Rajpal R, Begley J, Foyle D, McKenna B, Igoe G*

### Background

PPIs are one of the most commonly prescribed drug groups. They are, however, often prescribed for extended periods at a therapeutic rather than maintenance doses resulting in considerable additional costs.

### Aims

The aim of this study was to determine the appropriateness of PPI use, as per guidance, in patients primarily presenting to primary care or returning from secondary care.

### Method

Prospectively, as patients presented for consultation, and retrospectively, clinical notes and discharge letter from hospitals were reviewed. The data collected included the patient's demographic, whether PPIs were prescribed at the primary or secondary care, indications, patients signs/symptoms, dosage (full versus maintenance), prescription duration, prescribing habits (branded/generic), diagnostic investigations, private-GMS, and whether there was a step-down-dose reduction.

### Results

Medical notes of 252 patients were analysed – 98 Male and 154 female. Median age was 63 years (range 18–76 years). There were 202, 7, 43 patients with medical card, GP-card and private patients respectively. Median duration of PPI therapy was 10 months (range 3–120 months). OGD was performed on 64/252 (25%) patient, 25 (10%) patients refused or were not fit. There were 63 (25%) generic and 189 (75%) branded prescriptions. The number of prescriptions for branded PPIs-Nexium, Zoton, Losec and Protium were 98, 28, 49, 14 times respectively and for generic-brand; Esomeprazole, Lansoprazole, Omeprazole and Pantoprazole were prescribed 23, 10, 29, 1 times respectively. First prescription of PPIs were issued by the medical team, surgical team, MAU, casualty, not-specified, transfer-of-care and the primary-care were 35, 67, 16, 7, 21, 4, 102 of cases, respectively. The duration of therapy was specified in 35/252 (14%) patients. 140 (55%) patients had approved indication. 89/140 (35%) patients were at the right dose. 51/252 (20%) patients could benefit from a step-down-approach. In 62 patients no indication was documented. In 23 patients PPI was co-prescribed with corticosteroids and NSAIDs. 11 patients had previous history of H-pylori. 26 patients previously had a PUD but currently asymptomatic. In 21 patients, it was not possible to establish the indications.

### Discussion

Prolonged duration of PPI treatment is contributor to cumulative prescribing volume and habit of branded prescribing has cost implications. This study shows that more thought is needed when PPI are prescribed both in general-practice and in hospitals (where the 150/252=59%) recommendations for treatment were originated) to ensure appropriate, safe, and cost conscious prescribing.

### Conclusion

Many patients have legitimate clinical needs for PPI. However, there are vast proportions of patients who after review may benefit from discontinuation or step-down-Therapy. This would not only reduce the number of patients who suffer side effects but would also contribute to a cost saving.

## ICGP research ethics approved projects 2012 and 2013

<b>Stephanie Dowling</b>	A qualitative study of the experience of doctors who completed electives in Malawi or Australia as part of their vocational training for general practice
<b>Velma Burns</b>	An evaluation of the b4udecide.ie, i.e. relationships and sexual health initiative in youth settings
<b>Aoife Dermody</b>	National community detoxification pilot: process and outcome evaluation
<b>Grainne Flannelly</b>	Cervical Check client satisfaction survey
<b>Genevieve Fay</b>	Survey of GPs' management of osteoporosis and osteopenia, and their knowledge and utilisation of physiotherapy services in Ireland
<b>Louise Connolly</b>	A survey of general practitioners' "attitudes to self care"
<b>Eamonn Coyle</b>	GPs', practice nurses', and patients' perspective on managing cardiovascular multimorbidity: a service provider-patient approach to developing interventions
<b>Suzanne Dunne &amp; Walter Cullen</b>	Attitudes, beliefs and behaviours towards generic versus proprietary medicines in Ireland: a cross sectional study of key stakeholders
<b>Brendan O'Shea</b>	Is it acceptable to systematically measure height and weight of children aged 5–12 years, attending their GP for routine care in general practice
<b>Hilary Jane Hamilton</b>	Perspective of nursing home staff on the role of advance care plans
<b>Stephanie Dowling</b>	Does participation in CME influence medical practice? The experience of Irish doctors
<b>Anna Linnane</b>	What makes a good GP practice? A patient perspective
<b>Pat Durcan</b>	Detection of atrial fibrillation in primary care
<b>Emer O'Shaughnessy</b>	Depression, anxiety, stress and burnout in Irish GPs and their association with job satisfaction and working practices
<b>TH Lynch</b>	An Irish observational study to evaluate LUTS storage symptom improvement in men being treated with vesitirim
<b>Marion Rowland</b>	An evaluation of Helicobacter pylori prevalence and strain diversity in a unique cohort of adolescents in a developed country
<b>Una Doherty, Ana Louise Hawke &amp; Jamie Kearns</b>	Fitness to drive in cognitive impairment – a GP's perspective
<b>Anne Linnane</b>	Looking outside the consultation room – patients' perspective on practice design
<b>Marta Czerner, Triona De Faoite &amp; Denise Kiely</b>	Sun protection awareness and practice among adult general practice population
<b>Louise Malone</b>	A study to explore the knowledge, skills and attitudes of GP trainees towards continuous professional development

<b>Niamh O'Donnell</b>	Patient in waiting: an exploration of patients attitudes to waiting for appointments with their GP an acceptable waiting times in the wating room
<b>Walter Cullen</b>	Are phycho-social interventions for problem alcohol uses effective among problem drug users in primary care (PiNTA): a controlled before-and-after feasibility study
<b>Katherine Arthurs, Graham Gordon &amp; Emma Tobin</b>	Busy or burn out?
<b>Sarah Lawlor</b>	A study on the perceptions of an inner city homeless population of their own health and lifestyles, the service provided by their general practitioner and the barriers that they face in accessing health care
<b>Ciara McHugh</b>	A study to establish the percentage of people with uncomplicated epilepsy who are seizure free for >4 years in an Irish general practice and to quantify what proportion are interested in discontinuing their anti-epileptic drugs
<b>Sarah Clifford</b>	The practice of sexually transmitted infection and HIV testing amongst GPs in the Mid-West region
<b>Thomas McMahon</b>	A pilot study to investigate the potential impact of enhanced integration between a suburban university teaching hospital emergency department and a nearby primary care extended hours service
<b>Susan Cashman</b>	Osteoporosis: patient understanding and awareness. Comparing two GP practices and assessing if onsite osteoporosis clinics influence patient knowledge of osteoporosis
<b>Peter Byrne</b>	Prospective study to establish the prevalence of repeat prescriptions which require action in a formal annual assessment in primary care
<b>Nicola Day &amp; Aoife Storan</b>	Management of skin lesions in general practice
<b>Mairead McMahon</b>	GP opinion on the use and availability of psychotherapy in primary care
<b>David Millman</b>	General practitioners' attitudes towards obesity and management in young adults aged 12–18 years
<b>Claire Gibson</b>	Ophthalmology in primary care: a study of general practitioners knowledge and confidence
<b>Brendan Boland</b>	Colon cancer – factors influencing presentation and recognition in a primary care setting
<b>Ann Beckett</b>	Simply the breast – an examination of infant feeding practices
<b>Andrew Murphy</b>	Exploring the culture of prescribing and consuming antibiotics for uncomplicated UTIs in the west coast of Ireland
<b>Julie O'Connor</b>	Paediatrics and child health in general practice: the trainees perspective
<b>Fiona O'Reilly</b>	Diabetesd management: An Audit of 10 GP practices
<b>Andrew Murphy</b>	Dyslipidemia International Survey Ireland (DYSIS) lipid target achievement in high risk patients with coronary Heart Disease (DYSIS II)

<b>Gerard Bury</b>	ECG screening of opiate substitution therapy patients
<b>Breda Smyth &amp; Pat Durcan</b>	To establish the incidence and prevalence of atrial fibrillation in general practice
<b>Clement Leech</b>	Closed certification pilot study for first time certification
<b>Andrew Murphy</b>	Protocol for the urinary tract infections in the community (UTI-C) intervention: A randomised trial of a social marketing informed complex intervention to improve antimicrobial prescribing for urinary tract infections in primary care
<b>Andrew Murphy</b>	Resistant hypertension in general practice: a feasibility study for patient identification and description
<b>Dorothy Leahy</b>	The role of the GP in addressing mental and substance use disorders in young adults: A mixed methods approach
<b>Walter Cullen</b>	Supporting practice-based research innovation and teaching: a mixed methods study in the role of general practice at UL-GEMS (SPIRIT study)
<b>Claire Collins</b>	National audits in general practice – IPCRN; Diabetes audit as an example
<b>Olawale Olarewaju</b>	User fees and GP utilisation - A policy evaluation of the extension of GP-visit cards to diabetes patients in Ireland
<b>Jan Klimas</b>	Primary care of patients in opioid substitution treatment: pressing issues posing problems to patient life
<b>Davina Swan</b>	A national, cross-sectional study of an innovative technology to screen for atrial fibrillation in general practice
<b>Ciara O’Riordan</b>	Use of natriuretic peptide testing in general practice in the west of Ireland: a quantitative survey
<b>Karen Browne</b>	An exploration of the nature and impact of the combined-care model in pregnancy at the operational level of the antenatal encounter, from the perspective of service-users and providers, in the greater Dublin area
<b>Anne Mac Farlane</b>	Using community interpreters in general practice consultations: Perspectives of migrants, general practice staff and community interpreters
<b>Margaret Dunlea</b>	An exploration of the nature and impact of the combined-care model in pregnancy at the operational level of the antenatal encounter, from the perspective of service-users and providers, in the greater Dublin area
<b>Kevin O’Brien</b>	Health behaviour and response to stress among NCHDs – barriers and solutions
<b>Shirley McQuade</b>	Trichomonas vaginalis – a prevalence study using a molecular detection method
<b>Anne McFarlane</b>	Primary care reform in Ireland – an analysis of ‘top down’ and ‘bottom up’ innovation
<b>Margaret O’Riordan</b>	The lessons GPs learn from their patients: a narrative and concordance-based study of GP trainers
<b>Anne-Marie Regan</b>	Evaluating the predictive validity of situational judgement test (SJTs) measures in postgraduate selection to general practice training and subsequent job performance

<b>Aidan Culhane</b>	Establishing and maintaining educational and safety standards in teaching general practices – the EMESS Project
<b>Aine Jones</b>	The practice of sexually transmitted infection and HIV testing amongst GPs in Ireland
<b>Elisabeth Schaffalitzky</b>	Evaluating an educational intervention for youth mental health and substance use in general practice
<b>Amy Corcoran</b>	Medical decision-making in the event of incapacity
<b>Andy Delaney</b>	A study of drinking practices of a general practice population in a north Wicklow town, and assessment of awareness of available supports.
<b>Ciaran O’Fearraigh</b>	The feasibility of structured cardiac screening of athletes in general practice in Ireland
<b>Emily Norris</b>	Do nursing home patients with type 2 diabetes have tighter glycaemic control (as measured by HBA <sub>1C</sub> ), than their community counterparts?
<b>Erica Murphy</b>	Attitudes and approaches of Irish general practitioners to clinical risk management
<b>Finola Gallagher</b>	A study of the prevalence of urinary incontinence in women up to 12 months postpartum
<b>Imelda Hackett</b>	Parental perception of childhood weight and assessment of related obesity risks
<b>Kevin Neylon</b>	A study of personal health practice amongst a cohort of GPs
<b>Louise Smyth</b>	A study to assess the knowledge, attitude and practice of breastfeeding in Dublin’s inner city
<b>Maeve Doheny</b>	An investigation of the relationship between loneliness and the frequency of attendances to the GP
<b>Michael Callaghan</b>	Description of the impact of an unplanned closure of a regional hospital on patient care; a mixed methods case study
<b>Niamh Lynn</b>	Knowledge of and attitudes to human immunodeficiency virus (HIV) in general practice
<b>Nicola Flynn</b>	Exploring experiences of close family and friends following loss by suicide in order to improve GP management of suicide bereavement
<b>Phil Kiernan</b>	A study of patients’ knowledge of factors effecting sleep and relevant interventions
<b>Romaine King</b>	A survey of Irish general practitioners’ sick certification practices and attitudes towards the introduction of a “fitness-to-work” certificate
<b>Sarah Hyde</b>	Patient satisfaction with primary care out of hours care, and their suggestions for improvement
<b>Marion Walsh</b>	What are the differences between trainee and trainer case loads and can this be used to identify learning needs?
<b>Aileen Collins</b>	A study of general practitioners’ perspective on discharge/ outpatient prescriptions from Waterford Regional Hospital
<b>Thomas O’Byrne</b>	Obesity: the weight on general practice
<b>William Sheilds</b>	Can distribution of evidence based antibiotic guidelines influence prescribing rates in out of hours co-ops?

## Projects approved for funding under the ICGP Research and Education Foundation

<b>Dermot Folan</b>	Design of ICGP leadership for general practice
<b>Ray O'Connor</b>	Care of type 2 diabetes in general practice. Current state and perceived barriers to change
<b>Julie O'Connor</b>	Paediatrics and child health in general practice. The trainee's perspective
<b>Maureen Kelly</b>	Does the health professional's admission test predict performance in undergraduate tests of communications and clinical skills? An observational cohort study
<b>Margaret O'Riordan</b>	The lessons GPs learn from their patients: a narrative and concordance-based study of GP trainers in three countries
<b>Aidan Culhane</b>	Establishing and maintaining educational and safety standards in teaching general practices – the <i>EMESS Project</i>
<b>Audrey Russell</b>	Patient perceptions and attitudes towards dementia screening in an Irish primary care setting
<b>Susan Smith</b>	General practice in areas of deprivation in Ireland
<b>Aileen Collins</b>	A study of general practitioners' perspective on discharge/ outpatient prescriptions from Waterford Regional Hospital
<b>Ciara O'Riordan</b>	Use of natriuretic peptide testing in general practice in the west of Ireland: a quantitative survey
<b>Ciaran O'Fearraigh</b>	The feasibility of structured cardiac screening of athletes in general practice in Ireland
<b>David Keohane</b>	General practitioners and exercise. Is it time to self-prescribe?
<b>Karen Browne</b>	Where should long-term conditions be managed? The patients' perspective
<b>Mairead Nic An Fhaili</b>	Exploring experiences of close family and friends following loss by suicide in order to improve GP management of suicide bereavement
<b>Mona O'Boyle</b>	Description of the impact of an unplanned closure of a regional hospital on patient care – a mixed methods case study
<b>Neasa O'Keeffe</b>	Health behaviours and response to stress among NCHDs – barriers and solutions
<b>Orlaith Finucane</b>	Knowledge of and attitudes to human immunodeficiency virus (HIV) in the community
<b>Romaine King</b>	A survey of Irish general practitioners' sick certification practices and attitudes towards the introduction of a fitness-to-work certificate

## Projects approved to access the ICGP membership database 2012 /2013

<b>Stephane Dowling, GP</b>	Does participation in Continuing Medical Education Small Group Learning (CME-SGL) influence medical practice? The experience of Irish doctors
<b>Doreen Myers, GP</b>	Study of doctors' motivation in attending externally provided educational activities
<b>Desmond O'Neill, Traffic Medicine, RCPI</b>	GP survey on Medical Fitness to Drive Guidelines pre and post release of the guidelines
<b>Corina Naughton, ICS</b>	Evaluation of ICS Cancer Information Services
<b>Sarah Lyons, UCD</b>	GP survey on Open Access Policies and Use of Medical Information
<b>Margaret Barry, UCD</b>	GPs' needs in relation to youth mental health and the use of technology to support young people

