

# National Institute of Health Sciences Research Bulletin

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# Abstracts

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# Outcome Data Analysis on Cluster Presentation of Out-of-Hospital Cardiac Arrests



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## INTRODUCTION

Sudden cardiac arrest refers to the abrupt cessation of the mechanical activity of the heart leading to immediate haemodynamic collapse carrying a significant mortality. 34% of patients with witnessed ventricular fibrillation and 6% with any other presenting rhythm survive until hospital discharge.<sup>1</sup> Sustained ventricular tachycardia and ventricular fibrillation are often caused by ischaemic heart disease whereas pulseless electrical activity can be secondary to hypoxia, severe metabolic imbalances, hypovolaemia or other types of shock.

## OBJECTIVES

To examine the patient demographics, management and outcomes for a large volume of Intensive Care Unit (ICU) admissions post-cardiac arrest over a 5 day period.

## METHODOLOGY

Retrospective case report series of ICU admission data and review of individual patient medical records in a seven bed multidisciplinary general ICU during the month of January 2014.

## RESULTS

Eight patients were admitted to the ICU during the month of January following cardiac arrest. Interestingly, 7 out of these 8 patients were clustered over a 5 day period. The average age for these patients was 62 years of age. 60% of these patients were male. 2/3 of the cases reviewed were out-of-hospital events. The mean downtime for all 7 patients was 11.5 minutes. Other parameters examined included the use of therapeutic hypothermia, the presence of shockable rhythms on initial assessment, intervention via coronary angiography and aetiology. The average length of ICU stay vs. hospital stay was 10.5 days vs. 22 days. Mortality outcome during ICU stay was 42%, increasing to 70% for duration of hospital stay (5 out of 7 patients). 28 day mortality post event was also examined.

## CONCLUSION

Poor survival outcomes were evident in this cohort, and no clear benefit of therapeutic cooling for survival. There was also no evidence of any one dominant risk factor amongst this group of patients or clear pattern for the high volume of presenting cases over such a short period.

## REFERENCES

Available on request.

# An Audit of the Diagnosis and Therapy of Acute Pancreatitis



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## INTRODUCTION

Acute pancreatitis remains a common surgical emergency. Complications relate to uncontrolled systemic inflammation and sepsis both leading to eventual organ failure. In light of the severity of the disease, a number of international health organizations have issued guidelines with respect to appropriate management and investigation of patients with pancreatitis. The current study aimed to evaluate current practice in a regional unit and compare standards to those issued by the American College of Gastroenterologists (ACG).

## METHODOLOGY

Following ethical approval, a password protected electronic database was generated comprising patients with a diagnosis of acute pancreatitis during the interval July to August 2014. Data was obtained from HIPE, hospital records and patient chart review. Guidelines issued by ACG were utilized as a proxy of effective clinical management. Clinical, diagnostic and treatment standards for patients admitted with acute pancreatitis were measured and compared to ACG guidelines. The evaluation was performed before and after staff education (power point presentation, circulation of guidelines via email and a poster in the Accident and Emergency Department). Standards of care were compared between patient groups (those admitted before and admitted after staff education) to determine the effect of staff education.

## RESULTS

### *Prior to staff education*

One hundred patient notes were reviewed prior to staff education. Severity scores were calculated in 80 patients. Predicted severe acute pancreatitis (Glasgow severity score >3) was documented in 20 cases at admission. 12/20 (60%) were admitted to HDU. The median time (from admission) to abdominal CT was 4.3 days. Eighty five patients received  $\geq 3$ L of intravenous fluids within 24 hours of admission. Empirical antibiotics were commenced in 7. Eighty five patients underwent diagnostic ultrasound abdomen. Twenty patients demonstrated evidence of biliary obstruction. Of these 20, none (0%) underwent urgent ERCP within 48 hours of admission. There were 10 cases of idiopathic pancreatitis. Three (30%) underwent a second abdominal ultrasound and none underwent MRCP. Twenty cases were predicted severe acute pancreatitis. The overall mortality rate in this cohort was 2%. All 20 underwent abdominal CT. Necrosis was reported in 11 (55%) of cases and 7 patients (58.33%) were commenced on appropriate antibiotics. Median time to interval cholecystectomy was 58 days.

### *Post staff education*

One hundred patients were reviewed following staff education. Severity scores were calculated in 95. There were a total of 15 predicted severe cases, 13 (86.67%) of which were transferred directly to HDU. The median time to abdominal CT was 4.1 days. Eighty three patients received  $\geq 3$ L of intravenous fluids within 24 hours of admission. Two patients were commenced on empirical antibiotics. Ninety one underwent abdominal ultrasound during their admission. Twenty five patients were admitted with evidence of biliary obstruction. None of these underwent urgent ERCP (<48 hours). There were 13 cases of idiopathic pancreatitis. All 13 (100%) underwent a second interval ultrasound and MRCP. Thirteen cases were admitted to HDU/ICU. All 15 predicted severe cases underwent abdominal CT. Necrosis was evident in 8 (53.33%) patients and all 8 (100%) were commenced on appropriate antibiotic therapy. Median time to interval cholecystectomy was 65 days.

## CONCLUSION

This study aimed to determine if current practice was acceptable. A number of improvements were noted when the final audit loop was closed. The severity score was more frequently completed. Fewer patients were inappropriately placed on empirical antibiotics and more were treated with correct antibiotics in infected necrotic pancreatitis. In idiopathic pancreatitis all patients underwent appropriate investigations following staff education. Of note, there was no substantial difference in time to abdominal CT, urgent ERCP (ideally <48 hours) and time to interval cholecystectomy (2 weeks). This is likely to reflect excess demand on radiology, endoscopy and admission services rather than an unawareness of ideal current practice.

## Competency in Scrotal Examinations - A Survey of Newly Qualified Doctors



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### INTRODUCTION

Testicular cancer awareness has increased following a number of high profile public information campaigns, emphasising early detection and early presentation to a doctor. However, given its personal and intimate nature, teaching scrotal examination technique to medical students is difficult, in comparison to abdominal or chest examinations, for example. We aimed to assess opinions from newly-qualified doctors of the quality of scrotal examination training in medical school.

### METHODOLOGY

An online survey was created using SurveyMonkey™ and distributed to 475 Interns in the Republic of Ireland (ROI) between October and December 2012.

### RESULTS

In total, 179 responses were received (response rate =37%). Overall, 67 respondents were male (37.4%). One hundred and sixty four respondents (91.4%) completed medical school in ROI. Only 101 (56.4%) had formal scrotal examination (SE) training during medical school. Training methods used included demonstration models (50%), human volunteers (19%) or both (21%). The majority of respondents felt that SE training was inadequate in medical school (74.9%) and that they did not feel competent in performing (SE) on graduating (73.2%). Of note, 175 respondents (97.8%) do not routinely examine the scrotum when examining a male abdomen. Testicular self-examination is not practiced by up to 33.3% of the male respondents.

### CONCLUSION

Scrotal examination is poorly taught in medical schools with many new graduates not competent in the technique. This could compromise a doctor's ability to educate patients in testicular self-examination. More importantly, this lack of competence is likely to compromise a doctor's ability to diagnose important scrotal conditions such as torsion and cancer.

### PRESENTED

As a poster presentation at the British Association of Urological Surgeons Annual Meeting in June 2013 by Niall Kelly, Urology Research Registrar.

## Trends in Hospitalizations for Diabetes among Irish Children and Teenagers 2005-2012

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### INTRODUCTION

Diabetes mellitus is a chronic condition associated with significant morbidity and mortality. Early diagnosis and appropriate management is essential to reduce the occurrence of complications. International studies indicate that the burden of Type I and Type II diabetes is substantial and is likely to rise among children as well as adults.<sup>1</sup> It is estimated that 0.2% of all children (aged 0-19 years) in the Republic of Ireland (2,229 children) have Type I diabetes.<sup>2</sup>

### OBJECTIVE

The aim of this study was to determine trends in hospitalizations for diabetes in children and teenagers (0-19 years) in Ireland for 2005-2012 inclusive.

### METHODOLOGY

All hospital discharges for those aged 0-19 years with a principal or any diagnosis of diabetes (ICD-10 codes, E10, E11, E13-E14 inclusive) were extracted from the Hospital In-patient Enquiry (HIPE) database. Pregnancy-related discharges were excluded from the study. The data were analysed using STATA and SPSS.

### RESULTS

There were 10,381 hospital discharges with a diabetes diagnosis increasing by 407 (27.3%) from 1,083 in 2005 to 1,490 in 2012. The age standardized rate significantly increased from 93.3 per 100,000 to 120.1 per 100,000 population in 2012. See Figure 1.

Age standardized rate for hospitalizations with a diabetes diagnosis recorded increased significantly by 28.7% against a backdrop of a rate increase of 11.8% for hospitalizations without a diabetes diagnosis recorded in young children and teenagers. The majority were due to Type I diabetes (n=9,870, 95.1%). Patients with Type I diabetes were younger than those with Type II diabetes (11.7 years vs. 16.3 years,  $p<0.01$ ). The majority of patients were female (n=5,458, 52.6%) and median age was 12 years with no significant difference between genders ( $p>0.05$ ). There was a higher proportion of medical card patients among this cohort compared to patients of similar age with a non-diabetic diagnosis (43% vs. 36.3%,  $p<0.01$ ). The median length of stay (LOS) was 2 days representing 35,828 bed days.

### CONCLUSION

The number and rate of young children (0-19 years) hospitalized with a diabetes diagnosis in Ireland has increased over the study period. The over-representation of medical card holders in this cohort is of concern and the effect of diabetes on children of less well-off families (i.e. in receipt of a medical card) needs to be explored further.

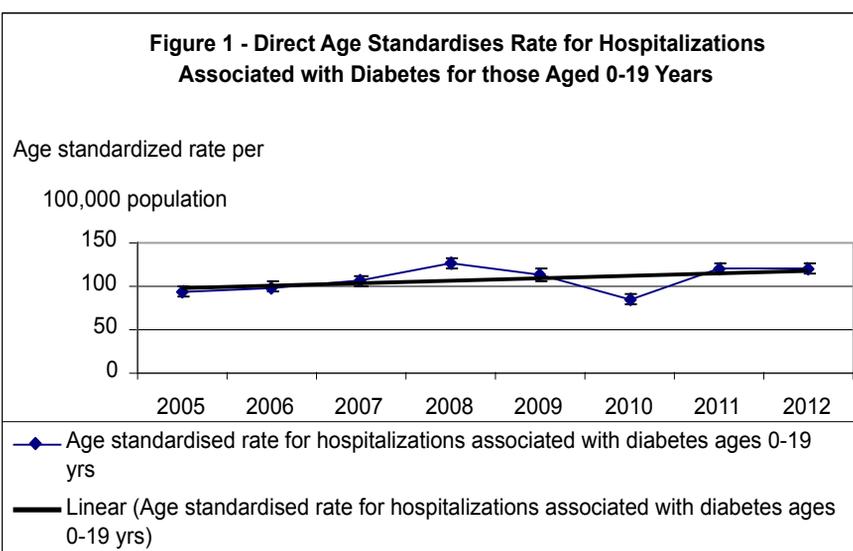
### REFERENCES

Available on request.

### PRESENTED

At the North Dublin Voluntary Forum (NDVF) Diabetes Lifespan Conference on November 14th, 2013 by Dr. Anne O'Farrell.

**Figure 1 - Direct Age Standardises Rate for Hospitalizations Associated with Diabetes for those Aged 0-19 Years**





# An Evaluation of the Profile of Patients Attending Secondary Diabetes Care Facilities in Cork University Hospital and Identification of Local Obstacles to Implementation of the National Integrated Care Model for Type 2 Diabetes

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## INTRODUCTION

Integrated diabetes care management has proven to be a significant innovation in chronic care management and an efficient way to improve the quality of diabetes care.<sup>1</sup>

Its successful implementation hinges on the willingness of general practitioners to implement the proposed national integrated care model.

## OBJECTIVE

To evaluate the profile of patients with Type 2 Diabetes attending secondary diabetes care in CUH and identify barriers preventing local effective integrated diabetes management.

## METHODOLOGY

A chart review was carried out on 534 patient records of the diabetes clinic of a consultant endocrinologist over the last five years.

A survey was used to assess GP perspectives. Data was collected using a self-completion confidential questionnaire sent to 100 GPs addressing 3 topics; GP training; current diabetes care delivery and relationships with secondary care.

## RESULTS

It was found that 7% (n=40) of patients are suitable for discharge to primary care only as per criteria outlined in the Integrated Care Model proposed by the National Diabetes Programme. A further 44% (n=231) may be discharged but require specialist input.

The questionnaire response rate was 53% (n=53). It is indicated that 30% of GPs are willing to become involved in the development of integrated care. Lack of remuneration was reported as the predominant barrier. A total of 55% underwent diabetes training in the last 3 years; 70% maintain a diabetes register; 13% feel adequately supported by a diabetes specialist team.

## CONCLUSIONS

The vast majority of patients attending secondary care require specialist input with only 7% recommended for primary care management only. Widespread engagement of GPs in the implementation of integrated care will require remuneration, better access to auxiliary services and ongoing access to diabetes education for the multidisciplinary team. This should improve outcomes for individual patients. Additional funding could realize significant long-term savings by reducing complications associated with inadequately managed diabetes.

## PRESENTED

1. At the North Dublin Voluntary Forum, Lifespan Diabetes Research Conference in the Rotunda Hospital on November 14th, 2013 by Katie Frost.
2. At the Association of University Departments of General Practice in Ireland (AUDGPI) Annual Scientific Meeting in University College Cork on March 7th, 2014 by Katie Frost.

## Factors Associated with Hospitalizations among the Elderly with a Decubitus Ulcer (Pressure Ulcer) in Acute Irish Hospitals 2008-2012



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### INTRODUCTION

A pressure ulcer (PU) is an ulcerated area of skin caused by irritation and continuous pressure on part of the body. It starts as an area of skin damage. The damage can then spread to the tissues underlying the skin. In severe cases, there can be permanent damage to muscle or bone underneath the skin. Pressure ulcers are classified by stages as defined by the National Pressure Ulcer Advisory Panel (NPUAP).<sup>1</sup> Originally, there were four stages (I-IV) but in February 2007 these stages were revised and two more categories were added, deep tissue injury and unstageable. Stage IV and deep tissue injury and unstageable are the most severe stages of pressure ulcers. Pressure ulcers can occur in all age groups but are a particular problem in elderly persons living in a variety of settings including hospitals. Risk factors associated with PU's include pressure due to immobility i.e. resulting from the inability to change position or to feel discomfort caused by pressure; friction whereby even friction from pulling someone across bed sheets can damage small blood vessels that supply the skin tissue; poor nutrition; and moisture which can come from sweating due to fever or leakage of urine or stool.

### OBJECTIVE

The aim of this study was to determine factors associated with having a PU diagnosis recorded as either a principal or additional diagnosis among elderly (aged 65+ years) in-patients in Irish hospitals during a 5 year study period of 2008-2012.

### METHODOLOGY

All in-patient hospitalization discharges for those aged 65 years and older (i.e. the elderly) were extracted from the HIPE system during a 5 year study period (2008-2012). All in-patient hospital discharges for elderly patients were extracted from the Hospital In-Patient Enquiry (HIPE) datasets for 2008-2012 using the Health Atlas. Those discharges with a PU diagnosis were identified using the ICD-10-AM code L89\* Decubitus (pressure) Ulcer. Those with a PU diagnosis were compared and contrasted to those without a PU diagnosis. Statistical analyses were carried out in Stata and StatsDirect.

### RESULTS

There were a total of 823,633 in-patient hospital discharges for the elderly during the study period and of these, 4,763 (5.8%) had a PU with 424 (8.9%) of these having a PU as a principal diagnosis. A total of 525/4,763 (11%) had a Stage IV (severe) PU diagnosis. The age standardised rate increased significantly from 183.1 per 100,000 in 2008 to 228.4 per 100,000 in 2012,  $P < 0.01$ . Forward selection stepwise regression analysis identified the following factors as being *independently and significantly* associated with having a PU diagnosis:

- older age >85 years, (Odds Ratio (OR) 1.9,  $p < 0.001$ )
- having diabetes (OR 1.84,  $p < 0.01$ ) as co-diagnosis
- having incontinence (OR 6.3m  $p < 0.01$ ) as co-diagnosis
- having malnutrition (OR 14.9,  $P < 0.01$ ) as co-diagnosis
- being admitted from a nursing home (OR 2.9)
- being a medical card holder (OR 1.2)

### CONCLUSION

This study has found that PUs are increasing in our in-patient elderly population. PUs can be prevented and minimised. Pressure Ulcer Prevention points as by the National Pressure Ulcer Advisory Panel (NPUAP)<sup>1</sup> should be adhered to and the use of evidence-based predictive tools such as the Braden Scale<sup>2</sup> for predicting pressure score risk should be adhered to in hospitals.

### REFERENCES

Available on request.

### PRESENTED

As an oral presentation at the 1st Annual SPHeRE (Structured Population and Health Services Research Education) Network Conference on Health Research, Policy and Practice on Friday January 9th, 2015 in the Albert Theatre, RCSI, 123, St. Stephen's Green, Dublin 2 by Dr. Anne O'Farrell.

## Beliefs about Medications and Adherence to Inhalers in Asthma Patients during Pregnancy

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### INTRODUCTION

Asthma is the most common chronic disease in pregnant women, complicating up to 12.4% of pregnancies, and these rates continue to rise.<sup>1</sup> Non-adherence to controller medication increases this risk, and average compliance with medication during pregnancy is poor.<sup>2</sup> Ireland has the fourth highest prevalence of asthma in the world with 470,000 having a diagnosis of this condition in 2006.<sup>3</sup>

### OBJECTIVE

To assess compliance with prescribed asthma medications in pregnant women and its relationship with women's attitudes and beliefs.

### METHODOLOGY

Prospective study of asthmatic women in the delivery ward in University Maternity Hospital Limerick from March to June 2013. All (n=25) completed 3 questionnaires: Asthma Control Questionnaire (ACQ), Beliefs about Medications Questionnaire (BMQ) and Medications Adherence Report Scale (MARS). Patients' pharmacies were contacted about the collection of asthma medications during pregnancy and 6 months prior to that.

### RESULTS

All women were Irish, mean age 28.9 years. Of these, 28% were current smokers, 20% had smoked previously. In more than half of the patients (15 women, 60%) asthma had been diagnosed under the age of 16. The mean age for adult-onset asthma was 24.3 years (range 20-35). The overall mean asthma duration was 14.3 years.

All women reported to be on short-acting beta-agonists; 15 women (60%) were also prescribed either inhaled corticosteroids (7) or combined LABA/corticosteroids (8). Ten women (40%) reported subjective deterioration in their asthma during pregnancy, with poor asthma control in 9 (36%) (ACQ). Three (12%) had pregnancy-related complications (preterm delivery, small baby weight, intrauterine growth retardation). Ten (40%) had asthma-related GP visits during pregnancy. Half of these were multiple episodes.

Nevertheless, almost every third woman (28%) stopped collecting her inhalers from the pharmacy when she became pregnant.

Only 3 (12%) were compliant with their medication during pregnancy (MARS). The majority of patients (72%) appreciated the value of medications in asthma management, reflected by positive *necessities-to-concerns* ratio in BMQ. Scores on Harm/Overuse scale in BMQ were also high suggesting unmet women's concerns about the safety of medication during pregnancy. See Table 1.

**Table 1 - Percentage of Respondents Agreeing/Strongly Agreeing with Beliefs about Medicine Questionnaire Statements**

|   | % agreeing or strongly agreeing |
|---|---------------------------------|
| <b>Harm scale</b>   |                                 |
| Most medicines are addictive  | 13 (52%)                        |
| Natural remedies are safer than medicines   | 12 (48%)                        |
| Medicines do more harm than good  | 2 (8%)                          |
| All medicines are poisons   | 0                               |
| <b>Over-Use scale</b>   |                                 |
| Doctors use too many medicines  | 8 (32%)                         |
| People who take medicines should stop their treatment for a while every now and again | 15 (60%)                        |
| Doctors place too much trust in medicines   | 10 (40%)                        |
| If doctors had more time with patients they would prescribe fewer medicines           | 12 (48%)                        |

### CONCLUSION

Adherence to inhaled asthma medications during pregnancy is low, in spite of asthma control deterioration in a significant proportion of patients. In spite of their concerns, most women realised the necessity of medication for asthma control.

### REFERENCES

Available on request.

### PRESENTED

As a poster presentation at the American Thoracic Society Meeting on May 18th, 2014 in San Diego, USA.

# Surgical Management of Laryngomalacia in Children above Age 1 at a Tertiary Referral Centre - A Retrospective Review



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## INTRODUCTION

Laryngomalacia is characterised by inspiratory indrawing of the supraglottis and in most children is a self-limiting condition which resolves during the first year of life. A small proportion of children continue to have symptoms beyond this which can significantly impact upon respiratory health, feeding and growth.

## OBJECTIVE

This study aims to define the characteristics and management of children at our institution undergoing surgical treatment for laryngomalacia beyond the age of 12 months.

## METHODOLOGY

All children above age 12 months undergoing surgery for laryngomalacia over a 19 year period (1995 to 2014) were identified from an electronic database. A retrospective chart review was performed and data including demographic, co-morbidities, presenting features and post-operative courses were extracted.

## RESULTS

A total of 19 children were identified who underwent surgery for laryngomalacia within this age group. The mean age at operation was 4.6 years, the oldest child being age 17. Neuromuscular problems were frequent in this cohort, particularly cerebral palsy and global developmental delay. The majority presented with persistent inspiratory stridor. Another common presentation was with sleep-disordered breathing. Surgical procedures performed included aryepiglottoplasty and excision of redundant arytenoid mucosa using 'cold steel' instruments. A unilateral procedure was performed in three patients. No complications were recorded.

## CONCLUSIONS

Laryngomalacia is an unusual diagnosis beyond the first year of life but one that should be considered, particularly where there are associated neuromuscular problems. Within this group, in carefully selected individuals aryepiglottoplasty can be a safe and effective intervention. Unilateral or staged procedures can be useful where there are concerns about precipitating post-operative aspiration.

## Condition Specific General Practitioner Referral Forms- Are They Useful?



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### INTRODUCTION

Referrals to specialist services often contain inadequate information to be able to confidently triage a patient for review. Referral letters contain a varying degree of relevant and irrelevant information regarding the patient.

### OBJECTIVE

The aim of this study was to assess the adequacy of medical information in general practitioners' (GPs) referral letters regarding common urological conditions.

### METHODOLOGY

A retrospective review of all GP referrals was carried out for a 3 month period. Seven common urological conditions were identified (haematuria, urinary tract infections (UTI), incontinence, male lower urinary tract symptoms (LUTS), prostate specific antigen (PSA), phimosis, scrotal mass). For each condition, we devised a list of key parameters that should be included as part of a referral. Each referral letter was then assessed.

### RESULTS

A total of 176 referrals were received over the study period. Of these, 53.4% (n=94) pertained to our 7 specified conditions. In all, 80.9% (n=76) were typed letters. Routine parameters (age/sex/medical/surgical history/medications/allergies) were omitted in 26.6% (n=25). Regarding haematuria (n=26), 11.5% (n=3) included a smoking history, 7.7% (n=2) MSU results, 7.7% (n=2) renal function. Regarding UTI (n=15), 40% (n=6) included more than one MSU report. Regarding incontinence (n=10), 20% (n=2) reported anti-cholinergic use while none reported pad requirements or fluid intake. Regarding male LUTS (n=24), 33.3% (n=8) recorded a PSA, 12.5% (n=3) an urinalysis result and 45.8% (n=11) performed a digital rectal examination.

### CONCLUSION

GP urology referral letters seldom contain all the required information to appropriately triage a patient for review. Condition specific referral forms may assist GPs and specialists to provide a more efficient and safer service.

## The Use of Smartphone Applications by Urology Trainees



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### INTRODUCTION

Mobile phone technology is continuously advancing - the smartphone allows users instant access to information via the internet. Downloadable applications ('apps') are becoming widespread across medical specialties. The aim of this study was to assess the use of smartphone applications among urology trainees in Ireland.

### METHODOLOGY

An anonymous electronic survey was distributed via Survey Monkey® to all urology trainees in Ireland assessing their ownership and use of smartphones and downloadable applications. A search of urology applications was performed using the Apple App Store and the Android Market.

### RESULTS

A total of 36 (81.8%) of trainees responded with 100% ownership of smartphones. Twenty eight (77%) report downloading applications with 11 (30.6%) reporting paying for them. The mean number of applications downloaded was 4 (Range 1-12). Sixteen (44.4%) trainees think applications for smartphones are very useful in clinical practice, 14 (42.4%) think they are useful. A total of 126 urology applications were available. Seventy six (60.3%) were designed for physicians, 46 (36.5%) for patients, 2 (1.6%) for students and 2 (1.6%) for urological nurses.

### CONCLUSION

There are an ever increasing number of urology applications available. Urology trainees are using smartphones as an educational and reference tool and find them a useful aid in clinical practice.

### PRESENTED

As a poster presentation at the Sylvester O'Halloran Surgical Scientific Meeting, University of Limerick in March 2014.

### PUBLICATION

This research has been accepted for publication in The Surgeon. Abstract available at:  
Surgeon 2014 Sep 5. pii: S1479-666X(14)00078-X

## A Prospective Audit of Emergency Urology Activity in an Irish Teaching Hospital



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### INTRODUCTION

The trend towards subspecialisation has led to the development of urology on-call services in most teaching hospitals. However due to budget constraints, many institutions are being forced to consider removing middle grade cover from out-of-hours service. The aim of this study was to audit urology activity through our Emergency Department (ED) over an eight month period.

### METHODOLOGY

A prospective logbook was kept of all urology referrals from ED between August 2012 and March 2013. The diagnosis and patient outcome was recorded for each referral. In cases of suspected renal colic the imaging modality and findings were also recorded.

### RESULTS

A total of 521 patients were referred to the urology service over an eight month period (65 patients/month\*). The most common reasons for referral were renal colic and scrotal pain. Approximately 41.5% of patients per month\* were discharged directly from the ED. One hundred and fourteen patients required emergency surgery (14 patients/month\*). The most common reasons for theatre were insertion of JJ stent (37) and scrotal exploration (10). There were 185 patients referred with suspected renal colic. One hundred and four-four were imaged with IVP of which 66% (96/144) were positive for ureteric calculus. Thirty-five patients had CTKUB and 77% of these (27/35) had ureteric stones. Sixty percent of emergency urology activity is currently provided out of hours.

### CONCLUSION

Emergency urology activity contributes to a significant workload at our institution. Restricting emergency urology cover may limit essential training opportunities for urology trainees.

\*median values.

### REFERENCES

Available on request.

### PRESENTED

At the Irish Society of Urology Meeting in Powerscourt, Co. Wicklow on September 20th, 2013 by Ms. Elaine Redmond (Winner of Registrar's Prize).

## Attitudes of GP Trainees towards the Training Received in Urology on the GP Training Scheme



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Flynn, C.,<sup>2</sup>  
O'Shea, D.,<sup>2</sup>  
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### INTRODUCTION

The majority of patients with scrotal problems or urinary symptoms will first present to their General Practitioner (GP). The importance of the initial examination performed by the GP is often underestimated; however it frequently determines the course of investigation and ultimately treatment. Unfortunately, medical schools have devoted increasingly less time to teaching urology over the past decade. The impact of this decline in teaching on a trainee's assessment of urological complaints remains unclear.

### OBJECTIVE

The aim of this study was to investigate the self-reported competency of GP trainees in assessing urological presentations.

### METHODOLOGY

A questionnaire was circulated to 101 GP trainees from five separate training programmes. The response rate was 100% and this number represents 60% of the total number of trainees across the 5 GP training programmes.

### RESULTS

Only 18 trainees (19%) felt urology was adequately covered on their curriculum. A small yet significant number of respondents felt uncomfortable in their assessment of testicular (28%, 28/101) or prostate (35%, 35/101) pathology and male (17%, 17/101) or female (10%, 10/101) urinary symptoms. Twenty-six trainees (26%) would choose a rotation in urology if available. Another ten trainees felt that attending urology outpatient clinics would benefit training.

### CONCLUSION

This study highlights a number of concerns among GP trainees in relation to their training in urology. These issues should be addressed to ensure that the training scheme sufficiently prepares GPs to manage common urological conditions.

## Paediatric Orchidopexy - An Impending Crisis?

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### INTRODUCTION

Undescended testis (UDT) is one of the most common congenital abnormalities with a prevalence of about 1% at the age of one year. UDT is associated with increased risk of testicular tumours and infertility.

### OBJECTIVE

The aim of this study was to assess who is carrying out paediatric orchidopexy in Ireland.

### METHODOLOGY

A survey was distributed via Survey Monkey® to all Consultant Paediatric Surgeons and Urologists in Ireland.

### RESULTS

A total of 64.3% (n=27) of urologists and 71.4% (n=5) of paediatric surgeons responded to our online survey. Of the urologists, 100% reported formal training in paediatric orchidopexy. 29.6% (n=8) underwent a dedicated paediatric fellowship. 48.1% (n=13) currently perform paediatric orchidopexy. 33% (n=9) think it should be carried out by a urologist, whereas 29.6% (n=8) think it should be carried out by a paediatric surgeon. The mean age at which urologists think an orchidopexy for UDT should be performed by was 18 months (range 1-4years). Approximately 400 orchidopexies are performed per year by the surveyed urologists. Of the paediatric surgeons, 60% (n=3) feel it should be carried out by a paediatric surgeon whereas 40% (n=2) feel it does not matter. All paediatric surgeons feel it should be performed by 1 year of age. Approximately 700 orchidopexies are performed per year by the surveyed paediatric surgeons.

### CONCLUSION

UDT is a concerning condition which requires intervention at an early stage. Dedicated training in core paediatric urology is required to continue to meet this need for the future to prevent delayed orchidopexy and resultant increased risk of testicular tumours.

### PRESENTED

As an oral presentation at the Irish Society of Urology Annual meeting, Killarney, September 2014 by Mr Gregory John Nason.

### PUBLICATION

This research has been accepted for publication in the Irish Journal of Medical Science however has yet to be allocated a volume.

## Are Adult Ureteroscopes Safe in the Management of Urolithiasis in a Paediatric Population?

### INTRODUCTION

Advances in endoscopic instrumentation have facilitated the endoscopic management of urolithiasis in paediatric patients. Debate remains regarding the optimal calibre of ureteroscopes.

### OBJECTIVE

The aim of this study was to assess the safety and efficacy of stone management in a paediatric population using standard adult ureteroscopes.

### METHODOLOGY

A retrospective review of all ureteroscopic procedures for the management of urolithiasis in patients under the age of 16 years was carried out. Standard adult 6-7.5 French semi-rigid and 6 French flexible uretero-renaloscopes were used in all cases.

### RESULTS

During the study period, 2000-2013, 8 patients underwent 21 ureteroscopic procedures. Mean patient age was 6.5 years. Two patients had rigid ureteroscopy, 7 had flexible ureterorenoscopy and 1 had a subsequent open procedure. No patients required ureteric dilation. Double J ureteric stents were utilised in 7 patients. There were no intra or post operative complications. All patients required further treatment in the form of extra corporeal shock wave lithotripsy. Stone clearance was achieved in 7 patients. One patient is still undergoing treatment.

### CONCLUSION

Our series demonstrates that, in skilled hands, adult ureteroscopes can be used safely for the treatment of urolithiasis in paediatric patients.

### PRESENTED

As a poster presentation at the Sylvester O'Halloran Surgical Scientific Meeting, University of Limerick in March 2014.



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## Urethral Catheterisation Prior to Laparoscopic Appendicectomy - is it Indicated?

### INTRODUCTION

A significant proportion of laparoscopic complications occur during the insertion of ports. Some of these complications are preventable especially those related to secondary port insertion.

### OBJECTIVE

The aim of this study was to assess the rates of iatrogenic bladder injury during laparoscopic appendicectomy and postulate a simple method of prevention.

### METHODOLOGY

A retrospective review was carried out of all laparoscopic appendicectomy performed in a university teaching hospital between 2012 and 2013. Iatrogenic visceral injuries were identified and operative notes examined.

### RESULTS

A total of 504 appendicectomies were performed during the study period. Four iatrogenic bladder injuries occurred related to secondary port insertion. There were no other visceral or major vascular injuries. The mean age of patient was 26.2 years (range 17-54 years). All were male. No patient was catheterised pre-procedure. Three were identified intra-operatively with one presenting unwell at an interval of 48 hours. Three were repaired by laparotomy and one laparoscopically.

### CONCLUSION

Bladder injury at the time of secondary port placement is a rare avoidable complication however it has serious consequences. This injury can be prevented by simple on-table urethral catheterisation prior to port insertion.

### PRESENTED

As an oral presentation at the Irish Society of Urology Annual meeting, Killarney, September 2014 by Mr Gregory John Nason.

### PUBLICATION

This research has been accepted for publication in the Canadian Urological Association Journal however has yet to be allocated a volume.

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# The Role of Reconstructive Surgery in Patients with End Stage Interstitial Cystitis/Bladder Pain Syndrome - Is Cystectomy Necessary?



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## INTRODUCTION

Interstitial cystitis is a debilitating condition which has a profound effect on the patient's quality of life. Although many approaches to treatment have been explored, no consistently effective treatment has been identified. Reconstructive surgery is offered to patients with refractory Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS), however expert opinion is divided as to whether cystectomy is necessary to achieve symptomatic cure.

## OBJECTIVE

The aim of this study was to report our surgical experience of managing IC/BPS in a university teaching hospital.

## METHODOLOGY

The hospital inpatient enquiry system was used to identify patients with IC/BPS who underwent surgery from 1995-2013. A chart review was performed and patients were invited to complete three symptom-based questionnaires.

## RESULTS

Twelve patients were identified (8 female, 4 male). Reconstructive procedures included urinary diversion without cystectomy (9) and augmentation ileocystoplasty (4). One patient failed to have a sustained improvement in symptoms following ileocystoplasty and later underwent successful urinary diversion. All other patients noted a "marked improvement" of overall symptoms on Global Response Assessment (GRA) and complete resolution of bladder pain on Visual Analogue Scale (VAS). There was no association found between the persistence of symptoms and IC/BPS phenotype. None of the post-operative complications encountered following urinary diversion could have been avoided by initial cystectomy.

## CONCLUSION

Our study adds to the existing evidence that cystectomy is not necessary to provide symptomatic cure in patients with end stage IC/BPS. Urinary diversion without cystectomy is a highly effective operation and a successful outcome was achieved in all patients. Ileocystoplasty may be offered in carefully selected cases.

## Extended Thromboprophylaxis Use in Major Pelvic Surgery - A Cross-Sectional Survey of Current Practice among Pelvic Surgeons



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### INTRODUCTION

Venous thromboembolism (VTE) is a potentially preventable complication of surgery which can result in significant morbidity and mortality for the patient. Various international guidelines advocate extended duration pharmacological thromboprophylaxis for major pelvic surgery.

### OBJECTIVE

The aim of our study was to evaluate the current thrombo-prophylaxis use among pelvic surgeons and to compare their practice with published guidelines.

### METHODOLOGY

An online questionnaire was circulated via Survey-Monkey™ to a group of consultant urologists, gynaecologists and colorectal surgeons practicing in the UK and Ireland regarding their thromboprophylaxis use in major pelvic surgery. Respondents were asked to quantify their experience of pelvic surgery over the preceding five years. They were also questioned regarding the timing of commencement and duration of thromboprophylaxis used, in addition to the number of thromboembolic events encountered.

### RESULTS

One hundred and thirteen (113) surgeons responded to the questionnaire [response rate=62.7% (113/180)]. The responses of 34 urologists, 32 colorectal surgeons and 30 gynaecologists were included for analysis. In total, 38.3% of urologists (13/34), 40% of gynaecologists (12/30) and 56.3% of colorectal surgeons (18/32) reported that they commence thromboprophylaxis prior to operating. The majority of urologists (64.7%, 22/34) but only 25% of colorectal surgeons (8/32) and 23.3% of gynaecologists (7/30) routinely prescribe extended duration thromboprophylaxis after major pelvic surgery.

### CONCLUSION

This study highlights major inconsistencies among pelvic surgeons in adopting the current guidelines on peri-operative thromboprophylaxis use. Extended thromboprophylaxis is still underutilised among pelvic surgeons. Increased professional awareness and hospital incentive schemes for VTE prevention may improve adherence to these guidelines and optimise patient care.

## Cancer Specific and Overall Survival of Patients Undergoing Preoperative Renal Artery Embolization Prior to Radical Nephrectomy for Renal Cell Carcinoma



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### INTRODUCTION

Preoperative renal artery embolization (PRAE) prior to radical nephrectomy (RN) for renal cell carcinoma (RCC) has theoretical potential for prevention of tumour emboli due to intra-operative handling of tumour. However use of PRAE has not been widely adopted. In our institution, PRAE has been available and utilised since 2009.

### OBJECTIVE

We aimed to assess the medium-term oncological outcome of patients who underwent PRAE prior to RN for RCC.

### METHODOLOGY

A retrospective review of demographic, peri-operative, interventional data and medical notes was conducted on all patients undergoing RN in our hospital from January 2009 to December 2012. ANOVA and Chi-Square tests were used to compare data. Cancer specific survival (CSS) and overall survival (OS) data was calculated using Kaplan-Meier Curves and a p-value of 0.05 was considered statistically significant.

### RESULTS

A total of 55 radical nephrectomies were performed during the study dates. A total of 16 patients underwent PRAE. There was no difference in the age profile of the patients ( $63.63 \text{ years} \pm 8.2$  vs  $62.28 \pm 12.2$ ,  $p=0.689$ ). Tumours subjected to PRAE were larger ( $9.06 \text{ cm} \pm 1.9 \text{ cm}$  vs  $5.89 \text{ cm} \pm 2.98$ ,  $p<0.001$ ) and of a higher stage ( $p<0.001$ ) than those that did not. Patients who had embolization were more likely to have locally-advanced disease ( $p<0.01$ ). There was no difference demonstrated for CSS or OS between the two groups of patients at 1 year ( $p=0.974$ ,  $p=0.804$ ), 3 years ( $p=0.974$ ,  $p=0.622$ ) or 5 years ( $p=0.974$ ,  $p=0.622$ ).

### CONCLUSIONS

Our data has shown that despite having larger and more advanced tumours, PRAE is not associated with an inferior survival. Prospective randomised studies are necessary to further validate this work.

# Adrenal Sparing Radical Nephrectomy Should be the Gold Standard Where Indicated in Renal Cell Carcinoma

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## INTRODUCTION

Routine ipsilateral adrenalectomy was a component of the traditional radical nephrectomy.

## OBJECTIVE

The aim of this study was to assess the impact of adrenal sparing radical nephrectomy (ASRN) on survival in patients with renal cell carcinoma (RCC).

## METHODOLOGY

A retrospective analysis was carried out on all radical nephrectomies carried out in two university teaching hospitals between 2000 and 2012. Tumour details were assessed from histopathological reports. Overall survival (OS) and cancer specific survival (CSS) data was collected from the National Cancer Registry of Ireland.

## RESULTS

A total of 579 nephrectomies were performed in the study period. The median age was 60.1 years (range 25-85 years). The median tumour size was 6.45cm (range 1-20). 65.6% (n=380) patients underwent an ASRN. On univariate analysis, there were significant OS ( $p=0.001$ ) and CSS ( $p=0.001$ ) differences favouring ASRN. On multivariate analysis, after adjusting for age, gender, histology, grade, TNM status, tumor necrosis and IVC invasion, non-adrenal sparing radical nephrectomy was associated with worse OS ( $p=0.089$ ) and CSS ( $p=0.064$ ).

## CONCLUSION

Adrenal sparing radical nephrectomy has been shown to impact survival and should be standard practice without preoperative evidence of adrenal invasion of tumour.

## PRESENTED

To be presented as a Poster Presentation at the upcoming European Association of Urology Meeting in Madrid in March 2015.

# Genitourinary and Gastrointestinal Toxicity after Radical Radiotherapy for Prostate Cancer



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## INTRODUCTION

Radiotherapy is a common treatment option in the management of localised prostate cancer. Most initial side-effects resolve once the course of radiotherapy has finished, however troublesome long term side-effects may develop at intervals following treatment. These can result in multiple admissions or repeated procedures for the patient.

## OBJECTIVE

The aim of this study was to investigate the burden of genitourinary (GU) and gastrointestinal (GI) toxicity in a cohort of prostate cancer patients who were treated with radiotherapy at our institution.

## METHODOLOGY

The radiotherapy department database was used to identify all patients who underwent radiotherapy for prostate cancer from January 2006 to January 2008. The patient administration system from each public hospital in the region was interrogated and all patient points of contact during five years of follow-up were recorded. Individual patient charts were reviewed and factors which might influence outcomes documented.

## RESULTS

A total of 112 patients were identified. The mean age at diagnosis was 66 (44-76) and the median PSA was 12.1 (3.2-38). The overall 5 year biochemical recurrence rate was 19%. Thirty-five patients (31%) required acute admission. Fifteen patients (13%) were investigated for GU toxicity. Forty-seven patients (42%) underwent investigation of GI side-effects of whom 21 (44%) required argon therapy.

## CONCLUSION

This study found that a significant number of patients required investigation for possible GU/GI toxicity following radiotherapy. It is important that patients are counselled carefully in relation to these potential side-effects. The morbidity to patients and additional cost of managing such complications should be taken into consideration when planning therapeutic strategies.

## Artificial Urinary Sphincter Placement after Radical Prostatectomy, a National Review

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### INTRODUCTION

Urinary incontinence is a significant complication of radical prostatectomy (RP). No published Irish data exists on the number of, or rate of, Artificial Urinary Sphincters (AUS) placed post RP. The expected rate of surgery for urinary incontinence post RP is 2.6% at 5 years.<sup>1</sup>

### METHODOLOGY

American Medical Systems Inc® (AMS) are the only provider of AUS in Ireland. The total number of AUS placed post RP was obtained from AMS, for the period 2009 to 2013. The overall incidence and number of RP performed in Ireland was obtained from the National Cancer Registry of Ireland (NCRI) for the period 2008 to 2011.

### RESULTS

There were a total of 14,082 cases of newly diagnosed prostate cancer and 2,218 RP performed between 2008 and 2011, an overall RP rate of 15.75%. The incidence of prostate cancer has increased year on year by an average of 6.7% from 2008 to 2011. For the same period, the total number of RP performed has increased year on year by an average of 17.7%. Between 2009 and 2013, a total of 102 AUS were inserted in Ireland, and over the same period there was an increasing rate of AUS placement (See Table 1). AUS insertion rate is diluted by the arrival of the sling procedure.

### CONCLUSIONS

With the increasing number of RP nationally, it is evident that there will be a greater requirement for post RP incontinence surgery. Further audit regarding post RP urinary incontinence surgery is required on a national level.

### REFERENCES

Available on request.

### PRESENTED

At the Irish Society of Urology Meeting in Killarney in September 2014.

**Table 1 - Artificial Urinary Sphincter National Review**

|                                | 2008  | 2009  | 2010  | 2011  | 2012 | 2013 |
|--------------------------------|-------|-------|-------|-------|------|------|
| Prostate Cancer Incidence      | 3,164 | 3,470 | 3,633 | 3,815 | N/A  | N/A  |
| Number of RP operations        | 437   | 484   | 579   | 718   | N/A  | N/A  |
| Number of AUS inserted post RP | N/A   | 13    | 30    | 17    | 21   | 21   |

N/A – not available

## Elective Urology in the Mid-West - Did Reconfiguration Improve our Efficiency?



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### INTRODUCTION

In 2009, all surgical services were reconfigured in the Mid-Western Regional Hospitals Group. Non-major elective urology operations were moved to Level 2 hospitals within the hospital group. As a marker of turnover and efficiency, we assessed average length of stay (AvLOS) and day of surgery admission (DOSA) percentage for 3 urology operations; transurethral resection of prostate (TURP), transurethral resection of bladder tumour (TURBT) and tape sling (TS) for the period 2007 to 2012.

### METHODOLOGY

The hospital inpatient enquiry system (HIPE) was used to identify all patients who underwent TURP, TURBT and TS between 2007 and 2012 inclusive, in all hospitals in the Mid-Western Regional Hospitals Group.

### RESULTS

The AvLOS for TURP for the period prior to reconfiguration, 2007-2009 (control period), was 4.88 days. This decreased to 3.47 days for the period 2010 to 2012 (study period). TURBT AvLOS decreased from 4.02 days to 3.11 days and TS AvLOS decreased from 3.17 days to 2.14 days for the same periods respectively. There were 322 bed days saved when comparing AvLOS in 2007 to 2012 for all 3 procedures combined.

DOSA percentages for TURP, TURBT and TS two years prior to reconfiguration were 32%, 40% and 58% respectively. Two years after reconfiguration, DOSA percentages are 83%, 100% and 100% respectively.

### CONCLUSION

The reconfiguration of non-major elective urology services has led to improved AvLOS and DOSA percentages for TURP, TURBT and TS in the Mid-West. Appropriate use of Level 2 hospitals has facilitated this improvement.

# Proactive Bladder Management Reduces Incidence of Postpartum Urinary Retention

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## INTRODUCTION

Post-partum urinary retention (PPUR) is a condition that can affect up to 10% of all pregnancies. Often diagnosed late, it can be a significant source of distress for the new mother with some significant medium-term sequelae. It is also a significant source of litigation for hospitals. We audited a new post-partum bladder management plan in our maternity hospital.

## METHODOLOGY

In conjunction with midwifery and obstetrics, a post-partum bladder care protocol (Figure 1) was introduced into our hospital in 2013. A random selection of patient charts from January and February 2014 were interrogated to assess compliance with the protocol.

## RESULTS

In all, 119 patient charts have been examined to date. Mean age of patient was 31 years and mean gestation was 39 weeks. Patients had on average 2 risk factors for PPUR. 28% of patients were primiparous, 36% had an epidural and 52% had some form of perineal trauma.

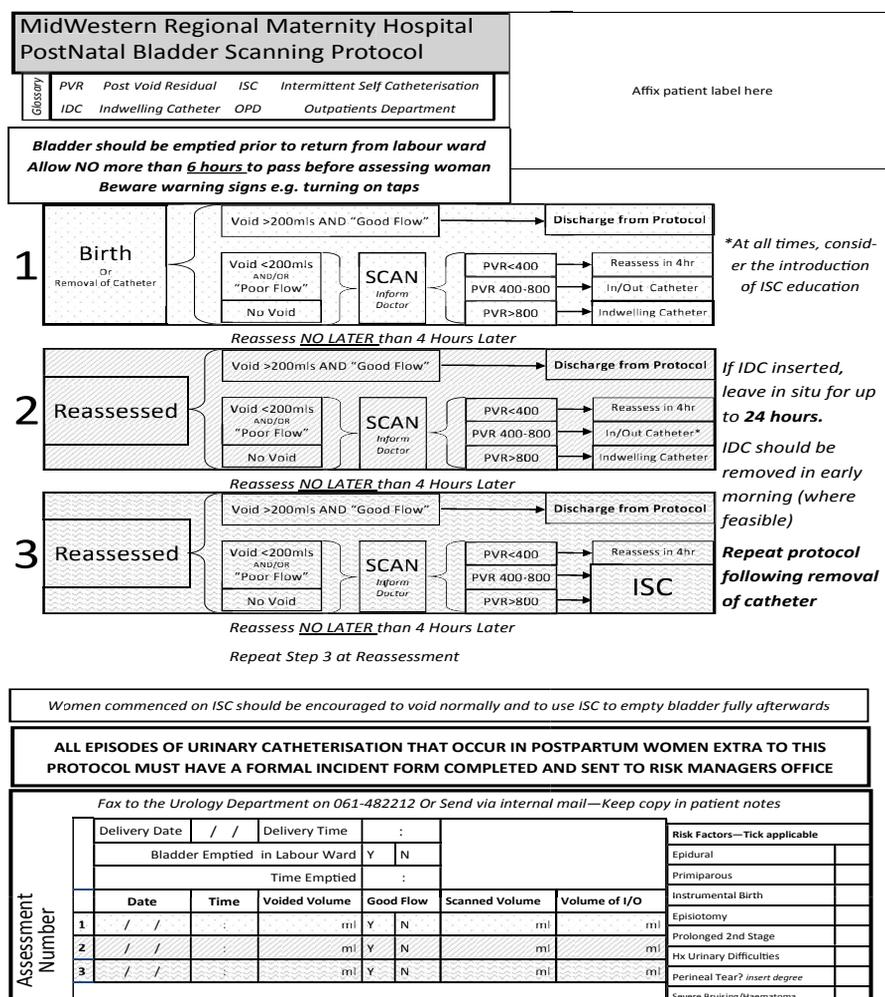
79% of charts contained the protocol, however only 70% had a completed protocol sheet. 86% of patients had documentation of first voided volume. 3% of patients required bladder scanning to aid the protocol.

No patient needed indwelling or intermittent catheterisation. No patients required referral to urology services.

## CONCLUSION

We feel that the use of proactive management of the postpartum bladder is necessary to eliminate PPUR. Our study audit shows that the use of our protocol in tandem with the adoption of a "bladder-aware" attitude by postnatal midwives has resulted in increased awareness and reporting of voiding habits of postpartum women, and fewer cases of PPUR.

Figure 1 - Post-Partum Bladder Control Care Protocol



## Internet Search Trends on the Quest for Treatment Options for Early Prostate Cancer



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### INTRODUCTION

Standardised treatment options for early prostate cancer remain undecided even among practicing urologists. Individual patient preference is the mitigating factor in choosing the appropriate treatment.

### OBJECTIVE

Our study aimed to see the trends on internet activity regarding the treatment options for early prostate cancer in different regions of the developed world.

### METHODOLOGY

We analysed keyword searches in the last year on regional Google search engines such as google.ie, google.co.uk, google.com, google.ca and google.au (Ireland, UK, USA, Canada and Australia respectively) using Google Adwords and SEMrush. Our study mainly focused on contemporary treatment options of early prostate cancer such as brachytherapy, intensity modulated radiotherapy (IMRT), radical and robotic prostatectomy.

### RESULTS

Google's Irish server yielded an average of 170, UK server 2,400, US server 8,100, Canada server 880 and Australia server 880 average keyword searches per month regarding early prostate cancer treatment options. The proportion of searches for brachytherapy were 18% (Ireland) vs. 1% (UK) vs. 2% (USA) vs. 3% (Canada) vs. 2% (Australia). For IMRT they were 6%, 1%, 2%, 2% and 2% respectively. The same for radical prostatectomy were 26%, 25%, 30%, 44% and 55% respectively. For robotic prostatectomy the figures were 6%, 11%, 16%, 8% and 16% respectively.

### CONCLUSIONS

Although the Irish population's internet activity regarding specific treatment options for early prostate cancer was similar to other parts of the world, the quest for brachytherapy was disproportionate compared to rest of the world. We need to encourage our patients to access reliable web based information as part of their decision making process.

## Paediatric Urology Training - Do we Need a Structured Training Programme?



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### ABSTRACT

Paediatric urology training (PUT) is not a mandatory part of higher surgical training in urology in Ireland. It is predicted there will be a shortfall of surgeons trained in paediatric surgery in Ireland in the coming years, leading to further reliance on specialist paediatric surgical centres.<sup>1</sup>

An anonymous survey was distributed via Survey Monkey® to urology trainees in Ireland. PUT experience and subjective technical proficiency in 5 key paediatric urology operations, as defined by the intercollegiate surgical curriculum in urology, were assessed.

- 69.2% of trainees responded (n=18/26).
- 55% report at least 6 months PUT. No trainees trained in a dedicated paediatric hospital.
- 94.4% (n=17) are in favour of a mandatory 6 month period of PUT.
- 33% (n=6) favour training in a centre combining adult and paediatric urology, 50% (n=9) favour training in a dedicated paediatric hospital, 11% (n=2) have no training site preference.
- 66% (n=12) wish to provide a consultant paediatric urology service.
- Of those, 50% (n=6) plan to undergo fellowship PUT.

Technical proficiency was subjectively reported for 5 procedures (grade 0-4, mean score shown); Circumcision 3; Orchidopexy 1.78; Scrotal Exploration 2.88; Endoscopic Management of Ureteric Reflux 1; Paediatric Urodynamics 0.94.

Our findings demonstrate a strong demand amongst Irish urology trainees for structured, mandatory PUT, and a desire to provide a paediatric urology service as a consultant. The higher surgical training programme in urology should incorporate a structured PUT component to train a Urologist capable in the delivery of a paediatric urology service.

### REFERENCES

Available on request.

### SOURCE

Published as **Paediatric urology training: what does the future hold?**

Burke MJ, Nason GJ, Aslam A, Redmond E, Kelly ME, Giri SK, et al. *Ir J Med Sci.* 2014 Sep 7. PubMed PMID: 25194829. Epub 2014/09/10. Eng.

## An Evaluation of Expectant Parents' Knowledge, Satisfaction and Use of a Self-Instructional Infant CPR Kit

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### INTRODUCTION

In Ireland as in other parts of Europe infant CPR training is not provided routinely to expectant and new parents of term infants. Training those most likely to encounter an infant increases the possibility of survival.

### OBJECTIVE

To assess parents' knowledge of infant CPR prior to, and on completion of, skills training; to assess parents' use and satisfaction with the self-instruction kit Infant CPR Anytime™ and to evaluate the medium term impact of infant CPR skills training on parents' knowledge.

### METHODOLOGY

An uncontrolled pre-post test design was used to evaluate expectant parents' knowledge, satisfaction and use of a 22 minute Self-Instructional Infant CPR kit validated by the American Heart Association. Infant CPR Anytime™ uses a practice-while-watching technique to facilitate the teaching of infant CPR and the relief of choking in an infant. Expectant parents were surveyed immediately pre and immediately post training and six months post training using a questionnaire adapted with permission from the Irish Heart Foundation CPR 4 Schools Evaluation Study.<sup>1</sup> Knowledge was measured using multiple choice questions and Likert type questions were used to measure confidence and willingness to use infant CPR. Inferential statistics were used to determine difference in knowledge at the 3 time-points.

A convenience sample (n=77) of attendees at antenatal classes was recruited in December/January 2013 from one maternity hospital in Ireland. Participants included women who were 32 weeks gestation or greater with their partner or support person.

### RESULTS

A total of 42 women expecting their first baby with 33 partners and 2 support persons took part in the study. Thirty three women and 25 partners returned questionnaires at 6 months indicating a response rate of 70%. Findings indicated a significant difference with knowledge scores pre and post training ( $z=-7.604$   $p<0.0001$ ). Pre training and follow on ( $z=-5.781$   $p<0.0001$ ). Post training and follow on ( $z=-5.874$   $p<0.0001$ ). Average or above reported confidence levels for performance of Infant CPR at six months 84.5% (n=58) of participants compared to 34% (n=76) prior to training. Willingness to give CPR at six

months was 88% (n=58) compared to 60% (n=76) prior to training. 37.9% of participants reported that others had used their kit. 98.3% recommended that the maternity service should facilitate infant CPR training for expectant women and their partners.

### CONCLUSION

Facilitation of a 22 minute Self-Instructional Infant CPR training DVD to expectant women and their partners as part of an antenatal education programme is effective in increasing infant CPR knowledge and confidence in parents at six months post training.

### PRESENTED

- At the 33rd Annual International Nursing and Midwifery Research and Education Conference in the RCSI, Dublin by Maebh Barry.
- At the 14th Healthcare Interdisciplinary Research Conference and Student Colloquium in the Department of Nursing and Midwifery, Trinity College, Dublin by Maebh Barry.

### FUNDING

Discretionary funding provided by the National Children's Research Centre.

## An Evaluation of the Views of Nurses Working in Long-term Care Setting Regarding the Seasonal Influenza Vaccine

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### ABSTRACT

A review of the literature demonstrates a persistent low level of uptake of the influenza vaccine by healthcare workers. Compared to other healthcare workers, nurses have the lowest level of uptake of seasonal influenza vaccination. Nurses are also the largest group of healthcare professionals providing twenty-four hour direct care to older people. For this reason the vaccination of healthcare workers including nurses working in residential long-term older person care settings in Ireland is recommended. The experience of nurses who work in the long-term care setting for older people regarding the seasonal influenza vaccine is often overlooked, with a paucity of published qualitative studies in the literature. A recent quantitative study using a survey questionnaire was conducted in public healthcare facilities in Ireland.

The aim of the study was to determine seasonal influenza vaccine uptake amongst healthcare workers employed in acute hospitals (n=46,287) and long-term care settings for older people (n=6,806). The study reported on uptake of seasonal influenza vaccine by healthcare workers (n=6,806) in long-term care facilities (n=120) for older people. The overall vaccination rate for healthcare workers in the long-term care setting was 13.5% (n=920) with the highest vaccination rates amongst management and clerical staff at 16% (n=66), with the lowest vaccination rates among medical and dental staff at 7% (n=7). Nursing staff working in the long-term care setting in Ireland (n=2,540) had the second lowest uptake of the seasonal influenza at 11.6% (n=294). This report was consistent with other published studies that demonstrated low rates of uptake of the seasonal influenza vaccine. The report made recommendations for an urgent need to identify reasons for non-vaccination of healthcare workers; hence the importance of this study.

The study purposively sampled registered nurses (n=11) working in a large long-term care facility for older people (n=142) in Ireland. Using a broad qualitative research approach data was collected through in-depth semi-structured interviews, transcribed and thematically analysed into themes.

Three main themes emerged from the textual data:

- Knowing- the seasonal influenza vaccine
- Mandatory Vaccination - Balancing autonomy and control
- Meaningful Education - Sub-themes in this study were considered to be the foundation for the main themes, constructing the rich stories inherent in the data

The study reveals the complexity of the views of nurses regarding the seasonal influenza vaccine to include influences such as family, friends, peers and media.

Contrary to published studies nurses appeared to have a good knowledge of influenza and the vaccine. There were, however, major misconceptions regarding the fact that the vaccine is inactivated and that up to 30% of staff may carry the virus asymptotically. The position of nurses within the organisation and recommendations for meaningful education for nurses was also important.

The significance of this research is that findings have provided an insight that may inform future influenza policy and influenza educational campaigns that should be explored prior to the introduction of any mandatory influenza campaigns. The influence of past experiences, personally and professionally with clients around the seasonal influenza vaccine may play a part in how nurses approach decision making. These findings are congruent with other studies that suggest personal issues play a more significant role in nurses' thinking and decision making than empirical knowledge.

The adjustments required to the delivery of the seasonal influenza vaccine campaign articulated by participants included the involvement and collaboration of trusted role models to satisfy their need for balanced information from multiple sources.

Based on the findings of this study and the existing body of literature it is evident that there are some important misconceptions regarding the influenza vaccine. Findings from this study suggest that a different approach is urgently required for the education of nurses to address their specific concerns regarding the seasonal influenza campaign. Indeed for the first time this study facilitated nurses by providing them with an opportunity to identify the supports and resources that they felt were necessary to improve the seasonal influenza campaign. This study supports the need for increased efforts by the health service to be informed of the current specific issues and views of nurses and the need to provide targeted education sessions to address the concerns of nurses.

A recommendation from this study is the introduction of an educational programme regarding the seasonal influenza vaccine, delivered to nurses in a more personal way by a trusted colleague, preferably an expert nurse. This recommendation provides an opportunity for the organisation to improve the way in which the seasonal influenza campaign is delivered and assist nurses in making an evidence-based decision, which may ultimately improve outcomes for older persons. Prior to the introduction of any mandatory vaccination programmes, face-to-face infection prevention and control training that includes seasonal influenza vaccination should be mandatory for all nurses. Equally, it may be prudent to include education regarding vaccine preventable diseases as part of the academic preparation of student nurses.



### Implications and Recommendations for Further Research

While the present study has presented invaluable insights into nurses' views regarding the uptake of the seasonal influenza vaccine, further in-depth explorations of nurses' experiences are required. This present study represents a departure from the dominant empiricist studies cited in the literature.

A recommendation of this study is that a possible future interventional study is undertaken based on the findings in this study. In particular, to address major gaps in knowledge regarding the misconception that influenza vaccine causes influenza and the possibility that nurses can be asymptotically infected with influenza virus. The creative use of research methodologies in future studies could be mixed to build on the findings of this study. Perhaps Carper's (1978) fundamental patterns of knowing should be used as a theoretical framework to guide future research within this area, with this unique group of healthcare workers.

### PRESENTED

At the Irish Infection Prevention Society Meeting in Portlaoise on May 15th, 2014 (won scholarship prize in IIPS poster abstract competition).

As a poster presentation at the International Infection Prevention Society Meeting in Glasgow from September 29th to October 1st, 2014.

### SOURCE

British Journal of Nursing, 2014;23(17):942-948.

## Medication Reconciliation - A Work in Progress

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### INTRODUCTION

Medication reconciliation is the process of obtaining a complete and accurate list of each patient's current medication from all available sources, at all points of contact, and verifying and reconciling medications to reduce medication errors.<sup>1</sup> The Department of Health and Children's Commission on Patient Safety and Quality Assurance 2008 report ('Building a Culture of Patient Safety') made recommendations regarding medication safety which included medication reconciliation. The report states that in order for medication reconciliation to be successful it must be a formal, standardised process that is built into the system of care. In a previous study carried out in University Hospital Limerick in 2012, clinical pharmacists recorded that 32% of pharmacist interventions on wards were related to medicine reconciliation discrepancies on admission.<sup>2</sup>

### OBJECTIVE

The aims of this study were to determine the number and type of discrepancies that occur in patients' medication on admission to University Hospital Limerick and to make recommendations on how the process of medication reconciliation could be improved.

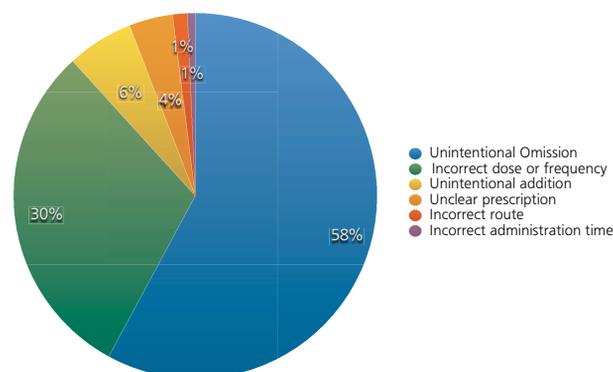
### METHODOLOGY

Data was collected by clinical pharmacists for 100 patients over a 5 day period on 4 medical and 4 surgical wards. Medication history was obtained by using at least one source. Sources included patient, community pharmacy and GP; both verbal and written. There was statistical analysis of this data and the development of a plan to improve the current process of medication reconciliation for the healthcare professionals involved.

### RESULTS

- 100 drug charts audited; 55 medical and 45 surgical patients
- 60% of patients had at least one unintentional discrepancy identified on admission
- A total of 738 admission medicines were reviewed and 152 unintentional discrepancies were identified (21%)
- The discrepancy types varied. See Figure 1
- There was an average of 1.9 days (median 1.5, mode 1) between admission and medication reconciliation by a pharmacist
- There was a significant difference ( $p < 0.05$ ) between medical and surgical admissions in terms of mean number of discrepancies per patient; 1.9 for medical versus 1.1 for surgical
- There was a correlation ( $p < 0.001$ ) between the number of discrepancies and the number of drugs on admission

Figure 1 - Discrepancy Type



### CONCLUSION

It was found that unintended discrepancies in patients' medication occur commonly on admission to hospital. There is a need for improvements in the process of medication reconciliation for all of the healthcare professionals involved.

The introduction of a medication reconciliation service by clinical pharmacists in the Accident and Emergency Department would reduce the time delay in detecting discrepancies. Targeting patients on a large number of medications is recommended. Education of junior doctors in relation to the importance of medication reconciliation on admission and provision of feedback to consultants on the current situation may improve the current process.

### REFERENCES

Available on request.

### PRESENTED

As a poster presentation at the Hospital Pharmacists' Association of Ireland Annual Educational Conference in Dublin from April 4th to 6th, 2014.

## Testing for STIs in General Practice in Ireland



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### INTRODUCTION

Since the 1990s there has been a significant increase in the incidence of sexually transmitted infections (STIs) in Europe, including Ireland. Waiting times to attend specialist Genitourinary Medicine (GUM) Clinics are long. Early diagnosis and treatment of STIs can cure and prevent complications and will reduce the onward transmission.

### OBJECTIVE

The aim of the study was to inform us about what STI services GPs are providing in Ireland, including costs and barriers. This paper focuses on tests carried out by GPs for chlamydia and gonorrhoea for asymptomatic female and male patients requesting screening.

### METHODOLOGY

A postal survey and one reminder were sent to 500 GPs on the ICGP membership database; the response rate was 58.4% and the respondent profile is consistent with that of the full membership population.

### RESULTS

Overall 76.4% of respondents reported that someone in their practice provides STI testing and screening. Less than 6% of GPs refer patients for testing to a GUM clinic. The patient is charged an additional fee for CT and GC tests in 35% and 17% of practices respectively for private and GMS patients. Almost 30% of those GPs who provide testing have completed a Sexually Transmitted Infections Foundation (STIF) course. The barriers to providing testing were as follows: perceived lack of knowledge and skills 18.5%, lack of time 24%, problems accessing testing swabs 12.3%, no financial incentive 33.6%.

### CONCLUSION

The proportion of GP practices sending tests for screening of STIs in asymptomatic individuals is lower than expected. The barriers to providing testing for STIs in general practice are similar to those reported in other studies. Cost has been shown in another Irish study to be a barrier for young people attending general practice for STI testing and such testing is not covered under the GMS scheme - however, studies here and elsewhere have reported cost effectiveness and patient preferences for providing a sexual health service in the general practice setting instead of in a specialist GUM clinic.

### PRESENTED

As a poster presentation at the European Society of Contraception 'First Global Conference on Contraception, Reproduction and Sexual Health' in Copenhagen, Denmark from May 22nd to 25th, 2013.

## Foster Caring - Experiences of Fostering Children in Long-Term Care

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### INTRODUCTION

Foster care is typically provided on a short-term or long-term basis. Short-term care involves a child staying in care from one week to a number of months but may last up to a few years. When reunification with the birth family is unachievable, children remain in long-term care which may be for a number of years or until the child reaches adulthood.

### OBJECTIVE

Foster carers' understanding of their role as a 'foster carer' varies according to the type of care provided, thus the aim of this study was to explore foster carers' experiences of fostering children for long-term and/or more permanent placements.

### METHODOLOGY

Data collection took place in the form of qualitative interviews and quantitative questionnaires. Four foster carers, with foster children ranging in age from 1.5 to 16 years, and two fostering care team members actively working in the Irish Care System, participated in the research. Foster carers completed the 'Motivation for Foster Parents Inventory' and the 'Thinking about your Child' questionnaire. Descriptive frequency analysis was carried out on the measures. Six semi-structured individual interviews were conducted and analysed using thematic content analysis.

### RESULTS

Having a sense of fulfilment and rescuing abused or neglected children were the greatest motivators to become foster carers. Foster carers obtained a high score ( $X=34$ ,  $SD=4.5$ ) on the parent skills and understanding subscale, with scores ranging from 29 to 40. Parent-child relationship scores ranged from 20 to 30 ( $X=27$ ,  $SD=4.7$ ) and child responsiveness to care scores varied from 15 to 28 ( $X=21$ ,  $SD=5.8$ ). Placement stability scores ranged from 7 to 10 ( $X=8.25$ ,  $SD=1.25$ ).

From the onset, potential foster carers' suitability was tested by formal assessment procedures by the fostering care team. Following the assessment process, foster carers were involved in decision-making from the initial stages of the process. Several areas were considered before making a commitment to providing care. On reflection, carers identified a number of challenges, which were overlooked following the commitment. In addition, the impact of the child on the fostering family and household was enough to secure or demolish the care commitment.

### CONCLUSION

Findings indicate that considerable thought is given to the commitment of fostering, particularly for a child who will remain in care until adulthood. Carers perceived themselves as having a good relationship with the children and skilled enough to deal with problems. Practical considerations, such as time and age, as well as psychological considerations, such as the child's history and impact on family were taken into account when deciding to commit to a child in care. Areas of insecurities, such as the legal system and ongoing challenges were shared. What was evident is that, although a commitment is made both practically and psychologically, there remains a level of uncertainty regarding the child's security within the household and system. Furthermore, a strong recommendation put forth by the fostering care team was to develop a formal fostering assessment process to address ongoing concerns.

In order to elicit further experiences of care, it may have been useful to incorporate children's views, as it would have given greater scope to relate their impressions of living in long-term care. It may have also been beneficial to gather experiences from other professionals, such as legal practitioners, psychologists and social workers, to get a sense of their understanding of the impact of committing to long-term care, offering further insight and objectivity.

### REFERENCES

Available on request.

# Investigating the Effectiveness of an Attachment-Based Foster-Carer Training Programme in Relation to the Parent-Child Relationship



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## INTRODUCTION

There is evidence to suggest that training, which utilises the attachment perspective as a conceptual framework, can assist foster-carers to better understand and respond to children with complex difficulties.<sup>1,2,3,4</sup> The present research aimed to investigate the effectiveness of an attachment-based foster-carer training programme in relation to the parent-child relationship.

## METHODOLOGY

Qualitative interview data from five foster-carers was explored using thematic analysis.

## RESULTS

Four themes were identified from the data indicative of positive training outcomes: 'increased understanding of the child,' 'adopting more positive responses to the child,' 'building trust within the parent-child relationship,' and 'ways of supporting the child to manage his/her struggles.' When asked directly, none of the participants identified negative aspects to the training programme. However, several statements made by the participants showed that there were limitations to the training programme, for example, that the impact of the training programme was not instantaneous and strategies often required repetition, and that foster carers did not see a total eradication of the problems described prior to the training programme.

## CONCLUSIONS

Findings are encouraging as to the effectiveness of the programme, however are limited in their generalisability.

## REFERENCES

Available on request.

## FUNDING

This study was sponsored by the Health Service Executive.

## Irish GPs' Experience of Dealing with Elder Abuse



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### ABSTRACT

Elder abuse is not new and has probably been present since antiquity. It occurs in all societies and crosses all socioeconomic, racial, and religious lines. The consequences of elder abuse cannot be underestimated, as victims experience a significantly increased morbidity and mortality.<sup>1</sup>

The primary purpose of the study was to describe Irish General Practitioners' (GPs') experience, attitudes, and insights concerning elder abuse. The aspect reported here is a survey sent to a random sample of 800 GPs by mail with one reminder, yielding a 24% response rate.

Two-thirds of GPs, 64.5%, had encountered elder abuse, with 35.5% encountering a case in the previous year. Most were detected during a home visit. Psychological abuse and self-neglect were most common. Most GPs were willing to get involved beyond medical treatment, and 76% cited a need for more education.

GPs play a valuable role both in the detection of and intervention in elder abuse cases, noting an improvement in the situation of the victim by the majority of physicians. Home visits provide access to cases that perhaps might otherwise go undetected. The vast majority, 96%, either strongly agree or agree that elder abuse is an important issue for them to address. In addition, almost three-quarters felt that beyond medical treatment or referral, they would get involved in resolution of the case. The study also lends support to the development of focused educational and training initiatives in general practice.

Among the key recommendations from the study are to;- (1) increase public awareness, (2) increase the availability of home care nurses, and (3) provide educational programmes for general practitioners, other physicians, home health nurses, and the public. A future increase in the synergy between GPs, senior case workers, and public health nurses has the potential to result in a much more protective model for older people in Ireland.

### REFERENCES

Available on request.

### FUNDING

This research has received funding from Atlantic Philanthropies and the Irish College of General Practitioners.

### SOURCE

Journal of Elder Abuse & Neglect, 2014;26(3):291-299.



# Comparing Communal Environments Using the Assessment Tool for Occupation and Social Engagement - Using Interactive Occupation and Social Engagement as Outcome Measures

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## ABSTRACT

Interactive occupation and social engagement are important components of quality of life for residents with dementia in nursing homes. Communal living spaces should be evaluated on these qualities. Two Irish nursing homes were compared pre and post conversion from a Traditional Model Unit (TMU) to a Household Model Unit (HMU) (Table 1) using the Assessment Tool for Occupation and Social Engagement. This assessment uses interactive occupation and social engagement as positive outcome measures.

**Table 1 - Typology: Physical, Operational and Social Environment Comparisons between TMU and HMU**

| TMU   | HMU   |
|---|---|
| Separate sitting and dining rooms                 | Open plan sitting/dining areas  |
| Food prepared by centralized kitchen off the unit | Functioning kitchen in a dominant central position in open plan area    |
| No homemaker role                                 | Homemaker staff allocated to kitchen in open plan area                  |
| Institutionalized routines and time guillotines   | Operational changes to give unforced routines, flexibility, spontaneity |
| Care defined by task accomplishment               | Person-centred model of care offering choice                            |

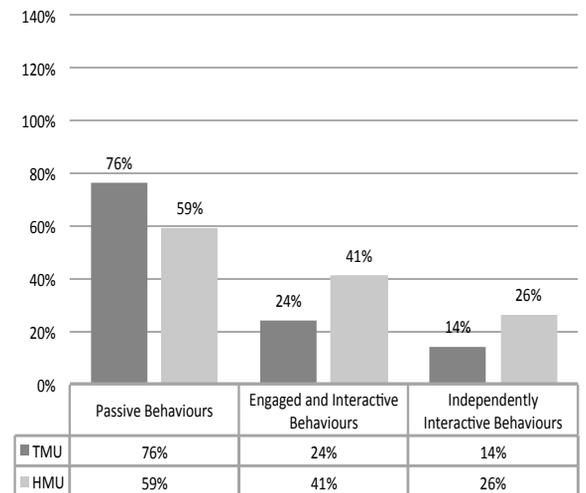
Residents, staff and relatives were observed pre and post renovation over a 6-week period using a snapshot observational method over 4 hours on 7 different weekdays.

Changing from a Traditional to a Household Model nursing home increased the interactive occupation and social engagement of residents, staff and visitors within the communal living areas. The role of a homemaker in the household unit was crucial for maintaining residents' participation and engagement, including engaging in familiar everyday domestic tasks.

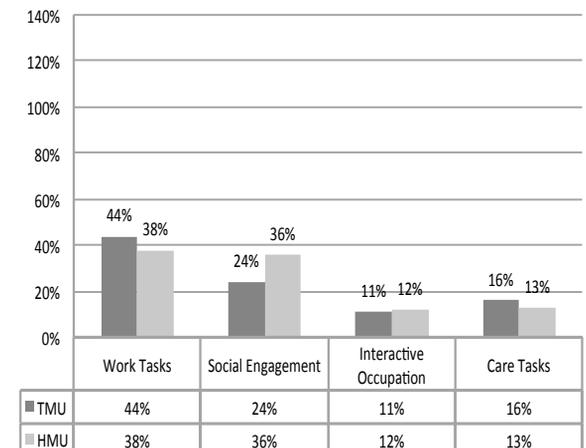
In this study the kitchens were integrated into the fabric of daily life, as food and drinks were prepared and served from here. The homemaker in the kitchen area enabled residents to choose when they got up and breakfasted each morning, according to their previous lifetime preferences. In addition, the strategically placed kitchens provided supervision of HMU residents in the open plan area. The kitchen and dining areas provided a homelike interaction hub, which had an engaging and stimulating effect on residents, staff and visitors. The open plan design facilitated greater resident choice about moving

from place to place within the room, joining in activities, engaging with others, and interacting with a more open and therefore more stimulus-rich environment. The domestic style placement of furniture encouraged more spontaneous casual interactions between people. The bustle of the homemaker role had a stimulatory effect on the self-initiation and interest of the residents.

**Figure 1 - Residents: Percentage of time spent in communal rooms: Decrease in passive behaviours and increase in engaged, interactive and independent behaviours when comparing HMUs to TMUs**

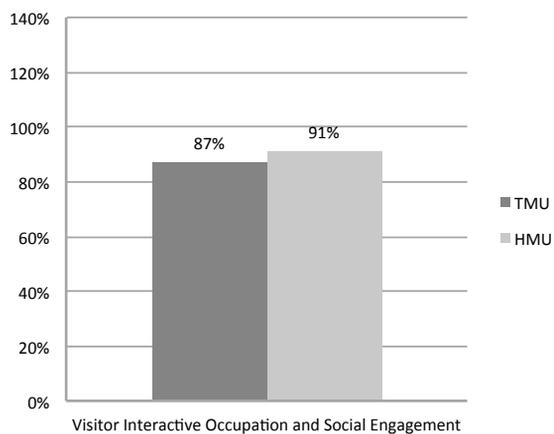


**Figure 2 - Staff: Percentage of time spent in communal rooms: Decrease in non-resident contact work tasks and increase in social engagement and interaction with residents when comparing HMUs to TMUs**





**Figure 3 - Visitors: Increase in percentage of time visitors spent in interactive occupation and social engagement with the residents when comparing HMUs to TMUs**



There were statistically significant changes in interactive occupation and social engagement in the HMU when compared to the TMU, particularly for residents. In the HMU, more residents initiated and maintained their own interactions within the communal environment and did not require prompting from staff to do this.

#### **PRESENTED**

At the 16th International Congress of the World Federation of Occupational Therapists in Yokohama, Japan on June 18th, 2014 by Dr. Mark Morgan-Brown.

#### **SOURCE**

British Journal of Occupational Therapy, 2014;77(2):50-58.

# An Evaluation of an Infant Mental Health Reflective Practice Group



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## INTRODUCTION

Infant Mental Health (IMH) focuses on the complex dynamic between a caregiver and a child during their first several years of life. Existing research in this area encourages clinicians from many different disciplines to assimilate new knowledge about early childhood mental health and infancy with interventions that are culturally sensitive and skilful.<sup>1</sup> Working in this area can place huge demands on clinicians, both in terms of training needs and support. Reflective practice groups can play an important role in this regard. Reflective practice is the capacity to reflect on actions so as to engage in a process of continuous learning.<sup>2</sup> IMH is an emerging clinical approach in Ireland. The current study evaluated clinicians' experiences in a Munster-based IMH reflective practice group.

## METHODOLOGY

A mixed methods design was utilised. Nine clinicians from an IMH reflective practice group completed a survey evaluating their experiences in the group. In addition, they completed the Self-Reflection and Insight Scale.<sup>3</sup> Semi-structured interviews were conducted with five clinicians to explore the benefits and drawbacks of the group. Survey and scale data were analysed and interpreted through the use of descriptive statistics and correlation analysis. Thematic analysis was used to develop themes from the interview data.

## RESULTS

Quantitative findings suggested that clinicians viewed the group favourably. There was a positive correlation between aspects of group experience and the subscales 'engage in self-reflection' and 'need for self-reflection' from the Self-Reflection and Insight Scale. Clinicians who tended to engage in self-reflection may be more adaptable to adjustments and challenges that occur as the group progresses e.g. changes in group membership. Five major themes emerged from the interview transcripts in relation to the group: 'A Space to Reflect,' 'Applications to Work,' 'A Sense of Wonder,' 'Dynamic Learning Process' and 'Role Constraints.' It appeared that all participants benefitted from the group, whether it was gaining new knowledge about IMH or support in completing their clinical work. Some participants felt their roles or training (e.g. child protection worker) limited the extent to which IMH learning could be directly applied to their work.

## CONCLUSION

Overall, clinicians evaluated the reflective practice group positively. Results supported the points raised by previous studies,<sup>4</sup> which suggest that reflective practice in the area of IMH can help clinicians in terms of decreasing burn-out and increasing staff satisfaction and morale. The complexity of learning in IMH was highlighted and reflective practice was shown to be a beneficial process in aiding clinical practice. Future research might continue to explore the impact of other reflective practice groups in the emerging area of IMH in Ireland.

## PRESENTED

At the Mallow Infant Mental Health Reflective Practice Group meeting, April 2013.

## REFERENCES

Available on request.

# An Exploration of the Use of the 'Drop-In' Service at the Child, Adolescent and Family Psychology Service



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## INTRODUCTION

This study aimed to explore the use and experience of the 'drop-in' service offered by the Child, Adolescent and Family Psychology service in Cork. This was the first time the 'drop-in' service was examined in detail since its commencement in 2009. The service was established to address parents' and professionals' enquiries regarding the waiting list process and status, provide an opportunity to discuss their concerns, and offer a one-off consultation regarding the child's emotional and behavioural difficulties. The service also provides an opportunity to engage with parents who are frequently from disadvantaged and hard to reach areas.

## METHODOLOGY

Data collected comprised of audit review of the use of the 'drop-in' service between 2009 and 2013, a survey administered to 20 service users and four semi-structured interviews with seven participants. Audit and survey data were analysed using SPSS. The interviews were audio recorded and analysed using a thematic analysis framework. Ethical approval for this study was obtained from the Clinical Research Ethics Committee of the Cork Teaching Hospital. Ethical issues which may have arisen from this study had been considered and addressed in accordance with the principles outlined by the Psychological Society of Ireland's (2011) Code of Professional Ethics and British Psychological Society's (2006) Code of Ethics and Conduct.

## RESULTS

The quantitative findings of this study provided an overview of the demographic and clinical profile of the service users. Overall, a positive experience of the 'drop-in' service emerged from the qualitative element of the survey and from interviews. There was a consensus between participants in rating the 'drop-in service' experience positively, with the majority indicating being "very satisfied" or "mostly satisfied". Additionally, the vast majority felt "more reassured" and "more informed," with some participants also reporting feeling "less worried/anxious" at the end of the consultation. Three core themes emerged from the study. The first core theme centred on perceived benefits/emotive aspects, with subthemes comprising "I Felt Treated Like A Human Being," "I Am Not The One To Be Blamed," and "I Felt Happy...We Got The Right Answers." The second core theme comprised perceived benefits/practical aspects, with subthemes including "Forum To Air Concerns," "I Just Needed Advice," and "Clearer Way Of Dealing With The Situation." The final core theme identified the barriers to accessing the 'drop-in' and other frustrations, with subthemes including "Spread The Word," "Centre Hard To Find," "Other Professionals Could Link In," "Ah...The Waiting Time," and "The Waiting List Is So So Frustrating!"

## CONCLUSIONS

Collectively, the quantitative and qualitative findings provided the service with valuable information about the clinical and demographic features of the service users, as well as their overall experience of the service to date and their recommended improvements to the 'drop-in.' Several practical recommendations suggested by the service users (i.e. an inclusion of leaflets and provision of signs) were subsequently implemented. Empirical material (i.e. transcript data) was instrumental in order to ensure that the experiences of the service users were verbalised and heard, and that their needs were identified and integrated into the 'drop-in' service activity.

## REFERENCES

Available on request.

## Giving Parents a Voice - Exploring Parents' Experiences of a Child and Adolescent Mental Health Service



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### INTRODUCTION

A 'Vision for Change' emphasizes the innumerable benefits of supporting families to be actively involved in their recovery journey through mental health services. The research aimed to explore parents' experiences of the West Cork/South Lee Child and Adolescent Mental Health Service (CAMHS), to empower families in the recovery process, and to enable family-led service development.

### METHODOLOGY

A mixed methodology was employed in the research. The Chi-Experience of Service Questionnaire for Parents was administered to a random cross-section of the open caseload over a three month period. In addition, qualitative data was generated through a Focus Group with six parents (3 Biological parents, 2 Foster parents and 1 Adoptive parent). Data was transcribed verbatim from the focus group and analysed using Template Analysis.

### RESULTS

Response rates were relatively low with a final sample of 22 out of 160 families contacted. However, the majority of respondents had been attending CAMHS for at least 6 months, and therefore knew the service relatively well. The quantitative component of the study found parents and guardians reported generally positive experiences of the service. The highest rated items related to Parents and Guardians feeling listened to, feeling respected and feeling understood. 86.4% of respondents gave the service the highest overall rating, and would recommend the service to a friend. The poorest rated items were the convenience of appointment times. Interestingly, parents of male service users found the appointment times significantly more convenient than parents of female service users. Five key themes emerged from the focus group including Feeling Supported, Poor Continuity of Care, Information/Awareness, Accessibility/Environment, and Communication.

### CONCLUSION

The quantitative component yielded generally positive reports of parents' experiences of CAMHS, with the unexpected finding that parents of male children/adolescents found their appointment times were more convenient. It may be the case that this particular sample of male service users (n=11) were presenting with more complex needs and thus were given emergency appointments. Moreover, the small sample size limits the generalisability of this finding.

The focus group provided significant depth to parents and guardians' experiences, highlighting critical factors which had wide-ranging repercussions for families. Most notably, this included the theme of poor continuity of care. Parents reported persistent changes in staff due to a lack of funding for a permanent consultant post.

As a result, families were faced with the daunting and frustrating task of retelling their histories time and again to different professionals. Parents discussed how they felt CAMHS was like a 'closely guarded secret' with limited to no public information available about the service. This is a critical area for change as however unintentional it may be it colludes with the stigmatisation of mental health difficulties. However, families also voiced the high level of support they had received from the team, but stressed their desire for more interventions. The necessity of providing interventions is exemplified by the example of one parent's experience. The difference to the parent's child was so significant after attending CAMHS that she wished to rename her child.

In conclusion, the research highlights the need of obtaining rich experiential knowledge from parents to develop family led service provision, in addition to the necessity of undertaking a mixed methodology to obtain a comprehensive and authentic account of families' lived experiences.

## A Clinical Audit and Qualitative Exploration of Active Re-Referrals to the North Lee East Child and Adolescent Mental Health Service since 2009

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### INTRODUCTION

Child and adolescent mental health services (CAMHS) are the first line of specialist services and are tasked with delivering mental healthcare to children/teenagers with challenging emotional, behavioural and psychiatric issues.<sup>1</sup> North Lee East (NLE) CAMHS is one such team serving a catchment area that spans part of Cork city and county. The first national CAMHS audit took place in 2008 and reports since then indicate increasing rates of re-referral.<sup>1,2,3,4,5</sup>

### OBJECTIVE

Given that little published literature on CAMHS re-referrals exists, this research was undertaken with the aim of exploring re-referrals to NLE CAMHS. The research objectives were twofold. Firstly, to gather information on the types of clients re-referred and secondly, to gain insight into their experience of this process.

### METHODOLOGY

A mixed-methods design incorporating both quantitative and qualitative components was utilised. A clinical audit was conducted on active re-referrals (n=52) during January/February 2013, some of which dated back to 2009. Descriptive statistics were computed using audit data. Semi-structured interviews were conducted with parents of re-referred children (n=4). Interview data was analysed using thematic analysis.

### RESULTS

Quantitative findings indicated more males than females were re-referred. General Practitioners were the most common referral agents. The most frequent primary presentations included hyperkinetic disorders, anxiety disorders and diagnosis 'not possible to define.' Statistics indicate that psychiatry, psychology and social work were the professions involved with the highest quantity of cases. Qualitative analyses revealed three key themes; 'Falling between the Cracks,' 'Waiting Game' and 'The Other Side' which depict the journey of participants during referral/re-referral to CAMHS. All participants experienced feeling lost amidst the services for various reasons. There was a strong indication that parents and professionals alike had put in a huge effort to enhance the child's chances of acceptance into CAMHS and to prove their worthiness of CAMHS involvement. Following acceptance into the service participants play a waiting game. This can be a frustrating time for parents as their child's well-being often continues to deteriorate. Eventually, they reach the other side of the waiting list and a new journey begins. The high level of support received from CAMHS was hugely significant for parents.

Noticeable differences emerged between involvements at various referral times and parents' empathy was apparent as they advocated for parents starting a similar journey.

### CONCLUSIONS

Considering the extent to which the 'not possible to define' category was used, it would be worth investigating if diagnoses were undecided as clients weren't attending or if the lack of a definite diagnosis had an impact on motivation to attend. Given the high prevalence of hyperkinetic disorders, the high rate of psychiatry involvement is fitting. However, it is important to note that neither quantity of input nor length of engagement was considered for any profession. While the quantitative analyses are a good indication of re-referral activity during the designated timeframe, they are not totally inclusive or exhaustive. It seems improved inter-service relations and communications would greatly benefit clients who fall between cracks. Information packs containing service details and generic information on the child's difficulties or bibliotherapy could be extremely advantageous for parents during the waiting list period. This service-specific research is of limited generalisability, however, it constitutes an important first step for NLE CAMHS in recognising key factors in re-referrals, understanding returning clients and creating a more efficient service.

### REFERENCES

Available on request.

## Evaluation of the Parents Plus Adolescent Programme in a Child and Adolescent Mental Health Service



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### INTRODUCTION

Parent training programmes have been shown to be an effective way to prevent and treat disruptive behaviour disorders in children. Parent training programmes have also been developed for the parents of adolescents, however, there is very little research evaluating parent training programmes for this age group. The Parents Plus Adolescent Programme is one such parent training programme with a very small evidence base.

### OBJECTIVE

The aim of this study is to evaluate the implementation of the Parents Plus Adolescent Programme in a Child and Adult Mental Health Service (CAMHS) clinic in the south of Ireland.

### METHODOLOGY

This study employed a mixed methods design incorporating both qualitative and quantitative components. A repeated measures design was employed for the quantitative component of the investigation. The Stress Index for Parents of Adolescents (SIPA)<sup>1</sup> and the Client Defined Problems and Goals Form<sup>2</sup> were completed by participants (n=8 participants finished the programme and are included in analysis; 42% attrition rate). Semi-structured interviews were completed by some finishing participants (n=4). Postal questionnaires were sent to parents who were invited to the programme but did not attend (n=5 responses; 45% response rate).

### RESULTS

No significant differences were observed between pre-intervention and post-intervention on any SIPA scale domain; at post-intervention stress scores were slightly higher in 3 of the 4 SIPA domains. Participants were significantly closer to achieving their goals post-intervention ( $p<0.05$ ). Qualitative data indicated that participants found the intervention helpful.

### CONCLUSION

The strengths and limitations of the study were discussed and recommendations for service delivery were made.

### REFERENCES

Available on request.

## GPs Reported Confidence and Experience of Working with Child and Adolescent Mental Health

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### INTRODUCTION

'A Vision for Change' identifies GPs as having the primary role in referring children and adolescents with mental health issues to mental health services.<sup>1</sup> They are expected to know of available services in primary and secondary care and to refer accordingly. Limited research has explored GPs' perceptions, attitudes and training needs in relation to primary care child mental health practice in an Irish context.

### OBJECTIVE

This study aimed to identify gaps in GP knowledge so as to inform mental health services on how better to meet GP needs, and improve communication between GPs and mental health services.

### METHODOLOGY

Eleven GPs (five females and six males) participated in the study. GPs completed a 43 item self-report questionnaire adapted from GPs' 'Attitudes, Reported Confidence and Behaviour Questionnaire'<sup>2</sup> and a five item questionnaire devised by Byrne.<sup>3</sup> The questionnaire examined GP mental health training, GP reported confidence in child and adolescent mental health and GP knowledge of referring to, and accessibility of Primary Care and Child Psychology Services (PCCPS) and Child and Adolescent Mental Health Services (CAMHS). Three GPs also participated in a semi-structured interview. Frequencies and descriptive analyses were performed on quantitative items of the questionnaire using Statistical Package for Social Sciences (SPSS). Qualitative items of the questionnaire and semi-structured interviews were transcribed, coded and analysed using thematic analyses.

### RESULTS

The most significant findings from the self-report questionnaire included the following:-

- 9% of GPs felt their psychiatric training provided them with insufficient knowledge in treating children and adolescents with mental health difficulties.
- 64% reported being "reasonably confident" in assessing mental health difficulties in children and adolescents and 36% reported being "slightly confident."
- 55% reported being "reasonably confident" in assessing suicide risk in children and adolescents and 46% reported being "not confident at all" or "slightly confident."
- 63% reported being unsure as to which service to send child and adolescent patients with mental health presentations "often" or "very often."
- All GPs reported wanting more information on what referrals PCCPS would accept.

- The most common presentations contributing to this uncertainty included Conduct Disorder (64%), Attention Deficit Hyperactivity Disorder (ADHD) (55%) and Fear and Anxiety (55%).
- The most common presentations GPs reported wanting additional information on providing advice or treatment included on Sexual Abuse (82%), Grief and Bereavement (73%), Fear and Anxiety (73%) and ADHD (73%).
- 64% reported being unaware of the transfer of PCCPS to Child and Family Services (CFS).

Semi-structured interviews revealed two major themes; 'Barriers to Accessing Mental Health Services' which was divided into subthemes 'Under-Resourced and Under-Funded Services,' 'Change-Over in Personnel,' 'Time,' 'Referrals,' 'Overlap in Services,' and 'Communication between General Practice, PCCPS and CAMHS.'

### CONCLUSION

GPs' lack of knowledge of referral criteria for PCCPS and CAMHS and transfer of mental health services to other agencies indicates a lack of communication and collaboration amongst general practice and mental health services. GPs are in need of further, more detailed referral criteria which may result in decreases of potentially inappropriate or unnecessary referrals to mental health services. GPs are also in need of further education on various child and mental health presentations which could be provided through continuous medical education. Future research could consider exploring GP perceptions of the role of PCCPS and CAMHS to confirm what their working knowledge of child mental health services are.

### REFERENCES

Available on request.

# Patient Suicide and Support/Interventions Received Post-Incident - Mental Health Nurses' Experiences



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## INTRODUCTION

Experiencing a patient suicide can be a traumatising incident for mental health nurses causing both personal and professional effects. Its' impact on nurses may be significant and potentially compromise their ability to function effectively. This poses the question 'do mental health nurses receive adequate support following a patient suicide'? It is evident from a literature search that there are few statistics available on suicide among mental health service users in Ireland which is also reflected in the number of studies conducted to elicit the impact of patient suicide on healthcare professionals. The Health Service Executive (HSE) (2005) provided best practice guidelines to ensure safety of mental health in-patients and to assist staff in managing the traumatic events surrounding an in-patient suicide. Also the HSE (2009) provides an Employee Assistance Service where HSE employees can avail of a confidential support service with personal or work-related difficulties. Thus, support services are available for mental health professionals yet the usage of such services has not been investigated which gave rise to this study.

## METHODOLOGY

A qualitative descriptive study was carried out with the aim of exploring the effects of patient suicide on mental health nurses and their experience of support/interventions received post-incident. Ethical permission was obtained from the Faculty of Health Sciences Research Ethics Committee in Trinity College, Dublin. The study was carried out in a mental health service in South Dublin. At the time of data collection, there were approximately forty mental health nurses working in the acute and community settings of the selected mental health service. Mental health nurses who have experienced at least one patient suicide during their nursing career were invited to

participate in the study. A purposive sampling technique was used to select eight nurses who met the inclusion criteria. Data was collected by the first author using semi-structured interviews guided by an interview schedule which was later analysed using five steps of Colaizzi's (1978) method of analysis.

## RESULTS

Four themes emerged from the data analysis:

1. Mental health nurses' feelings, emotions and reactions following a patient suicide
2. Personal and professional effects of the patient suicide
3. Measures perceived as supportive/non-supportive following the patient suicide
4. Strategies suggested for changes in practice

These are presented in Table 1.

## CONCLUSION

A patient suicide can leave nurses with devastating emotional and professional effects which may hamper their nursing career and effective functioning as a nurse in the future. Findings suggest that it is important to support mental health nurses when such incidents occur by effective nursing management support, formal counselling if needed and with a clear critical incident plan. In order to provide ongoing support clinical supervision and regular staff meetings may be useful. Also, familiarising nurses with the policies and guidelines on suicide on induction and training them with effective risk assessment may help prevent patient suicides.

## REFERENCES

Available on request.

**Table 1 - Themes which Emerged from Data Analysis**

|  |        |                            |                              |
|--|--------|----------------------------|------------------------------|
| <b>Mental Health Nurses' Immediate Feelings and Emotions following Patient Suicide</b> |        |                            |                              |
| Disbelief  | Doubt  | Guilt & Anger              | Shock                        |
| Distress   | Fright | State of Panic             | Surprise                     |
| Upset  |        |                            |                              |
| <b>Personal and Professional Effects</b>   |        |                            |                              |
| Disturbed sleep  |        |                            | Impact on everyday life,     |
| Extra vigilant   |        |                            | Professional responsibility, |
| Feeling of letting patient/family down   |        |                            | Self doubt/blame/questioning |
| Flashback/ruminations  |        |                            | Nightmares, Sadness          |
| <b>Perceived Supportive/Non-Supportive Measures</b>                                    |        |                            |                              |
| <b>i. Informal Support</b>   |        | <b>ii. Formal Support</b>  |                              |
| a) Nursing Management  |        | a) From Nursing Management |                              |
| b) Multidisciplinary Team  |        | b) Debriefing              |                              |
| c) Peer  |        |                            |                              |
| <b>Strategies for Changes to Practice</b>  |        |                            |                              |
| Critical Incident Plan   |        | Team Building Exercise     |                              |
| Clinical Supervision   |        | Support Plan               |                              |
| Continuing Education on Suicide  |        | Post-Incident Analysis     |                              |

## Registered Psychiatric Nurses' Practice with Parents who have Mental Illness, their Children and Families in General Adult Mental Health Services in Ireland



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Northern Ireland

### INTRODUCTION

The overall aim of this study was to investigate Registered Psychiatric Nurses' (RPN) perceptions of their family focused practice (FFP) with parents who have mental illness, their children and families, in general adult mental health services in Ireland. The concept of FFP has been operationalised as a model or method of care delivery that emphasises the family as the unit of attention as opposed to a health professional working with an individual alone. The study sought to measure the extent of RPNs' FFP in acute admission units and community settings and to establish how RPNs' FFP compared with Australian RPNs' FFP. It also sought to identify the significant predictors of RPNs' FFP and to explore the scope and nature of high scoring RPNs' FFP and factors that affected their capacity to engage in FFP.

### METHODOLOGY

A mixed methods approach, using a sequential explanatory design, was employed to address the study aims. In Study One a clustered, random sampling approach was used to access 610 RPNs in 12 mental health services in Ireland (practicing within acute admission units and community mental health services). Data was elicited using the Family Focused Mental Health Practice Questionnaire (FFMHPQ) with a 57 percent response rate (n=346). RPNs' FFP was ranked on the basis of their responses on the questionnaire. RPNs were deemed to be high scoring if they obtained between five and seven on at least three of the six FFP behavioural subscales within the FFMHPQ. In Study Two, fourteen high scoring RPNs, from Study One participated in semi-structured interviews.

### RESULTS

Whilst the majority of RPNs in Study One were not family focused, and had lower mean scores than RPNs in Australia, a substantial minority were family focused. Most of the higher scorers were practicing within the community setting. The most important predictors of FFP were skill and knowledge, followed by RPN group (acute versus community setting) and confidence around parenting and children generally. Study Two suggested that high scoring RPNs' FFP was complex and multi-faceted, comprising various family focused activities, principles and processes. Their capacity to engage in FFP was determined by certain enablers and barriers with other results focused on future potential developments in FFP.

### CONCLUSIONS

The findings have enhanced understanding of RPNs' FFP with parents who have mental illness, their children and families, in the Irish context and internationally. The findings also represent a starting point for future research in this area within Ireland and elsewhere. On the basis of the results, various implications for RPNs' education, practice and policy can be made. It is recommended that national policies be introduced to mandate the identification of service users' parenting status by mental health professionals, including RPNs, on admission to mental health services, and to embed information and support regarding parenting into ongoing care. Furthermore, key enablers, including child and family focused education and time to engage in FFP, should be provided to RPNs, to facilitate the transfer of policy into practice. Future research is required to develop an in-depth understanding of RPNs' FFP in different settings.

### PRESENTED

Oral presentation at the Fourth International Conference on 'Families with Parental Mental Health Challenges: Addressing the Needs of the Whole Family' at Berkley University, California, USA on 27th April, 2014 by Anne Grant.

Oral presentation at the 'Fostering International Research Collaborations in regard to Families where a Parent has a Mental Illness (FaPMI)' at Monash University, Prato, Italy on 18th December, 2013 by Anne Grant.

# Mindfulness for Self Care in Social Work - An Introductory Study

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## INTRODUCTION

The occupation of social work is regarded as highly stressful. There tends to be little training on self care available to social workers. Research has shown the positive effects of mindfulness training for self care in caring professions and this training may be of benefit to social workers.

## OBJECTIVE

The current study aims to facilitate a mindfulness introduction programme for a group of Irish social workers, investigate trends in their levels of secondary traumatic stress and mindfulness and explore the appropriateness of mindfulness training for their self care.

## METHODOLOGY

A mindfulness introduction programme of 3 weekly sessions was facilitated for a group of social workers in Ireland (n=15). The Secondary Traumatic Stress Scale and Cognitive Affective Mindfulness Scale Revisited were completed by participants before and after the programme and were analysed for trends and correlations. Participants (n=3) were interviewed about the programme and a thematic analysis of these interviews was completed.

## RESULTS

Levels of mindfulness and secondary trauma stress did not change significantly from before to after the programme but there was a strong negative correlation between levels of mindfulness and secondary trauma stress at any given time point. The themes that emerged from the interviews were 'The Relevance of Mindfulness to Social Work', 'Applied Mindfulness Practice', 'What Mindfulness Does' and 'Preferences for Specific Aspects of Mindfulness.'

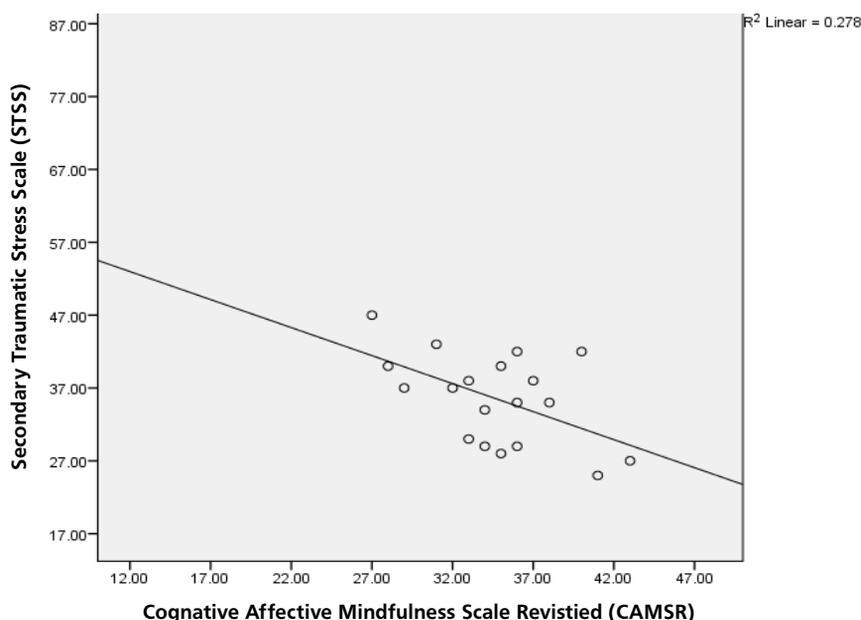
## CONCLUSION

The current study provided preliminary evidence that mindfulness training can be a suitable method for developing the self care of social workers in Ireland. The participants conveyed a positive disposition in relation to mindfulness training and its relevance to social work. Future research is required in order to verify the suitability of mindfulness and to develop a comprehensive and appropriate model of mindfulness training for this specific cohort.

## REFERENCES

Available on request.

**Figure 1 - Correlation Analysis of Mindfulness and Secondary Trauma Stress**





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# 'Stress Control'- An Evaluation of a 6 Week Didactic Stress Management Course Delivered to Staff in a General Hospital Setting

## INTRODUCTION

'Stress Control' is a 6 session psycho-educational programme which was devised over 26 years ago to help the large number of people who complained of stress and who were keen to learn how to tackle their problems themselves. This taught programme was designed for delivery in the primary care setting and is currently being run in a number of primary care services in Ireland. Participants sign up for 'Stress Control' themselves, attending a weekly 90 minute class over a 6 week period while completing homework tasks in between. They receive course materials in the form of booklets and relaxation CDs. In an effort to support staff in their self-care, 'Stress Control' was delivered in University Hospital Limerick by the first author in 2013 and again in 2014. A literature search revealed no published research on 'Stress Control' in an occupational health context.

## OBJECTIVES

The current study evaluates participant feedback from the 2014 programme. 'Stress Control' follows a cognitive-behaviour therapy (CBT) format focusing on the role played by our thoughts, behaviours and body in how we experience stress. The authors were keen to examine participants' reported learning across the different parts of this didactic CBT intervention.

## METHODOLOGY

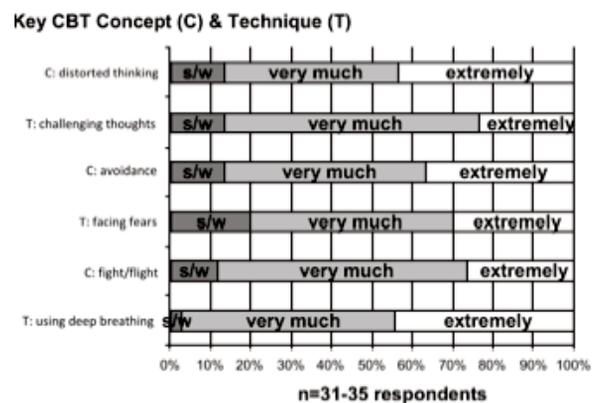
Fifty-four staff registered for the 'Stress Control' 2014 course in advance with a further 13 staff registering after the course had begun. Given the nature of an acute hospital setting, attendance varied across the 6 sessions from 45 in the first session with a steady decline to 23 in the final session and an average attendance of 32.3 across all 6 sessions. At the end of each session 5 minutes was set aside to allow participants to complete a questionnaire. They were asked to rate on a 4-point Likert scale the extent to which their understanding of the key learning objectives for that session had improved. The current study focused on core biological, cognitive and behavioural learning objectives presented in sessions 2, 3 and 4 respectively.

## RESULTS

The evaluation examined 16 key CBT concepts and techniques across sessions 2 to 4. 'Not at all' (0) was not marked by any participant on any of the 16 items. Across all 16 items, the greater majority of respondents - at least 80% - rated their increased understanding at the higher end of the scale as either 'very much' or 'extremely.' Figure 1 shows the percentage rating distribution for one key concept and a related technique for the cognitive, behavioural and biological domains as follows:-

- **Cognitive:** distorted thinking in the form of perceptual bias for high-threat information and 5 ways of challenging negative thoughts
- **Behavioural:** the problem of avoidance and how to face your fears
- **Biological:** understanding fight/flight and using deep breathing to regulate it

**Figure 1 - Percentage Distribution of Respondents' Ratings for a Sample of 6 Key CBT Concepts and Techniques (s/w=Somewhat)**



A future study could look at a 6 month follow-up to examine the extent to which participants report putting into practice what they had learned at 'Stress Control'. For future programmes, it would be useful to take a standardised measure of participants' reported stress symptoms for comparison pre and post 'Stress Control'.

## CONCLUSIONS

Results are encouraging suggesting that psycho-education delivered in this way does increase participants' understanding of key CBT concepts and techniques such as those listed in Figure 1.

## PRESENTED

The above evaluation is to be presented at the Psychological Society of Ireland's Annual Conference in Kilkenny in 2014 as part of the Irish Hospital Psychology Group Symposium.

## Patterns of Non-Fatal Self-Harm in Irish Men - Findings from a National Registry (2007-2011)

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Larkin, C.,<sup>1</sup>  
Corcoran, P.,<sup>1,2</sup>  
Perry, I.J.,<sup>1,2</sup>  
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### INTRODUCTION

It is consistently the case that suicide rates in Ireland are highest among men, particularly among those aged 20-24 years (31 per 100,000). Less is known about male non-fatal self-harm, which confers risk of further self-harm and suicide.

### METHODOLOGY

The National Registry of Deliberate Self-Harm routinely monitors deliberate self-harm presentations to all emergency departments (EDs) in Ireland.

### RESULTS

Between 2007 and 2011, the male self-harm rate increased by 27% to 205 per 100,000. The highest rates are observed among men aged 20-24 (516 per 100,000).

Most male self-harm presentations involved an intentional drug overdose (64%). While rare as a sole method of self-harm, alcohol was involved in 44% of all presentations. Highly lethal methods of self-harm (such as attempted drowning and attempted hanging) and self-cutting were significantly more common among men than women, with self-cutting most common among men aged 15-24 years (24% of presentations). 15% of all male self-harm presentations left without being seen or refused treatment. Men were more likely to refuse admission if alcohol was involved (18%) or after a self-cutting act (17%). In addition, men who presented with self-cutting more often required intensive treatment than women (29% vs 25%).

Risk of repetition of self-harm (re-presenting to an ED with another act of self-harm) was highest among men within 30 days of an initial act of self-cutting (6.2% vs 4.5%), and male patients with more severe self-cutting were less likely to present with multiple self-harm methods. Male patients who received less extensive treatment for self-cutting were more likely to repeat within 12 months than those who required more intensive treatment.

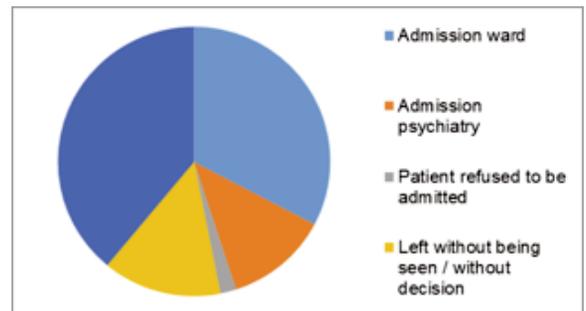
### CONCLUSIONS

A reluctance to seek help, combined with a tendency towards more lethal methods, may contribute to men's higher risk for subsequent suicide. Less severe self-cutting is associated with non-fatal repetition, while men engaging in more severe self-cutting with low risk of non-fatal repetition may be at high suicide risk.

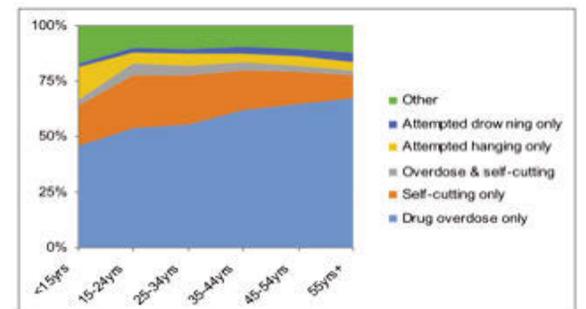
Self-cutting involvement should be considered as a risk factor for repetition during assessment of self-harm patients. The increase in self-harm involving cutting is associated with a high risk of repeated self-harm following an ED presentation. There is need for continued efforts to prioritise national implementation of evidence-based treatments shown to reduce risk of repetition, such as CBT and DBT interventions.

In all, 16% of men left without being seen or refused admission. More focus should be placed on those who leave the ED without receiving treatment or assessment following a self-harm episode. Further research is also required to examine suicide risk among men who present with self-harm to emergency departments in Ireland.

**Figure 1 - Treatment of Self-Harm among Men**



**Figure 2 - Methods of Self-Harm among Men**



### REFERENCES

Available on request.

### PRESENTED

As a poster presentation at 'From Policy to Practice: Profiling the Impact of Ireland's National Mens' Health Policy' in Dr. Steeven's Hospital, Dublin, on June 13th, 2013.

### FUNDING

The National Registry of Deliberate Self-Harm is funded by the Health Service Executive National Office for Suicide Prevention.

## Frequent Repeaters of Self-Harm - Findings from the Irish National Registry of Deliberate Self-Harm



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### INTRODUCTION

While previous studies have identified the risk factors associated with repetition of self-harm, relatively little work has been done to explore the profile of self-harm patients who present multiple times to emergency departments (EDs).

### METHODOLOGY

A cohort study was conducted using data from the Irish National Registry of Deliberate Self-Harm, which records information on deliberate self-harm presentations to all EDs, in order to identify patients presenting multiple times (10 or more recorded episodes) over the study period.

### RESULTS

During the period 2003-2011, 635 persons made a total of 11,483 presentations to EDs as a result of self-harm, representing 12% of all self-harm presentations made within that time period (n=99,672). Drug overdose was involved in 64% of these episodes. Self-cutting was strongly associated with multiple repeat acts, present in 33% of all episodes. The proportion of cases involving self-cutting increased with number of previous episodes. Patients presenting 10 or more times over this study period were most often discharged from the ED following treatment (37%). A total of 16% were admitted to a psychiatric ward. However, 18% of presentations left the ED without being seen or without a recommendation, and more so for men (23%).

### CONCLUSIONS

Multiple repeat presentations have a significant impact on ED health services and staff. The aftercare patterns recorded suggest a service gap for these individuals. The findings suggested that self-harm patients are not a homogenous group. Targeted intervention such as dialectical behaviour therapy should be promoted as treatment options for this group of individuals.

### REFERENCES

Available on request.

### PRESENTED

At the 15th European Symposium on Suicide and Suicidal Behaviour on August 28th, 2014 in Tallinn, Estonia by Dr. Eve Griffin

### FUNDING

The National Registry of Deliberate Self-Harm is funded by the Health Service Executive National Office for Suicide Prevention.

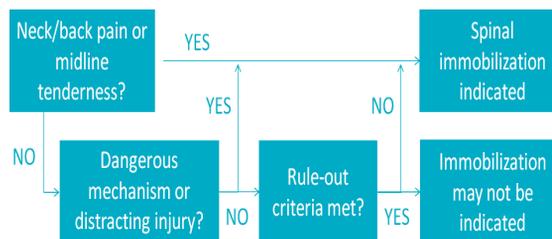
# An Audit of Prehospital Spinal Precautions in Trauma Patients Presenting to University Hospital Limerick

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## INTRODUCTION

Management of trauma patients has traditionally been as straightforward as ABC: Airway, Breathing, Circulation. As trauma care advanced, an increased emphasis was placed on identifying and preventing injury to the cervical spine and spinal cord in hopes of mitigating any neurological injury. Thus, cervical collars and spinal long-boards became a mainstay of trauma care. In an effort to further improve management of trauma patients, clinical decision algorithms for spinal care (i.e. NEXUS criteria, Canadian C-Spine Rule) were developed resulting in a 40% reduction in the number of patients requiring spine immobilization and radiography.<sup>1</sup> Ireland's Pre-Hospital Emergency Care Council (PHECC) has adapted the best practice recommendations into clinical practice guidelines (CPG) for their paramedics to use in the field.

Figure 1



This study aims to evaluate paramedic use of spinal immobilization with regard to PHECC clinical practice guidelines, as well as to identify areas for improvement in patient evaluation and management.

## METHODOLOGY

A total of 90 'major trauma' patients - as per coding by Emergency Department (ED) personnel on the ED information system (MaxIMS), who presented to UHL's Emergency Department over a two-month period in 2013 were randomly selected for retrospective review. Of the 90 patients, 19 were excluded (7 for age<12, 5 for arriving at the ED independently, 7 for incomplete records). Ambulance patient care reports (PCRs) and ED notes were used to obtain patient demographics, presenting complaints, mechanisms of injury, and ED outcomes. Anonymized data were collected and stored in a Microsoft Access database. Data were analyzed using Microsoft Excel.

## RESULTS

Overall, 71 patients (50 males and 21 females) met the inclusion criteria, ranging in age from 12-79 years (mean 38, SD 16). Using the Manchester Triage System, 3% of patients were to be seen immediately (red), 57% very urgently (orange), and 40% urgently (yellow).

however none of these patients experienced a spinal injury. A total of 8% of collared patients experienced

Figure 2 - Mechanism of injury for major trauma patients

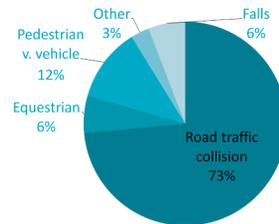


Figure 3 - Spinal precautions used for major trauma patients

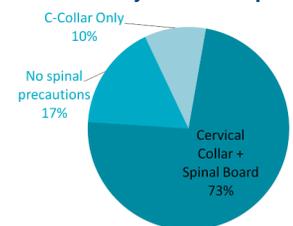
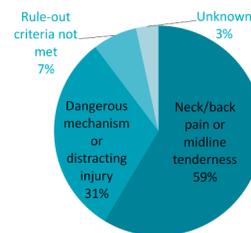


Figure 4 - CPG indications used for spinal immobilization



spinal fractures, 80% of whom had a PHECC-defined 'dangerous mechanism.' None of the non-collared patients experienced spinal fractures. Against medical advice 25% of the non-collared patients refused spinal immobilization. Despite a dangerous 'rule-in' mechanism 8% of non-collared patients had no spinal precautions taken.

## CONCLUSION

In this sample of 71 patients, the PHECC guidelines resulted in immobilization for 100% of all patients with spinal injuries. A sample of 13,357 patients found the sensitivity of similar Emergency Medical Services (EMS) protocols to be 92% (95% CI 89.4-94.6%).<sup>2</sup> With a larger sample size, this study may have resulted in similar findings. Spinal immobilization was not indicated by PHECC's CPG for 3% (n=2) of collared patients and 8% (n=1) of those requiring immobilization were missed. Literature suggests that up to 12% of patients are immobilized when not indicated, and 7% are missed.<sup>2</sup> There may be a role for a spinal clearance algorithm in future PHECC guidelines, as this may reduce prehospital spinal immobilization by up to 33%.<sup>3</sup> Overall, prehospital spinal management of trauma patients at UHL meets the current international standard.

## REFERENCES

Available on request.

# The Generally Unwell - Are they Sick or Septic? A Survey of Irish Emergency Medical Services Practitioners' Awareness of Sepsis

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## INTRODUCTION

Sepsis is considered to be an extremely complex disease by medicine, having battled it for millennia. The current Pre-Hospital Emergency Care Council (PHECC) curriculum covers sepsis for Advanced Paramedics (AP) only, not paramedics or Emergency Medical Technicians (EMT).<sup>1</sup> Current literature regarding the sepsis syndrome suggests that it is a significant burden on the medical infrastructures of many countries.<sup>2</sup> Early recognition and intervention by Emergency Medical Services (EMS) can improve the mortality and morbidity associated with various acute medical conditions such as stroke and Acute Myocardial Infarction (AMI). Cronshaw et al. recognised that the mortality associated with severe sepsis and septic shock can be 6 times greater than that of AMI and up to 5 times greater when compared to stroke.<sup>3</sup> The most common causes of sepsis are pneumonia, bowel perforation, Urinary Tract Infections (UTI), and severe skin infections.<sup>4</sup> Early recognition, intervention and transport to an appropriate facility by EMS can play a vital role in the survival of a patient suffering with severe sepsis and its complications.<sup>5</sup>

## OBJECTIVE

To assess the awareness of sepsis among Paramedics and Advanced Paramedics in Ireland.

## METHODOLOGY

An anonymous web-based questionnaire was distributed during October 2012 (30 days) to 1,911 Pre-Hospital Emergency Care Council (PHECC) registered Paramedics and Advanced Paramedics. The survey consisted of 18 questions that sought to gather information on the recipient's demographics, knowledge, awareness and attitude with regard to Sepsis. A total of 330 (n=1,911) responses were collated and analysed using Survey Gizmo© and SPSS©. Ethical approval was granted by the research ethics committee at the Mid-Western Regional Hospital, Limerick.

## RESULTS

The overall response to this study was diminished, with 330 (n=1,911) giving a return rate of 17.3%. The AP response rate was 90 (n=220) or 39%. Some of the results are detailed below. The clinical signs of SIRS were correctly identified by 88% ( $\pm 5.2\%$ ) and the correct definition of sepsis was indicated by 83% ( $\pm 6\%$ ). Knowledge of sepsis was considered limited among practitioners by 60% ( $\pm 7.8\%$ ) but confidence in identifying and managing septic patients was indicated by 67% ( $\pm 7.5\%$ ). The current Clinical Practice Guideline (CPG) on septic shock was unhelpful according to 61% ( $\pm 7.8\%$ ) and when transporting a septic patient 37% ( $\pm 7.7\%$ ) would not alert the receiving Emergency Department (ED). One of the study's vignettes described a man with severe sepsis, only 53% ( $\pm 8\%$ ) of responding APs found this patient's condition to be 'life threatening.'

## CONCLUSIONS

A moderate awareness of sepsis was demonstrated among the responding APs but the confidence and abilities of practitioners to recognise septic patients is debatable from these results. Studies from the US and Europe have reported that EMS practitioners, trained in the recognition of severe sepsis while following a sepsis protocol/guideline can result in accelerated treatment modalities in both the pre-hospital and ED settings.<sup>6</sup> Current national programmes are running to educate hospital staff in the recognition of sepsis. The Irish EMS is not currently involved in these initiatives, however PHECC are reviewing their CPGs relating to septic shock and may include sepsis recognition in future drafts. With the epidemiology and etiology of sepsis closely connected to older populations, diabetes and respiratory disorders, the prevalence of sepsis is set to increase.<sup>7</sup>

## REFERENCES

Available on request.

## PRESENTED

As part of a CPR Workshop at the Emergency Medical Society Gathering in Killarney in 2014 by Denis Daly.

# A Comparative Study of the Effectiveness of Supraglottic Airways Inserted during Uninterrupted Chest Compressions by Irish Healthcare Professionals and Medical Students



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## INTRODUCTION

Bystander resuscitation is crucial to saving life after a cardiac arrest. Guidelines demand increased focus on chest compressions rather than airway management during CPR. To minimize interruptions to chest compressions, supraglottic airways devices (SAD) are being used to manage the airway. They have been shown to work well with skilled operators in CPR scenarios while requiring little time to manage.

## OBJECTIVES

To evaluate the performance of second generation SADs, i-Gel-O<sub>2</sub> and LMA Supreme, between first year medical students compared to paramedics, then to evaluate the effect of an instruction template and device prompts in a second group of first year medical students.

## METHODOLOGY

Two groups of first year medical students were recruited and compared to a cohort of Dublin Fire Brigade paramedics. Group A received only verbal instruction and Group B were given only a picture template instruction card. Each group's time to insertion was measured as well as tidal volumes achieved using a Wright's spirometer. Participants also completed an anonymous questionnaire.

## RESULTS

In all, 81 participants were recruited for this study: 61 students and 20 paramedics. Overall 93% from student group A inserted the i-Gel-O<sub>2</sub> successfully on the first attempt. Only 56% inserted the LMA Supreme adequately on the first attempt. Paramedics had a 100% success rate with i-Gel-O<sub>2</sub> and an 80% with LMA Supreme on first attempt while 97% in student group B inserted the i-Gel-O<sub>2</sub> on the first attempt.

## CONCLUSIONS

Students performed well compared to professionals with the i-Gel-O<sub>2</sub> but performance with the LMA was markedly poorer between the two groups. The instruction template increased the insertion success rate for the second student group.

## PRESENTED

At the Emergency Medical Society Gathering Conference in Killarney on May 14th, 2014 by Dr. Edward Parkes.

# An Investigation of the Appropriateness of Ambulance Pre-Alerts to the Emergency Department



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## INTRODUCTION

Emergency Medical Services (EMS) provide advanced notice (pre-alerts) to the Emergency Department (ED) of the impending arrival of high acuity patients by ambulance. Currently this is at the discretion of the attending paramedic however national guidance is due to be published in the near future.

## OBJECTIVE

The project aim is to quantify the utilisation of the pre-alert system and compare it to local ED guidelines for resuscitation activation.

## METHODOLOGY

Ethical approval was granted by the University Hospital Limerick Ethics Committee. All patients pre-alerted to the ED during the 6 week study period were identified. The demographics and clinical characteristics of these patients were recorded. Pre-alert data was compared with local ED resuscitation room activation criteria.

## RESULTS

A total of 144 pre-alerted patients were included in the study. Overall 72% met local resuscitation room activation criteria and 19% of patients required resuscitation on arrival. Requests for "assessment on arrival" were more common approaching the end of an evening shift (7-8pm) compared to other times (66% v 42%) and only 50% of these requests met resuscitation room activation criteria. The most common clinical category for pre-alerts was cardiovascular emergencies (24%).

## CONCLUSION

Ambulance pre-alerts to the ED are relatively common and are not always appropriate. A programme of education for EMS staff on when to pre-alert would facilitate more appropriate use of ED resources. Introduction of a nationally standardised criterion would remove some of the ambiguity that leads to the relatively large number of inappropriate pre-alerts.

## PRESENTED

As a poster presentation at the UL Hospitals Research Symposium in the Strand Hotel, Limerick on October 24th, 2014.

# The Burden of Alcohol-Related Emergencies on the Ambulance Service in the Mid-West of Ireland - A Sobering Insight from the Advanced Paramedic Clinical Activity Study

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## INTRODUCTION

Alcohol consumption and abuse amounts to considerable socio-economic expenses for national and municipal services.<sup>1</sup> In Ireland, attempts at determining ambulance service costs due to alcohol-related emergencies have been estimated within a larger healthcare cost.<sup>1</sup>

## OBJECTIVE

The aim of this study is to provide an insight into the burden of alcohol-related emergencies on Advanced Paramedics (AP) in the Mid-Western region of Ireland over a six-month period.

## METHODOLOGY

Advanced Paramedic Clinical Activity Study (APCAS) data was collected prospectively over a 6-month period. Alcohol-related calls were then analyzed for call volume, demographic details and average call duration from dispatch to clear times. National Ambulance Service (NAS) costing figures were interrogated in order to calculate the unit costs per hour to the NAS for APs, Basic Paramedics, Rapid Response Vehicles (RRVs), ambulances and associated pay/non-pay costs.

## RESULTS

A total of 66 calls were categorized as alcohol-related, representative of 5% of emergent response calls (AS1) recorded in APCAS. Most alcohol-related calls took place at weekends (61%) and patients were more than twice as likely to be male. Almost a quarter of patients (23%) either refused to travel or were discharged against medical advice. The average call time per alcohol-related call was 60.17 minutes, with calls ranging from 16 to 135 minutes. The unit cost per hour of AP response to the NAS was estimated to be between €99.48 to €150.87. Alcohol-related emergencies requiring AP service cost the NAS an estimated €6,323.94 to €9,590.80 over a 6-month period in the Mid-West of Ireland.

## CONCLUSIONS

This study provides further insight into the sizeable burden of alcohol-related emergencies by analyzing a single facet of the NAS pre-hospital chain, advanced paramedics, over a six-month period in the Mid-West region of Ireland. These results represent a significant underestimation of true costs for a variety of reasons though it is clear the burden is still sizeable. Determining more precise estimates of alcohol-related pre-hospital and hospital financial burdens will aid in improving current national estimates of alcohol-related harm and addressing insufficiencies in alcohol management policies and Emergency Medical Services strategies.

## REFERENCES

Available on request.

## PRESENTED

As a poster presentation at the UL Hospitals Research Symposium in the Strand Hotel, Limerick, November 2013.

## FUNDING

This research has received funding from the Graduate Entry Medical School Summer Fund.

# Preparedness of Hospitals in the Republic of Ireland for an Influenza Pandemic - An Infection Control Perspective

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## INTRODUCTION

An influenza pandemic occurs when a new influenza virus subtype materialises against which no one is immune.<sup>1</sup> The most important failure in pandemic planning is the lack of standards or guidelines regarding what it means to be 'prepared.'<sup>2</sup> On reviewing the literature only three studies examined emergency preparedness for an influenza pandemic and one study focused on general emergency preparedness and not specifically influenza. All of the studies demonstrated that hospitals need to continue to prepare and test their preparedness for an influenza pandemic. No study had previously been carried out in Ireland.

## OBJECTIVE

To gain an insight into the current preparedness of Irish hospitals for an influenza pandemic from an infection control perspective which included:

1. Documenting the current situation regarding the facilities and infrastructure in acute hospitals to deal with an influenza pandemic in the Republic of Ireland
2. Providing information on organisational structures in acute hospitals in the Republic of Ireland regarding the preparedness and response to an influenza pandemic
3. Documenting current status on preparedness of acute hospitals for an influenza pandemic in terms of infection control

## METHODOLOGY

The investigator obtained information on influenza preparedness using a questionnaire completed by infection control nurses. The participant information sheet and a letter outlining the study and requesting permission to carry out the research was sent to the Chief Executive Officer (CEO)/Manager of each hospital. An e-mail was sent to the infection control nurse (ICN) of each hospital outlining the study and objectives of same. The following inclusion and exclusion criteria were applied:-

### Inclusion criteria

- Acute public and private hospitals in the Republic of Ireland

### Exclusion criteria

- Nursing Homes
- Psychiatric hospitals

A total of 46 hospitals responded out of 56 public and private hospitals in the Republic of Ireland giving a response rate of 82%.

A questionnaire devised by author T. Rebmann was used with permission for this study.<sup>2</sup> This questionnaire was piloted prior to use. The statistical computer package SPSS Version 2.0 was used to perform quantitative analysis on the collected data. Data cleaning was carried out throughout the data entry process. Analysis of the data was performed through descriptive statistics, such as frequencies for each of the variables.

## RESULTS

The survey reported an 82% response rate (46/56). It identified sub-optimal preparedness in Irish acute hospitals:

### (i) Existing Facilities and Infrastructure

- Over half of the hospitals (51%) held reserve medical supplies
- 65% planned to prioritise the vaccination of hospital workers in the event of a pandemic
- 52% of Irish acute hospitals had sufficient airborne isolation capacity to address routine needs and had an interim emergency plan to address needs during an outbreak

### (ii) Established Organisational Structures

- One third (35%) had participated in an emergency plan or infectious disease exercise over the previous year
- 40% had carried out a "lessons learned" exercise in revising their emergency response plans
- 22% had incentives in place to encourage healthy healthcare workers to attend work during a pandemic
- 35% had developed policies for providing alternative standards of care during a pandemic

## CONCLUSIONS

This study suggests that Irish acute hospitals are not fully prepared for an influenza pandemic, despite recently experiencing the 2009 Influenza A (H1N1) pandemic. Irish acute hospitals need to work to improve their preparedness for an influenza pandemic.

## REFERENCES

Available on request.

## Evaluation of the Community Oncology Nursing Programme

### ABSTRACT

Ireland's cancer incidence will grow by 100% in the next 10-15 years. This, together with advances in oncology drugs will increase cancer prevalence and survival. Though welcome, medical advances exert pressure on oncology ward capacity, where traditionally all such patient care is delivered. Alternative ways to safely manage patients are needed to address demand.

The National Cancer Control Programme (NCCP) in collaboration with the Medical Oncology Service, Letterkenny General Hospital (LGH), The Office of the HSE Nursing and Midwifery Directorate and the Community Nursing Service in Donegal developed the Community Oncology Nursing Programme to enable community nurses to provide shared nursing care to acute oncology patients in their own home. Theoretical and skills based training was delivered over 6 months. It met an identified service need, highlighted by Letterkenny hospital oncology team.

The aim of the study was to determine whether the education, training and systems put in place equipped the Public Health Nurses (PHNs) participating in the programme with the competence and confidence to manage patients safely in the community. Specific objectives were to evaluate patient safety, assess impact of programme on patients' quality of life, ensure PHNs were adequately trained to deliver intervention, assess impact on medical oncology day ward and on the community nursing service.

The evaluation used a mixed methods approach. Quantitative methodology included; collation and assessment of the episodes of cancer care provided by PHNs and a comparison of the oncology day ward activity for defined procedures before and after the implementation of the programme. Qualitative Methodology included; an assessment of the patients, the hospital personnel and the PHNs' experience of the programme using focus groups and semi-structured interview.

There were 120 PHN visits to a total of 25 patients in the community during the two month survey period 1/2/2012 to 31/3/2012. These visits were carried out by eight of the nine PHNs who completed the course. The majority of visits took place in the patients' home (112/120) and only seven visits took place in the local health centre. During those 120 visits 486 interventions, not inclusive of documentation of nursing care, were carried out. Of these the most frequent were:-

- A head to toe patient assessment (80%)
- Emotional support (78%)
- Patient education (70%)
- Symptom management (53%)
- Medication management (50%)
- Sub-cutaneous injections (38%).

One of the anticipated benefits of the programme was to reduce the burden of travel on the patients. The intervention forms completed by the PHNs showed that the most common distance of these patients' homes from Letterkenny General Hospital (LGH) was 60-69 kilometres.

No adverse patient events occurred during the evaluation period. Contact between community and hospital was for communication and referral and no queries relating to possible adverse events was recorded. Patients valued having aspects of their care delivered at home and they reported that it improved their quality of life.

There was a drop in the number of CVAD interventions; dressing, flushing and disconnections of ambulatory chemotherapy in LGH from May-June 2007 through May-June 2010 to May-June 2012. The data are only indicative due to poor quality. Nevertheless, this finding was supported by the LGH staff who report that the reduction in the medical oncology day ward activity for CVAD flushes/disconnection of ambulatory chemotherapy has been maintained.

Community nurses expanded their scope of practice and became partners with oncology day-ward nurses in caring for patients. The PHNs had the competence and confidence to safely deliver cancer care in the community. There was an impact on PHNs scheduling of their usual services due to the urgency of some of the cancer procedures. There was a dramatic decrease in hospital attendances for defined clinical procedures that are now performed in the community. The findings suggest there is a shift of the procedures undertaken in a patient's home from the hospital to the community.

Safe, seamless nursing care can be delivered so long as there is proper planning, detailed collaboration, leadership and trust. The education, local structures and process during the pilot along with access to oncology staff at all times facilitated the programme in meeting its key objective of patient safety.

### SOURCE

Published in August 2014 under the title 'Delivering care to oncology patients in the community: an innovative integrated approach' by Hanan T, Mullen L, Laffoy M, O'Toole E, Richmond J, Wynne M. in *Br J Community Nurs*. 2014 Aug 2;19(8):382-7.

doi: 10.12968/bjcn. 2014.19.8.382

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## Towards a Full Life - An Evaluation of Family Support Programmes for People with Disability



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### ABSTRACT

There has been an increasing awareness of the need for responses to people with disabilities to be framed within a person-centred approach, taking account not only of the person with disability, but also the family as a primary source of support. Studies into family-focused models of support suggest the potential to lead to positive change for people with disabilities, including enhanced partnerships, respect for autonomy, and the development of problem-solving, decision-making, and advocacy skills. The emergence of support projects that move away from service-led towards family-led models is a recent phenomenon in Ireland.

In 2010, Genio grant-aided four projects to build family capacity to promote and support the inclusion of people with a range of disabilities. The overarching aim was to enable families of people with disability to envision a positive realistic future, and build better lives for themselves and their children, within their communities. Two strategies were used to achieve this desired outcome. First, the initiatives emphasised strengthening participants' and their family's links with local communities through the creation of circles of support. Linked to this was the building of participants' knowledge and skills to enhance natural supports within the community. Each initiative set out to encompass an ethos of person and family-centeredness, the enablement of citizenship, and the strengthening of participants' capabilities to advocate and support their family member with a disability. In 2012, Genio commissioned researchers from Trinity College Dublin to evaluate these initiatives from the perspectives of families of people with disabilities and services/organisations.

The study employed a multi-method approach using qualitative and quantitative methods, including individual interviews, surveys and documentary analysis. Thirty eight surveys were collected (a 22% response rate overall - 27%, 32%, 8%, and 29% individually). Nine interviews were conducted with project managers/facilitators and 21 with family members. Qualitative data were thematically coded and quantitative data were statistically analysed. Ethical approval was granted from the Trinity College Dublin Research Ethics Committee.

Findings from surveys and interviews indicated that the initiatives had, for the majority of participants, a positive impact on the person attending the initiative, their family member and the family unit. Participants felt that the initiatives were well organised and facilitated, and that the information presented was empowering, enlightening, and applicable. Other positive outcomes for family members included enhanced knowledge and skills, changed ways of thinking, increased advocacy skills, greater networking and community involvement, and an overall perceived improvement in quality of life of the person with disability. The initiatives also provided an opportunity for participants to share knowledge and learn from each other, as well as to make connections with

others with similar experiences, leading to an increased sense of belonging and shared identity. However, participants also made recommendations to improve the initiatives, primarily around the need for enhanced follow-up supports to facilitate maintaining connections and circles of support. The initiatives appeared to have a number of positive impacts on the staff within the organisations involved, including enhanced awareness and understanding of the needs of families, and changed staff attitudes to, and ways of working with, families and persons with disabilities.

Overall, the findings supported a recommendation for continued funding of family focused programmes, although the limited response from participants in one of the four projects suggests that some caution needs to be maintained. To further strengthen the evidence base for this type of work, there is a need to move beyond post-hoc evaluations towards overarching evaluation frameworks, which include pre, post, and follow-up efforts. This would streamline the collection of data and inform future capacity building work in a more sophisticated manner.

### PRESENTED

- At the 6th Roundtable Meeting of the International Association for the Scientific Study of Intellectual Disability (IASSID) Special Interest Group on People with Profound Intellectual and Multiple Disability at the University of Groningen, the Netherlands from October 23rd to 25th, 2013.
- At the Genio Conference - 'Reforming Social Services through Public-Private Partnership' at RDS Concert Hall, Dublin, Ireland on October 9th, 2013.
- At the 14th Healthcare Interdisciplinary Research Conference & Student Colloquium: 'Health, Wellbeing and Innovation - Recent Advances in Research, Practice and Education' at Trinity College, School of Nursing and Midwifery, Dublin, Ireland from November 5th to 7th, 2013.

### FUNDING

This study has received funding from GENIO.

### SOURCE

Higgins, A, Sheerin, F, Daly, L, Sharek, D, Griffiths, C, de Vries, J, McBennett, P. Evaluation Report of Four Family-Focus Initiatives Funded by GENIO. Dublin: Trinity College Dublin School of Nursing and Midwifery.

## Cancer Incidence and Mortality Due to Alcohol in Ireland (2001-2010)



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### ABSTRACT

Alcohol is a Group 1 carcinogen. It is one of the most important causes of cancer after smoking, obesity and physical inactivity.

The aim of this study was to describe cancer incidence and mortality in Ireland (2001-2010) that was attributable to alcohol consumption, with a view to enhancing public awareness.

The Alcohol Attributable Fraction (AAF) for each cancer was calculated from:-

- National population 5 year age-specific prevalence data of alcohol consumption<sup>1</sup>
- Relative risk estimates of acquiring specific alcohol-related cancers

National cancer incidence and mortality data were obtained from the National Cancer Registry and Central Statistics Office respectively.<sup>2, 3</sup>

Alcohol related cancer incidence and mortality were calculated from the AAF for each cancer known to be causally related to alcohol.

Between 2001 and 2010, 4.7% of all invasive cancers in males and 4.1% in females were attributable to alcohol i.e. 4,585 male cases and 4,593 female cases. Alcohol consumption was causally related to cancer of the upper aero-digestive tract, liver, colon, rectum, female breast and pancreas. The dose response relationship varied for each site. The greatest risk was for the upper aero-digestive tract where 2,961 (52.9%) of all of these cancers in males and 866 (35.2%) in females were attributable to alcohol; 12.2% of breast cancer cases were attributable to alcohol. Over the 10 year study period 2,823 (6.7%) male cancer deaths and 1,700 (4.6%) female cancer deaths were attributable to alcohol.

Over half of alcohol related cancers could be prevented by adhering to low-risk alcohol consumption guidelines. Internationally public awareness of the link between alcohol and breast cancer must improve. The greatest potential is for the reduction of upper aero-digestive tract cancers through addressing the detrimental synergistic impact of alcohol with tobacco consumption.

### REFERENCES

Available on request.

### SOURCE

Irish Medical Journal, 2013;106(10):294-297.

## Piloting Questions Developed by Primary School Children for Inclusion in the 2014 Health Behaviour in School-aged Children Study

Daniels, N.,<sup>1</sup>  
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### INTRODUCTION

The Health Behaviour in School-aged Children (HBSC) study in Ireland provides data on a cyclical basis on a range of health and well-being related issues and the context of young peoples' lives. In partnership with the Citizen Participation Unit of the Department of Children and Youth Affairs the HBSC Ireland Research Team have been working on the inclusion of children as stakeholders in the research process. Within this partnership a series of participative workshops were conducted with primary school children. These workshops facilitated the children to develop consensus on priority dimensions of their lives, to compose potential questionnaire items based on these priorities, including response options and to review their progress. This abstract details the process of piloting these questions.

### METHODOLOGY

Six class groups from two schools took part (n=49) children (51% female; 49% male). Eleven questions were piloted from three categories (Table 1). Each participant was asked to (1) complete the pilot questionnaire (2) underline any words or questions they did not understand or found difficult to read and to (3) cross out any questions they thought should not be asked of children their age. A class discussion followed.

### RESULTS

Of the eleven questions, one had an unacceptable level of missing data and caused confusion to participating children ('Do you feel safe with other people?'). One was an open question for which there were too many different answers provided ('What is your favourite sport?'). In one question 100% of children gave the same answer ('Do you like making new friends?'). The responses to two questions were highly skewed and thus were unlikely to provide useful data ('Does your family try to spend time with you?' and 'Is having a family important to you?'). A final question was strongly queried by pupils during the classroom discussion ('Do you love your family?') As a result of the pilot these six questions were excluded. Five new questions, developed by primary school children, will be included in the 2014 HBSC questionnaire; (1) 'Do you play sports?' (2) 'Do you play with a club?' (3) 'Do you prefer to play... indoors or outdoors?' (4) 'How often do you do your hobbies?' (5) 'Does your family play with you?'

### CONCLUSION

The methodologies used in these workshops provided rich data directly from the children and can be applied to other projects to actively engage with children and inform health promotion practice and policy.

**Table 1 - Child Developed Questions Piloted with Primary School Children**

| QUESTIONS   | RESPONSE OPTIONS   |
|---|--|
| <b>FUN</b><br>Do you play sports?<br>Do you play with a club?<br>Do you prefer to play...<br>How often do you do your hobbies?<br>What is your favourite sport?   | Yes, No<br>Yes, No<br>Indoors, Outdoors?<br>Every day, Every week, Every month, Rarely, Never<br>Open-ended          |
| <b>SAFETY</b><br>Do you feel safe with other people?  | Yes, No  |
| <b>FAMILY</b><br>Do you like making new friends?<br>Does your family play with you?<br>Does your family try to spend time with you?<br>Is having family and friends important to you?<br>Do you love your family? | Yes, No<br>Always, Often, Sometimes, Never<br>Yes, No<br>Yes, No<br>A lot, Some, A little, Not very much, Not at all |



# Piloting Questions Developed by Post-Primary School Children for Inclusion in the 2014 Health Behaviour in School-aged Children Study

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## INTRODUCTION

A partnership between the Health Behaviour in School-aged Children (HBSC) research team and the Citizen Engagement Unit of the Department of Children and Youth Affairs worked with groups of young people to develop their ideas on what is important to report about young lives and how to ask young people about these issues. This abstract outlines the piloting process for these new questionnaire items.

## OBJECTIVE

The aim of the HBSC study is to gain new insight into and increase our understanding of young peoples' health and well-being, health behaviours and their social context.

## METHODOLOGY

Students from three post-primary schools participated in the pilot (n=154). In total 20 questions were piloted and students were asked to indicate how appropriate, how easy to understand and how fair each questions was. Students were also asked to underline any words or questions they did not understand. This was followed by a class discussion.

## RESULTS

Fourteen of the twenty questions piloted were excluded from use in the questionnaire. Making decisions on which items to exclude was complex with a range of different sources of input (student responses, student comments, etc.). The reasons for excluding the questions are highlighted in Table 1 below.

## CONCLUSIONS

Six new questions will be included in the 2014 HBSC questionnaire for post-primary school children; (1) 'Are you comfortable talking about your sexuality?' (2) 'Do you feel comfortable being yourself with your friends?' (3) 'At what age should young people be allowed to work?' (4) The voting age is 18. 'What age do you think it should be?' (5) 'Are you self confident?' (6) 'Do you feel social networking sites are safe?'

Including young people in the HBSC research process has, thus far, proved very valuable. Young people have clearly demonstrated the ability to participate in and provide new perspectives to such research projects.

**Table 1- Reasons for Excluding Questions**

| Question  | Did not understand words or phrases | Question unclear or vague | Responding skewed | Not appropriate | Not fair |
|---|-------------------------------------|---------------------------|-------------------|-----------------|----------|
| What is your attitude towards LGBT (lesbian, gay, bisexual, transgender) community? | ✓                                   |                           |                   |                 |          |
| Do you feel that every sexuality is accepted in your country?                       | ✓                                   | ✓                         |                   |                 |          |
| How do people influence your interests?   |                                     | ✓                         |                   |                 |          |
| Which gender has more freedom/ Do boys or girls have more freedom?                  | ✓                                   |                           |                   | ✓               | ✓        |
| Do you judge others because they are different?                                     |                                     | ✓                         | ✓                 |                 |          |
| Do you think young people should be judged (by adults) on past mistakes?            |                                     | ✓                         | ✓                 |                 |          |
| Are you open about your mental health?  | ✓                                   |                           |                   | ✓               |          |
| Do you often talk about your mental health in class/school?                         | ✓                                   |                           |                   | ✓               |          |
| Would you feel comfortable talking to friends about your mental health?             | ✓                                   |                           |                   | ✓               |          |
| Why do you use social media?  |                                     | ✓                         |                   |                 |          |
| Does your sexuality effect your mental health?                                      | ✓                                   |                           |                   |                 | ✓        |
| Have you ever stood up for the person being bullied?                                |                                     |                           |                   | ✓               |          |
| How would you deal with being bullied?  |                                     |                           |                   | ✓               |          |
| Do you have someone to talk to if you are being bullied?                            |                                     |                           | ✓                 | ✓               |          |

# The Effect of Brief Advice about Physical Activity Recommendations on Moderate-to-Vigorous Activity of Inactive Adults

## INTRODUCTION

National physical activity guidelines for the United Kingdom (UK) have recently been updated with the volume of physical activity required for health benefit now expressed as a weekly total of 150 minutes rather than the previously used daily guideline of 30 minutes on most days of the week.<sup>1</sup>

## OBJECTIVE

The aim of this pilot study was to compare the amount, intensity and pattern of physical activity undertaken by inactive adults following brief advice regarding physical activity based upon either the weekly or daily guideline.

## METHODOLOGY

A total of 62 inactive individuals in the UK and Ireland wore an accelerometer (Actigraph GT3X) for 7 days prior to and following a one-to-one advice session in which they were randomly assigned to receive either the weekly guideline (150 minutes/week) or the daily guideline (30 minutes on 5 days). The volume and pattern of moderate to vigorous intensity physical activity (MVPA) was compared using a two way mixed factor analysis of variance with one within subjects factor (time) and one between groups factor (group) using the Greenhouse-Geisser post-hoc test to determine significance.

## RESULTS

Total volume, frequency and duration of MVPA bouts increased significantly for the entire group ( $n=62$ ,  $P<0.05$ ) however there were no statistical differences between groups for the amount of MVPA engaged in, or the number or duration of bouts of MVPA.

## CONCLUSION

Both weekly and daily volume guidelines are equally effective in eliciting a modest short term increase in physical activity. Future studies of this nature completed over a prolonged period comparing volume, intensity and patterns of PA, would help to determine whether any short term increase in MVPA is sustained.

## REFERENCES

Available on request.

## PRESENTED

As a poster presentation at the Health Enhancing Physical Activity 3rd Annual Conference in Amsterdam from October 11th to 13th, 2013.

## FUNDING

Data collection in Limerick was funded by a grant from the Mary Immaculate College Research Directorate Seed Funding Scheme. Aiden Doherty is a Marie Curie post-doctoral research fellow supported by the Irish Health Research Board under grant number MCPD/2010/12.



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## Health Promotion Programmes in a Residential Care Setting - An Older Person's Perspective



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### INTRODUCTION

Globally the population of older people is rising.<sup>1</sup> Recent reports in Ireland indicate no change in this trend.<sup>2</sup> While older people can aspire to live long and healthy lives, the correlation between longevity and increased chronic illness is noteworthy.<sup>3,4</sup> Research suggests that health promotion programmes are effective regardless of age, even after decades of practising unhealthy lifestyles.<sup>5,6</sup> Thus, understanding what promotes health for older people in long-stay care is research worth doing.

### METHODOLOGY

A Qualitative Descriptive Research Design was used.<sup>7,8</sup> Data were analysed using Burnard's thematic analysis.<sup>9,10</sup> A purposive sample of ten residents was used. Data were collected by means of semi-structured interviews.

A central theme with 3 sub-themes were identified as follows;-

Meaning of Health

- 1) Being Enabled
- 2) Being Involved
- 3) Being Connected

### RESULTS

Findings show that promoting health is effective, and is intrinsic to quality of life in residential care. Findings also note that meaning of health for older people is a highly subjective concept. The importance of health and maintaining optimum health in residential care was highlighted by the residents as the data demonstrate.

### CONCLUSIONS

This suggests that a holistic understanding of what health means to older people is necessary if health promoting programmes are to impact positively on outcomes of health. However, a number of barriers do exist. Examples of such barriers are empowerment of staff, organization of care and lack of understanding of what health promotion is for older people. Furthermore, nurses are well positioned to provide this care using a person-centred approach.

### PRESENTED

At the All-Ireland Gerontological Nurses' Association, 6th Annual Conference in the Clayton Hotel, Galway on May 15th, 2014 by Fiona Rigney, Clinical Nurse Specialist in Health and Wellbeing.

## Consulting Stakeholders about Dissemination



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### INTRODUCTION

It is an ethical imperative of the Health Behaviour in School-aged Children Ireland (HBSC) study to disseminate research findings to as wide an audience as possible, including academics, practitioners, policy-makers and non-specialists. Optimally, findings should be disseminated in a manner that is useable, understandable and appropriate for specific stakeholder groups.

### METHODOLOGY

A qualitative exploration was carried out to identify alternative and suitable methods for disseminating research findings on the health behaviours of adolescents in Ireland to a range of stakeholder groups and to collate feedback on existing resources.

Participants were recruited from the stakeholder groups of young people, parents, youth workers and teachers. Convenience sampling was used to engage a diverse range of participants. Eleven focus groups and two discussion groups were conducted with 39 young people, 15 youth workers, 13 parents and 14 teachers. Using a semi-structured format, the discussions covered responses to current dissemination formats, information needs, and current and preferred sources and formats of information.

### RESULTS

Young people were interested in the health behaviours of other young people and agreed that this information would lessen peer pressure experienced by many adolescents. They were clear that information should be presented in a short, concise format containing a small amount of text and focusing on visual aspects such as colour and images. Most suggested social media (Facebook and YouTube) and many recommended the use of short video clips made by young people themselves as a method of disseminating research.

Parents found the research interesting and felt it was good for them to know the realities of adolescent life but were more eager that their children have the information. Parents recommended increased distribution of research findings in schools and libraries and increasing links with existing resources such as newspapers and websites.

Youth workers were interested in the research and considered that it would be useful for them to have such information presented in a way that was relevant to their own work. They were particularly interested in local or regional level data. Their chief recommendations were to link in with the established youth worker forums/databases and to involve young people in the dissemination process.

Teachers considered the research to be valuable and useful in a range of school subjects. A number of partici-

pants suggested that information should target specific teachers and subject areas and that it should be presented in a classroom-ready format such as a Power-Point presentation or easy to photocopy materials.

### CONCLUSIONS

This study elicited a range of opinions about the dissemination of adolescent health behaviour research data with distinct differences between the individual stakeholder groups. The consultation provided valuable and constructive insights into suitable approaches to the distribution of research findings to a variety of audiences. These provide valuable guidelines which will benefit the dissemination of both existing and future research in the area of adolescent health. Correctly adopted, this information has the potential to expand the reaches of the HBSC survey and other research findings thereby extending knowledge on adolescent health behaviours to a broader audience.

### FUNDING

The Irish HBSC Study is funded by the Department of Health. The Adolescent Sexual Health in Ireland: Data, Dissemination and Development Study is funded by the IRC and the HSE Crisis Pregnancy Programme. We would like to thank the young people, parents, teachers and youth workers who took part in the focus groups. Also thanks to Kathy Ann Fox and Ursula Kenny, co-facilitators of a number of the focus groups.

### PUBLICATION

The young peoples' findings of this research have been published by the Childrens' Research Network for Ireland and Northern Ireland Digest in December 2014.

## What Children Do When They Witness Bullying

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### INTRODUCTION

Bullying is a particular cause for concern among children in schools. It has a detrimental effect on the health and well-being of victims and bullies,<sup>1</sup> the influence of which often continues into adulthood.<sup>2</sup> Those who witness bullying behaviour are also at an increased health risk.<sup>3</sup> There is growing recognition of the role played by those who witness or are bystanders to bullying. Bystanders have the power to promote or prevent bullying behaviour.<sup>4</sup>

### OBJECTIVE

To explore what children report doing when they witness bullying at post-primary schools in Ireland.

### METHODOLOGY

Data were sourced from the 2010 Irish Health Behaviour in School-aged Children (HBSC) survey. Students were asked what they had done, in the last couple of months, when they saw bullying. Response options were 'I didn't see bullying in the last couple of months,' 'I did nothing, I stepped away,' 'I did nothing, I just watched,' 'I helped the victim,' 'I encouraged the attacker(s)' or 'I called an adult.' There was also a response option to record if they 'did something else' and space was provided for students to specify what they had done.

### RESULTS

**Table 1 - What Post-Primary School Children (Ages 11-18) Did When They Witnessed Bullying**

| What they did                 | N     | %    |
|-------------------------------|-------|------|
| I helped the victim           | 1,090 | 34.2 |
| I did nothing, I stepped away | 1,033 | 32.5 |
| I did nothing, I just watched | 585   | 18.4 |
| I called an adult             | 254   | 8.0  |
| I encouraged the attacker(s)  | 176   | 5.5  |
| I did something else          | 45    | 1.4  |

While the majority of students (63.6%) reported that they did not witness bullying in the last couple of months, over 36% of students reported that they had witnessed bullying. Of the 3,183 students that reported witnessing bullying, more than a third reported helping the victim followed closely by 'did nothing, stepped away.' Only 8.0% of bullying witnesses reported that they had called an adult. Of the total 45 students (23 girls, 22 boys) who reported that they had done 'something else,' 17 (37.7%) said that they intervened verbally, for example by telling the bully to 'stop' or to 'cop on,' 9 (20.0%) that they intervened with violence against the bully, 4 (8.8%) that they tried to mediate between the bully and the victim, and 2 (4.4%) that they had laughed. A further two reported that whether they would help would depend on the consequences and if they liked the victim.

### CONCLUSION

This exploratory work has given some insight into what children report doing when they witness bullying at school. While the majority of children reported that they did nothing to help the victim, a large proportion reported that they tried to help either verbally or physically and minorities reported that they encouraged the bully or intervened to fight the bully themselves. Empowering children to be active bystanders against bullying is an important strategy for bullying prevention in schools.

### REFERENCES

Available on request.

### FUNDING

The HBSC Ireland Study is funded by the Department of Health. Further detail on the study and its outputs is available at: [www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc)

## Diet, Physical and Social Activities in 9 Year Old Irish Children with Chronic Illnesses - Results from a National Cohort Study



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### INTRODUCTION

The Growing Up in Ireland (GUI) study is a national cohort study involving 8,568 9 year old Irish children and gives information on their diet and lifestyle. 11% were reported to have a chronic illness. The aim of this study was to identify any differences in diet, physical and social activities of children with and without chronic illnesses.

### METHODOLOGY

SPSS Statistical Software was used to analyse the anonymised GUI dataset. Weighted descriptive statistics are reported. Cross tabulations and chi-squared tests were used to test for significant associations.

### RESULTS

In all, 11% of the children studied were reported to have a chronic illness and 43.4% of these children are hampered by it in their daily activities. Children with a chronic illness were more likely to be overweight or obese (32.9% compared to 25.0% of those without a chronic illness,  $p < 0.001$ ). Consumption of meat, vegetables, bread, potatoes, pasta, rice, water and milk was significantly less and they also consumed more chips than those without a chronic illness. Children with a chronic illness were nearly three times more likely to not have undertaken any exercise in the previous 14 days. Twice as many children with a chronic illness were reported to never do something with a friend during the week and 5.4% of children with a chronic illness were reported to have no friends compared with 2.0% of those without a chronic illness.

### CONCLUSIONS

Children with chronic illnesses have less healthy diets and exercise less frequently compared to children without a chronic illness. Children with a chronic illness also have fewer friends and socialise less frequently. These insights can help inform those caring for these children and help improve the quality of life for children with chronic illnesses in Ireland.

### PRESENTED

- As a poster presentation at the University Hospital Limerick Research Symposium on October 24th, 2014.
- As a poster presentation at the Irish Paediatric Society Annual Meeting.

### FUNDING

Funding was generously provided by the Mid-West Medical Education Liaison Group (MELG) Research Awards.



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## Awareness of Sexually Transmitted Infection and Protection Methods among University Students in Ireland

### ABSTRACT

Sexually transmitted infections (STIs) are a major public health challenge. In 2012, young people (20-29 years) represented 59.1% of STI notifications in Ireland. In studying awareness and knowledge of STIs, methods of protection, and sexual practices of young people, many researchers have accessed university students.

A survey of 419 university students was carried out, investigating awareness and knowledge of sexual health and STIs, and risky sexual behaviour as a surrogate indicator of sexual activity in that age group.

The method used was a self-administered questionnaire on students' demographics, sexual activity, knowledge, attitude and awareness of sexual health and STIs.

A total of 419 students responded (response rate: 4.2%): 56.1% female and 78.1% undergraduate students. 74.2% remembered receiving sexual education in secondary school and 84% of those found it useful, but only 51.8% remembered education regarding STIs. 44.4% believed that STIs do not pose a long-term health risk. 90.7% of respondents were sexually active, and 10.3% had contracted STIs. 94.7% of sexually active students used contraception, with condoms most frequently used. 69.1% of those active had experienced penetrative vaginal sex, 86.4% oral sex and 19.2% anal sex without a condom in the prior 2 years. Condom usage initiated by women was primarily for STI prevention.

This is the first study of male and female Irish university students' attitudes towards, and awareness of, sexual activity and STIs. Cohort size is comparable with study cohorts published by researchers investigating young peoples' sexual knowledge, attitudes and beliefs in, for example, the Netherlands, Scandinavia and the USA.

Compared to the 2006 Irish study of sexual health and relationships (ISSHR) for equivalent age groups, university students were more likely to admit to a previous STI (5.2%) than general population (2.3%) and be more knowledgeable about fertility (63% versus 36% correctly identifying the most fertile stage of female cycle).

Young people do not always have the information needed for them to take responsibility for their sexual health. In this study, university-provided medical and information resources were available, but large numbers of students were unaware or uncomfortable accessing them. Future work is needed to determine factors contributing to effective communication of sexual health information to young people.

### PRESENTED

As a poster presentation at the inaugural University Hospital Limerick (UHL) Research Symposium in the Strand Hotel, Limerick on October 18th, 2013.

### FUNDING

This research has received funding from the Health Research Board.

### SOURCE

Irish Journal of Medical Science. February 8th, 2014 (Online first epub)

# Exploring Non-Attendance at Outpatient Appointments in a Public Hospital Using an Equity Lens



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## INTRODUCTION

Addressing health inequalities is critical if the highest standard of health is to be within the grasp of all the population. The failure of outpatients to attend appointments adversely affects the performance of healthcare systems. It poses clinical risks on patients, causes substantial waste in time and resources and contributes to longer waiting lists.<sup>1,2</sup> The overall non-attendance rate at University Hospital Galway (UHG) was 14.8% in 2011 which is higher than the national target of 10%.<sup>3</sup> Identifying and targeting vulnerable population groups that are at higher risk of defaulting is the most cost-effective approach to improving non-attendance rates, reducing long waiting lists and ensuring equity of access to health services by all population groups.<sup>4,5</sup>

## OBJECTIVE

The aim of the study was to explore socio-demographic and other factors that may contribute to patients not attending their outpatient appointments.

## METHODOLOGY

A cross-sectional study using structured questionnaires was conducted over a one-week period in seven outpatient clinics at UHG. All patients attending these clinics were invited to participate. Defaulters were contacted by telephone within one week of their missed appointments. Questionnaires elicited information about socio-demographics, mode of transportation to the hospital, any special health conditions or disabilities that might hinder their attendance, any general difficulties experienced in attending appointments and whether a text message reminder before the appointment was received. Defaulters were additionally asked about the reason for their defaulting. Ninety-eight attendees and 26 defaulters agreed to participate in the survey.

## RESULTS

The overall non-attendance rate was 12.2% (n=39). 42% of defaulters (n=10) reported not receiving a letter about

their appointments. 12%(n=3) reported either getting a letter with a different date, a letter six months before appointment, or told by their doctor that no further follow-up was required. 17% (n=4) reported cancelling at least 2 days before the appointment, yet their names showed on the clinic list. The remaining 29% (n=7) reported forgetting, illness, family emergency and confusion with multiple appointments. After excluding patients who did not attend due to letter conflicts (54%), non-attendance was significantly associated with certain disabilities as shown in Table 1.

Not receiving a text message reminder was also significantly associated with non-attendance ( $\chi^2=5.615$ ,  $df=1$ ,  $p=0.018$ ). Time spent to travel to appointment varied from 10 minutes to 12 hours for people living on islands, although this did not have a significant impact on attendance levels ( $p>0.05$ ).

## CONCLUSION

There were conflicts within the hospital's booking/cancellation system that affected non-attendance e.g. unreported cancellations. A considerable number of patients either did not get a letter or received one longer than 6 months ago. Every episode where someone defaults from an outpatient appointment in UHG is estimated to cost €80; Current mailing, telephone and text messaging reminder systems should be reviewed. This could provide additional cost savings for the hospital and reduce the numbers of patients who do not attend appointments. The text message reminder system positively impacted people attending their appointments in this survey, and similarly has contributed to meeting national targets in non-attendance at outpatients appointments overall in UHG. Further exploration and consideration should be given to the findings from this survey demonstrating significant impact of certain health conditions and disabilities associated with non-attendance.

## REFERENCES

Available on request.

**Table 1 - Health Conditions and Disabilities Associated with Non-Attendance**

| Type of Disability  | Attendees (n=98) | Defaulters (n=11) | p-value |
|---|------------------|-------------------|---------|
| Blindness or serious vision impairment                        |                  |                   |         |
| <b>Yes</b>  | 2 (50%)          | 2 (50%)           | P=0.029 |
| <b>No</b>   | 94 (94%)         | 6 (6%)            |         |
| Difficulty with walking, climbing stairs, reaching or lifting |                  |                   |         |
| <b>Yes</b>  | 25 (83%)         | 5 (17%)           | P=0.043 |
| <b>No</b>   | 71 (96%)         | 3 (4%)            |         |
| Intellectual disability                                       |                  |                   |         |
| <b>Yes</b>  | 0 (0%)           | 2 (100%)          | P=0.005 |
| <b>No</b>   | 96 (94%)         | 6 (6%)            |         |
| Psychological or emotional condition                          |                  |                   |         |
| <b>Yes</b>  | 1 (33%)          | 2 (67%)           | P=0.015 |
| <b>No</b>   | 95 (94%)         | 6 (6%)            |         |

N.B: Fisher's exact test was employed for cross tabulation due to small numbers.

# Alcohol and Violence - Assessing their Role in Attendance at an Emergency Department in the West of Ireland

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## INTRODUCTION

Violence and alcohol are major contributors to the burden of healthcare systems throughout the world. This is particularly apparent in Emergency Departments (ED). These departments are often the first point of contact after and following an acute event and have inadequate resources to deal with demand.<sup>1</sup> Ireland has one of the highest rates of both violence and alcohol abuse in OECD countries.<sup>2</sup> Violence has been well correlated to alcohol use in the literature.<sup>3</sup> Anecdotally both are considered to be major contributors to the workload for emergency department staff,<sup>4</sup> but there is limited published research from Ireland to confirm this.

## METHODOLOGY

One thousand individual presentations to the Emergency Department at University Hospital Galway from 01/06/2012 to 31/05/2013 were randomly selected via a random number generator. No repeat attendances by the same individual were included. The Emergency Department notes were retrospectively reviewed. The records of these attendances were then analyzed for basic demographic information, cause of attendance, cause of previous admissions, referrals to other services, and any reference to violence or the use of alcohol and other substances was recorded. Chi square tests, Fisher Exact tests and independent Mann Whitney U tests were utilized to analyze key issues emerging from the data using SPSSV 21.

## RESULTS

**Table 1 - Basic Demographics of Patients and Presentations**

| Men Age  | Medical Card | Male | Female | Self Referred | GP Referred | Ambulance Presentation |
|----------|--------------|------|--------|---------------|-------------|------------------------|
| 37+25yrs | 82%          | 53%  | 47%    | 43%           | 43%         | 15%                    |

**Table 2 - Causes for Presentation to the Emergency Department**

| Violence | Intentional Self Harm | Medical/ Disease | Accidents - Self | Accidents - Others | Sport | RTA | Follow-Up |
|----------|-----------------------|------------------|------------------|--------------------|-------|-----|-----------|
| 3%       | 1.5%                  | 57%              | 2%               | 20%                | 5%    | 3%  | 9%        |

Table 1 demonstrates that at the ED at UHG the people attending are broadly representative of the local population and showing a wide variety of perceived severity of condition. There was also a wide variety of causes for attendance as shown in Table 2. Overall, all types of violence contributed only 4.5% of total patient presentation. The majority of violence was in the form of assaults with a variety of other types making up the remainder. Sexual assaults are not included, as these are directed to the Sexual Assault Unit at time of presentation instead of to the Emergency Department. As such, the data on overall violence seeking acute medical attention is unreported in this study. Alcohol was recorded in 5% of all presentations, and 0.7% were related to other substances. The Gardaí were mentioned in 1% of case notes. There was a wide variety of referrals out of the ED to other departments and social services, and hospital admissions. Seventy three percent had attended the ED previously. There was a significant relationship found between alcohol and violence. Also, significant relationships between male gender and both alcohol and violence was observed. Involvement of the Gardaí was also significant with regard to violence. No similar link was found with alcohol, age, previous attendances, or having a medical card.

## CONCLUSIONS

Alcohol and violence both play large roles in the workload of the Emergency Department of University Hospital Galway. However, the incidence of alcohol is much lower than previously reported, at 5%, when compared to both previous studies in Ireland which show 15%.<sup>3</sup> Recorded violent causes of attendance make up 4.5% of cases which is significantly lower than anecdotal evidence would attribute. There is the high likelihood that this is under-reported on the medical documentation, but this requires further study to determine the extent and possible solutions.<sup>5</sup> There is evidence that both violence and alcohol use is more predominant in males.<sup>6</sup> This suggests that resources should be more focused on this wide demographic group to help decrease the incidence of serious violence and alcohol related injury and illness and help decrease emergency department workloads.<sup>7</sup>

## REFERENCES

Available on request.

## PRESENTED

As a poster presentation at the Winter Scientific Meeting of the Faculty of Public Health, Royal College of Physicians of Ireland, Dublin on December 11th, 2013 by Mr. Zack Bryant.

## Evaluation of GP Referrals to Medical Assessment Unit in Ennis Hospital



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### INTRODUCTION

Referral letters of high quality are an essential part of good clinical care. The General Practitioner is the gate-keeper to secondary care. The importance of a good accompanying letter in initial assessment at the hospital can not be overemphasised. The use of a standardised referral letter enables transmission of accurate, complete and relevant information about a patient.

### OBJECTIVE

- To evaluate GP referrals to a medical assessment unit against the standards approved by the HSE/ICGP.
- To examine the quality of communication and amount of information conveyed in referral letters.
- To make appropriate recommendations based on the findings of the audit to improve patient care.

### METHODOLOGY

A prospective study was carried out in which GP referrals to a Medical Assessment Unit were analysed. An assessment tool was designed based on standards set by an ICGP guidance document for GPs on a national referral form to secondary care. It contained 21 questions. The first 10 were administrative and the other 11 required clinical judgement. Referrals from GPs in a one month period in November 2013 were assessed. Emphasis was placed on the use of the national referral forms, the legibility of the referral letters and on information provided by the referral agent.

### RESULTS

The audit showed that out of 50 referrals received in a medical assessment unit, only 5(10%) used the ICGP form. All others were on headed paper. Twenty three out of 50(46%) referrals were legible, 16(32%) were average and 11(22%) were poorly legible. Urgency was stated in only 4(8%) of letters which can delay the process. Past history was included in 39(78%) of referrals and 11(22%) had no record of the patient's past history. Examination and investigations were included in 29(58%) of patients and 21(42%) had no information. Medications were listed in 45(90%) of referrals. Only 15(30%) of referrals had stated the patient's allergy status. There was significant lack of inclusion of GP treatment, 19 out of 50(38%) and patients psycho-social history, 2 out of 50(4%). Overall there was a good number of referrals which fulfilled the minimum data requirement. There was also good compliance (96%) in providing administrative information regarding GP and patients' correspondence details.

### CONCLUSIONS

This audit confirms that compliance with use of the standard GP referral form was very low which can cause delay in providing high quality of care to patients, as many elderly and other sick patients are unable to give a reliable account of their problems or details of their medication. Improvement is needed in the area of mentioning past psycho-social history and allergy status, GP treatment and medication history and recent changes in any of these.

However it was quite reassuring that 90% of these referrals met the minimum data criteria. We strongly recommend further audits to review continuing improvement in this area.

## An Audit on Discharge Letters from Hospitals to GP Surgeries



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### INTRODUCTION

Discharge letters have a very important role in effective communications between primary and secondary care and continuity of care of patients. These summaries are a means of communication between healthcare professionals in different specialities and thus, should be written as clearly and concisely as possible.

### OBJECTIVE

The main aim of this audit is to assess the quality of discharge letters and to assess presence or absence of key areas such as, diagnosis, investigations and their results, treatment given and further plan of management including instructions to primary healthcare providers.

### METHODOLOGY

A retrospective study was performed in the Fergus Medical Centre, Ennis in January 2014 on discharge letters received from different HSE hospitals. A total of 40 discharge summaries were reviewed from the period of December 11th, 2013 to December 31st, 2013 which included letters from the patients who were discharged from inpatients as well as patients who attended A&E.

### RESULTS

We got good results in demographic findings such as name of patient, D.O.B (date of birth), chart number, consultant name and GP name and address. Name of patient and DOB was written in 100% of summaries (n=40). Patient's chart number was written in 93% (n=37) of letters, GP's name and address and consultant name were written in 70% (n=28) and 60% (n=24) of letters respectively. We found hospital name written in 95% (n=38) summaries. Date of admission was written in 85% (n=34) of letters and date of discharge was written in only 68% (n=27) of letters. In review of essential elements of discharge letters presenting complaints were written in 85% summaries (n=34); there were no comments on presenting symptoms in 15% (n=6) of letters. Clinical diagnosis was written in 98% (n=39) of letters but missed from 2% (n=1) of letters. Investigations and their results were written in 55% (n=22) of letters and not written in 45% (n=18) of letters. Pending investigations were written only in 35% (n=14) summaries, were not written in 60% (n=24) of letters and were not applicable for 5% (n=2) of letters. Treatment given in hospital was written in 63% (n=25) of letters and not written in 37% (n=15) of letters. Medications on discharge was written on 60% (n=24) of letters and not written on 40% (n=16) of letters. Further plan of management and instructions to GP were written on 73% (n=29) of summaries and not written in 27% (n=11) of letters.

### CONCLUSION

Deficits in communication and information transfer at hospital discharge are common and adversely affect patient care. In this audit we found that the quality of discharge letters is below the expected standard and there are omissions of vital importance such as diagnosis, investigations, hospital management, new or altered medical treatments and post-discharge follow-up plan.

### RECOMMENDATIONS

- Computer-generated summaries and standardized formats may facilitate more timely transfer of patient information to primary care physicians and make discharge summaries more consistently available during follow-up care.
- We should produce headed discharge letter templates which include all key areas and make them available to all wards and clinics with the recommendation to use these and to ensure that all parts of template are completed.
- Adequate training of doctors on completion of discharge summaries should be arranged.
- Re-audit in 6 months.

## Written Communication - An Audit of Patient Healthcare Documentation in a Hospice Setting



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### INTRODUCTION

Communication is essential in ensuring best patient care. Written communication is generally in the form of the patient healthcare record and associated correspondence. The National Hospitals Office have developed guidelines to assist with structuring, organising and content of the record in an effort to improve patient safety and quality of care. We elected to review compliance with this document and to incorporate local hospice policies on patient charts as part of organisational efforts at continuous quality improvement.

### METHODOLOGY

A modified version of the National Hospital's Office Code of Practice for Healthcare Records Management audit tool was utilised. A convenience sample of charts of 20 inpatient admissions over a defined period was audited.

### RESULTS

Evidence of Good Practice: – Medical Record Number was clearly identifiable on the cover of each chart and 100% of entries were dated, clear and legible. Events were recorded chronologically and signed with a clear signature in 95% of charts. The majority of healthcare records did not contain any loose documents – 90%. There was documentation of abnormal results and evidence of action taken on these results in 100% of applicable records (7 charts).

Regarding death entries, the date and time that the patient was confirmed dead is recorded in 90.91% of applicable healthcare patients' records (10 charts).

Areas for improvement:- despite all healthcare records containing a designated place to record allergies/alerts on the inside of the front cover, this was not completed for any patient. Only 20% of charts had a Medical Record Number on each page and only 30% had the patient's name recorded on each page. Abbreviations outside the approved local list were used but were not followed or preceded by the full term in all cases. Only 20% of referral letters were stamped on receipt.

Involvement of the patient in decisions about his or her care is documented in the healthcare record under 'patient wishes' in 35% of charts.

Evidence that the patient's General Practitioner (GP) had been informed about death with a phone call was documented in only 54.55% of applicable healthcare patients' records (6 charts). This figure improved with regard to written correspondence to the patients' GP on their death - 72.73%.

### Recommendations

The importance of documenting information regarding allergies in the designated location will be reinforced to facilitate the accessibility and communication of this vital patient safety related information.

Maintenance of charts including the reinforcing of loose pages is the responsibility of all staff who document within the chart and will be revisited.

The date stamping of referral letters on receipt is important to facilitate evaluation of accessibility to the service, an important measure of the quality of an inpatient palliative care service. Date stamps have been made available to each department since this audit.

### CONCLUSION

There were many examples of evidence of good practice in that all entries were dated, clear and legible, events were recorded chronologically, signed with a clear signature and legible in the majority of charts. However, the results indicate that there are also a number of areas for improvement. These findings have been disseminated to all department heads and have been presented to medical staff. Further education sessions have been planned for staff on foot of this audit. A summary of key points of good documentation has been reviewed and included in the doctors' orientation/introduction folder. These areas will be re-audited in the next audit cycle.

## Audit of Referrals to a Specialist Palliative Care Unit - Identifying Areas for Improvement



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### INTRODUCTION

Improving access to specialist palliative care is one of the main objectives of the HSE National Clinical Programme for Palliative Care.

### OBJECTIVES

Referrals to a Specialist Palliative Care Unit (SPCU) were studied with the following aims:-

- To document the urgency of referrals made to the SPCU - Compare date of referral with date of actual patient admission.
- To evaluate information flow between referring source, General practitioner (GP), inpatient unit (IPU) and family of patient.

### METHODOLOGY

A retrospective chart review of 20 patients admitted to the SPCU between April and June 2013 was conducted. Referral forms, admission assessment documentation and correspondence with GPs were reviewed using an audit tool and referencing any available national standards.

### RESULTS

Fifteen out of 20 patients were deemed urgent referrals to the IPU. 100% of these referrals were admitted to the unit within the specified 48 hour timeframe as delineated in the national referral form. Eight out of 15 (53%) of urgent referrals were admitted on the day of referral demonstrating a high level of responsiveness.

Further analysis of communication flow was undertaken between referral source, the patient and family and the IPU. There was evidence that discussion on the likely outcome of the admission occurred at the time of referral with 60% and 65% of patients and families respectively but with only 25% of GPs.

### CONCLUSION

This audit of referrals to the SPCU indicates that timely access is facilitated for urgent referrals.

It also highlights the extent of communication between the stakeholders in the admission process but clarifies areas for improvement in particular communication with GPs at the time of admission. This will form part of an ongoing audit cycle within the organisation.

## Irish Paramedics' Knowledge of the Research Literature and Evidence-Based Practice



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### INTRODUCTION

Paramedicine in Ireland is a relatively new discipline. In order to further develop as a profession, research skills and evidence-based practice (EBP) must be introduced into the education and working environment of practitioners. The objective of this study was to investigate paramedics' current knowledge and opinions of the research literature and to evaluate the impact of an educational workshop on research skills.

### METHODOLOGY

Prehospital practitioners (n=28) attended a workshop entitled 'Journals and Databases: Searching the Research Literature.' Prior to the workshop participants were surveyed using interactive polling software to establish their baseline level of knowledge of the research literature. The workshop consisted of a series of focused lectures, practical exercises and group activities. A post-workshop survey was also conducted and the results were then analysed using SPSS.

### RESULTS

Prior to the workshop participants regarded the research literature as being somewhat relevant (41%) or very relevant (56%) to their daily practice; however 46% of participants rated their research literature skills as poor. In the pre-workshop survey correct responses averaged 47% which increased in the post-workshop survey to 73% ( $p < 0.01$ ). Following the workshop participants regarded the research literature as being somewhat relevant (11%) or very relevant (89%) to their practice and rated their research literature skills as average (33%) or good (59%). Most participants agreed (25%) or strongly agreed (71%) that interactive technology was a useful educational tool for use in this setting. All participants expressed an interest in further education on research skills.

### CONCLUSIONS

These survey findings are exploratory and require further validation however it appears that Irish paramedics currently have a very positive attitude towards research and EBP. Further work is required to establish a workplace culture that fosters research and additional educational resources are necessary to increase research skills among paramedics in order to develop professional practice in the future.

### PRESENTED

As a poster presentation at the Cochrane in Ireland Conference in Dublin City University on January 24th, 2014 by Dr. Niamh Cummins.

### FUNDING

The authors gratefully acknowledge the funding of the Pre-Hospital Emergency Care Council (PHECC).

## Continuous Professional Competence for Emergency Medical Technicians in Ireland - Educational Needs Assessment



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### ABSTRACT

As in other countries, the Irish Regulator for Pre-Hospital practitioners, the Pre-Hospital Emergency Care Council (PHECC), will introduce a Continuous Professional Competence (CPC) framework for all Emergency Medical Technicians (EMTs), Paramedics and Advanced Paramedics (APs). This framework involves EMTs participating in regular and structured training to maintain professional competence and enable continuous professional development.

The objective of this research is to inform the development of this framework. This study aimed to identify what EMTs consider the optimum educational outcomes and activity and their attitude towards CPC.

All EMTs registered in Ireland (n=925) were invited via email to complete an anonymous online survey. Survey questions were designed based on Continuous Professional Development (CPD) questionnaires used by other healthcare professions. Quantitative and qualitative analyses were performed.

The response rate was 43% (n=399). 84% of participants had been registered in Ireland for less than 24 months, while 59% had been registered EMTs for more than one year. Outcomes were: evidence of CPC should be a condition for EMT registration in Ireland (95%), 78% believed that EMTs who do not maintain CPC should be denied the option to re-register. Although not required to do so at the time of survey, 69% maintained a professional portfolio and 24% had completed up to 20 hours of CPC activities in the prior 12 months. From a list of 22 proposed CPC activities, 97% stated that practical scenario-based exercises were most relevant to their role. E-learning curricula without practical components were considered irrelevant (32%), but the majority of participants (91%) welcomed access to e-learning when supplemented by related practical modules.

EMTs are supportive of CPC as a key part of their professional development and registration. Blended learning, which involves clinical and practical skills and e-learning, is the optimum approach.

### FUNDING

This PhD study received funding from the Pre-Hospital Emergency Care Council. (PHECC).

### SOURCE

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<http://www.biomedcentral.com/1471-227X/13/25>





# news & News & Events events

Research Bulletin  
Volume 7 Issue 2



## FOUNDATION CHAIR OF MEDICINE UHL CALLS FOR NEW ALLIANCES AND COLLABORATIONS AT ANNUAL RESEARCH SYMPOSIUM

The Annual Research Symposium organised by University Hospital Limerick took place at the Strand Hotel, Limerick on Friday 24th October, 2014. This one day conference showcased the latest research findings from interdisciplinary research programmes across UL Hospitals, the University of Limerick and the wider Mid-West region. Conference organiser, Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, University of Limerick said; "This is one of the landmark scientific events of the newly established UL Hospitals Group and demonstrates the latest scientific research that is being conducted across the clinical and university campus. We had a huge turnout this year with over 150 abstracts, 18 oral presentations with 4 keynote addresses from national and international experts."



L. to R. Professor Niall O'Higgins, Professor Austin Stack and Professor Robert Foley



Organising Committee: Ms Karen Kemmy, Health Research Institute, UL; Mary O'Connell, GEMS, UL; Professor Tom Kiernan, Consultant Cardiologist, UHL, Graduate Entry Medical School, UL; Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, UL; Mr Brian Lenehan, Consultant Orthopaedic Surgeon, UHL; Dr Damien Ryan, Consultant, Emergency Medicine, UHL, Research Office, UL; Dr. Mary Clarke Moloney, Clinical Operations Manager, Health Research Institute, UL

The welcoming address was provided by Professor Niall O'Higgins, Chairman of the UL Hospitals Trust who described the tremendous opportunities provided by new emerging synergies and consortia between hospital and University departments. Keynote speaker Professor Colin Baigent, Clinical Trial Services Unit, University of Oxford, UK who debated the Good, Bad and Ugly of Clinical Trials and Emerging Methods in Clinical Trial Design. Professor Rob Foley, University of Minnesota, USA advanced the opportunities of using registry data and information systems to inform decisions on health research. Dr. Michael Walsh, a leading biomedical scientist in the Department of Mechanical, Aeronautical and Biomedical Engineering UL, gave an exhilarating presentation on biomedical engineering and dividends gained through rich collaborations between clinicians and bioengineers. Dr. Graham Love, CEO of the Health Research Board, closed the meeting with an excellent overview of the changing landscape of the Health Research Board (HRB) and its research funding programmes.



Dr. Graham Love, Chief Executive, Health Research Board; Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick; Professor Colin Baigent, Oxford; Dr. Puneet Saidha, Research Office UL and Dr. Mary Clarke Moloney, Health Research Institute, UL

## ORAL PRESENTATION WINNERS

**Theme:** Health Service and Population Health Research  
**Presentation Title:** Patterns of Recovery from Acute Kidney Injury (AKI) and risk of Kidney Disease Progression in the Irish Population  
**Person/Author:** Els Gillis

**Theme:** Lifestyle and Health  
**Presentation Title:** GP attitudes towards screening and treating mental and substance use disorders in primary care  
**Person/Author:** Dorothy Leahy

**Theme:** Technology and Health  
**Presentation Title:** Calcific inclusion size and morphology can predict high-risk mechanical vulnerability in carotid artery plaque: A microtomographical analysis  
**Person/Author:** Hilary Barrett



**Theme:** Clinical Research

**Presentation Title:** Is Low Skeletal Muscle Mass  
Synonymous with Sarcopenia?

**Person/Author:** Edric Leung

## POSTER WINNERS

**Theme:** Health Service and Population Health Research

**Presentation Title:** Comparison of Mortality and Kidney  
Transplantation Risks Between Type I and Type II Diabetes  
with End Stage Renal Disease

**Author:** Jennifer Johnson

**Theme:** Lifestyle and Health

**Presentation Title:** Knee Joint Mechanics after Anterior  
Cruciate Ligament Reconstruction.

**Author:** Ian C. Kenny

**Theme:** Technology and Health

**Presentation:** TGF $\beta$ 1 Signalling in Human Mesenchymal  
Stem Cells is Regulated by the Primary Cilium

**Author:** Marie-Noelle Labour

**Theme:** Clinical Research

**Presentation:** Impact of Multi-Vessel Disease on Patients  
Receiving Percutaneous Coronary Intervention or Thromb-  
olysis for Acute STEMI: a Retrospective Analysis

**Author:** Ruth Gillen

## KEYNOTE SPEAKERS:

1. Dr. Michael Walsh (University of Limerick)  
Senior Lecturer, Biomedical Engineering  
Department of Mechanical, Aeronautical and Bio-  
medical Engineering & Materials and Surface Science  
Institute, University of Limerick

### **New Paradigms in Biomedical Engineering Research**



Dr. Michael Walsh

2. Professor Robert Foley (University of Minnesota)  
Associate Professor of Medicine  
University of Minnesota School of Medicine  
Minneapolis, Minnesota USA  
**Healthcare Outcomes Research: Past, Present and  
Future**



Professor Robert Foley



3. Professor Colin Baigent (University of Oxford) Professor of Cardiovascular Epidemiology Clinical Trial Service Unit and Epidemiological Studies Unit (CTSU), University of Oxford, Oxford UK

### **Clinical Trials the Good, Bad and the Ugly**



Professor Colin Baigent

4. Dr. Graham Love (Health Research Board)  
CEO Health Research Board, Ireland  
**Whiter Health Research in Ireland**



Dr. Graham Love



Sylvester O'Halloran

## 23rd Sylvester O'Halloran Perioperative Scientific Symposium

The Graduate Entry Medical School, Faculty of Education and Health Sciences,  
University of Limerick

Friday, 6th March 2015

### *Sylvester O'Halloran Lecture*

Professor Edward Kiely, Consultant Paediatric Surgeon at Great Ormond Street Hospital, London

### *"Festschrift for Professor Pierce Grace"*

#### Speakers

**Professor O James Garden,**

Regius Professor of Clinical Surgery and Honorary Consultant Surgeon & Hepatobiliary and  
Pancreatic Surgical Services, Royal Infirmary of Edinburgh

**Professor Paul Finucane,**

Foundation Head of the Graduate Entry Medical School at the University of Limerick

**Mr John Moorehead,**

Vice President of the ASGBI

Saturday, 7th March 2015

### *Sir Thomas Myles Lecture will be presented by*

**Mr Brendan Moran MCh FRCS NCG,**

National Clinical Lead for Low Rectal Cancer (LOREC) in England and Director of the Pseudomyxoma Peritonei National  
Centre in Basingstoke

### *Sessions Overview*

Clinical, Plenary Prize, Orthopaedic, Anaesthetic, ENT & General Surgery

The deadline for Abstracts is the **November 14th, 2014**

### **ASGBI/SOH Published Paper Prize**

Can be submitted with the following details: Title - Authors - Paper References and a copy of published paper

For more information

[kara.leddin@hse.ie](mailto:kara.leddin@hse.ie)

<http://www.ul.ie/4i/content/sylvester-ohalloran-surgical-scientific-symposium>



## 2014 SYLVESTER O'HALLORAN SURGICAL MEETING LIMERICK February 27th - March 1st, 2014

The 22nd Sylvester O'Halloran meeting took place in the Graduate Entry Medical School Building at the University of Limerick. New to this year's meeting was Professor Ronan O'Connell, Professor and Consultant Surgeon, UCD delivering the Inaugural Hederman Lecture which was an excellent lecture on 'Who wants to be a Colorectal Surgeon?'

The Irish Higher Surgical Training Group debate on training between Professor Oscar Traynor and Professor Michael Kerin provided a lively and stimulating debate on training which continued long after the official debate ended following an excellent presentation. The motion was "The Traditional Apprenticeship Model of Surgical Training is Dead and should be Buried." It was chaired by Ms. Patricia Cronin, IHSTG.

Professor Eilis McGovern, (National Programme Director for Medical Training in the Health Service Executive) delivered a brilliant and insightful Sylvester O'Halloran Lecture this year 'Spotlight on Irish Surgical Training and Workforce Planning.'

The Sir Myles Lecture was delivered by Professor Gearóid Ó'Laighin, Professor of Electronic Engineering, School of Engineering and Informatics, NUI, Galway and Principal Investigator, National Centre for Biomedical Engineering Science, NUI, Galway. This was entitled 'Bringing Research from the Bench to the Bedside' - The Application of Biomedical Electronics in the Management of Venous Leg Ulcers.

The now established ASGBI best published paper prize was awarded to Mr John Hogan, Research fellow, Research Department, Graduate Entry Medical School, University of Limerick. Mr John Hogan was also successful in winning this year's Sylvester O'Halloran prize for best research presentation in the Plenary Session. The Poster Prize was won by Ms. Christina Fleming, Breast Research Centre, Cork University Hospital.



Ms. Shona Tormey, Breast Consultant/General Surgery, University Hospital Limerick and Dr. Christina Fleming, Breast Research Centre, Cork University Hospital

This year's Endoscopy Workshop at the recent Sylvester O'Halloran meeting was well attended.

We were again privileged to host the Irish Association of Vascular Surgeons meeting at the Sylvester O'Halloran

Meeting, which was organised by Mr. Eamon Kavanagh, Consultant Vascular Surgeon, Limerick. It included lectures and practical skills.

Professor John Fenton organised and co-chaired a very successful and interactive Head and Neck Session of presented papers. The second co-chair was Mr David Smyth, an ENT Consultant from Waterford Regional Hospital who is internationally recognised in the subspecialty of Rhinology and who contributed enormously to the meeting. Ms Eadaoin O'Cathain, SpR, Department of ENT, Sligo Regional Hospital won the Senior Presentation Prize and Shane Murphy, Medical Student GEMS UL and on behalf of the local Department of Otolaryngology/ENT Surgery in Limerick won the Junior Presentation Prize.



Surgical Senior House Office at the Fascial/Plastics training course at Sylvester O'Halloran 2014, Graduate Entry Medical School, University of Limerick, Limerick



Surgical trainees at the at Sylvester O'Halloran 2014, Graduate Entry Medical School, University of Limerick



Surgical trainee and Dr. Bart Ramsey, at Sylvester O'Halloran 2014, Graduate Entry Medical School, University of Limerick



Mr Declan McGee, Vice President, Royal College of Surgeons in Ireland, and Ms. Shona Tormey, at Sylvester O Halloran 2014, Graduate Entry Medical School, University of Limerick

Overall, the meeting was well attended and much enjoyed by the many participants and attendees. Planning is underway for next year's meeting, with an extended teaching programme.

Further information from [kara.leddin@hse.ie](mailto:kara.leddin@hse.ie) or <http://www.ul.ie/4i/content/sylvester-ohalloran-surgical-scientific-symposium>



Dr. Eamon Kavanagh, Consultant Vascular Surgeon, University Hospital Limerick and 5 successful applicants from MELG Research Awards L. to R. Shane O'Regan, Shane Murphy, Niamh Kiernan McConnell, Eamon Kavanagh, Eimear McCarthy and Chelsea Wee

The orthopaedic session provided interesting debates on many of the presentations and posters. The prizes were awarded as follows:

- Orthopaedic 1st Prize was awarded to Mr Leo Carroll, Department of Orthopaedics, Cork University Hospital.
- Orthopaedic 2nd Prize went to Mr Niall McGoldrick, Department of Paediatric Orthopaedic Surgery, Our Lady's Children's Hospital, Crumlin.
- Orthopaedic Poster Prize was won by Mr Stephen Brennan, RCSI 4th Year Medical Student, Knockdrinna, Stoneyford Co. Kilkenny and was presented by organiser Mr. Dermot O'Farrell, Consultant Orthopaedic Surgeon, Limerick.

The Anaesthesia papers were presented on Saturday and the prize winners were Ms Ciana McCarthy, Department of Anaesthesia and Pain Medicine, Limerick University Hospital who won the O'Shaughnessy Prize, and Mr Padraig Caplin, Department of Pain Medicine, University Hospital Limerick won the Anaesthesia Poster Prize.



## 94 DOCTORS GRADUATE FROM UL'S GRADUATE ENTRY MEDICAL SCHOOL

### UL President Highlights Importance of Links to Local and Regional Health Services



Mari Gleeson of Nenagh Tipperary and Laura Slattery, Tullamore Offaly pictured after receiving a BMBS in Medicine from the University of Limerick on Tuesday evening

The University of Limerick celebrated the graduation of 146 students on June 10th, 2014 from the Graduate Entry Medical School (GEMS) and Clinical Therapies Department. Among the graduates 94 doctors were conferred with their medical degrees as they became the fourth graduating class of the Graduate Entry Medical School at the University of Limerick. 52 Clinical Therapies graduates received their awards - 26 from the MSc in Occupational Therapy and 26 from the BSc in Physiotherapy.

Established in 2007, the Graduate Entry Medical School Programme at UL is open to graduates from any discipline and employs practical and interactive approaches to learning.

Among the doctors who graduated at UL today are students with undergraduate degrees varying from zoology, anthropology to music and archaeology. The programme is also the only medical education programme in the country founded on the modern pedagogical principles of Problem-Based Learning (PBL). PBL encourages team-working and self-directed enquiry, both skills being vital for their future careers in the fast moving world of medicine.

Speaking at the conferring ceremony Professor Don Barry, UL President, paid tribute to the Health Service Executive, "The support that we have received from the employees of the HSE and from its management staff at local, regional and national levels has been exceptional. Above all, UL is greatly indebted to the very large number of clinicians who have been instrumental in educating both our GEMS and Clinical Therapy students, by sharing their expertise and supporting our students' professional growth. We are proud to be working with the HSE on a shared facility to be located on the University Hospital Limerick campus - a Clinical Education and Research facility - which will enhance the delivery of our medical programme but also support the education services required by the University Hospital Limerick community.

I also want to highlight the over 80 General Practices throughout the Munster region and well beyond who have embraced the Medical School and its students. GEMS is unique, not only within Ireland but internationally, in terms of the emphasis that it places on clinical training in Primary Care settings. A full 25% of all such training at UL is provided in General Practice settings and this has already proved to be a major strength of our programme. This simply could not have happened without an exceptional level of 'buy in' from General Practitioners and for this, UL is hugely appreciative."



Attending the University of Limerick Medical School conferrings was 3 time medal winner Dr Caoimhe Costigan, Sutton, Dublin who was awarded First Prize for Overall Performance in the Bachelor of Medicine Bachelor of Surgery Graduate Entry Degree Programme 2014; First Prize in the Discipline of General Practice/Primary Care 2014 and First Prize in the Discipline of Psychiatry 2014. Dr. Costigan also has an BSc in Physiotherapy from TCD

"Today 52 graduates from Clinical Therapies will cross the stage to receive their degrees. These qualifications represent many years of study, thousands of hours in work placements and gruelling assessments. 26 students have completed the four-year Bachelor of Science in Physiotherapy - the only physiotherapy academic programme in Ireland situated outside of Dublin. 26 students have also graduated from the Masters of Science in Occupational Therapy, the only graduate entry Occupational Therapy course in the country. Increasingly, health systems are trying to address health needs in the community and primary care settings to reduce the need for costly hospital-based services. Building on this trend, our Masters course is unique as it assists modern healthcare practitioners to evaluate their practice and extend, or refocus, their skills and knowledge to meet the new challenges of healthcare provision," said Professor Don Barry.



Melissa Treacy of Limerick, Kelsey Kirwan of California, Eimear Fitzpatrick of Kilkee, Co. Clare, Maria Kelly of Mayo, Caren Prendiville of Waterfird, Joanne Brennan of Wexford, Niamh Lane of Limerick and Edel Dwyer of Roscommon pictured after receiving a MSC in Occupational Therapy from the University of Limerick on Tuesday evening



## AWARD-WINNING €15 MILLION GRADUATE ENTRY MEDICAL SCHOOL BUILDING AT UL LAUNCHED BY MINISTER FOR FINANCE

Minister for Finance, Michael Noonan TD, officially launched the award-winning Graduate Entry Medical School at the University of Limerick on Monday June 23rd, 2014.

The Building was designed by Grafton Architects, and was winner of RIBA 2013 EU Award and a finalist in the highly prestigious RIBA Stirling Prize. Located beside the existing Health Sciences and Irish World Academy of Music and Dance, the Medical School - easily distinguishable by its limestone exterior - is a stand-out addition to UL's Clare Campus.

A 4,000 sq.m. facility, the building houses 12 Problem-Based Learning teaching rooms, a 150-seat lecture theatre, two 60-seater seminar rooms, 75 IT work stations, eight clinical skills laboratories, two anatomical skills laboratories, an area dedicated to research and a cafeteria. The labs are equipped with a state-of-the-art AV system, which allows students to record themselves performing procedural or physical exam skills.



Minister for Finance, Michael Noonan TD, today officially launched the award-winning Graduate Entry Medical School at the University of Limerick. Minister for Finance, Michael Noonan TD (centre), Professor Don Barry, President of University of Limerick (left) and Professor Mike Larvin Head at UL Graduate Entry Medical School.

The €15 million project was funded by the Department of Education & Skills, the Higher Education Authority and supported by the University of Limerick Foundation.

Speaking from the official launch event UL President Professor Don Barry said: "We are immensely proud of the achievements of our Graduate Entry Medical School since its inception in 2007. GEMS offers a medical degree programme which is open to graduates from any discipline and is strongly supported by access scholarships. Through innovative teaching practices and applying a problem-based learning approach to instruction, in just 4 years compared to the 5 or 6 years of traditional medical schools, GEMS has proven its ability to graduate doctors who are competent, confident and caring. They understand the scientific basis of medicine; recognise the social and environmental



Minister for Finance, Michael Noonan TD, today officially launched the award-winning Graduate Entry Medical School at the University of Limerick

contexts in which health and illness exist and have special skills in, and commitment to, service to the public. GEMS doctors embrace modern scientific enquiry, life-long learning and, most of all, team-working with other healthcare professionals. These are the type of doctors we need, not only in Ireland, but around the world."

The UL Graduate Entry Medical School has been described by RIBA as "an exceptional example of how to create a vibrant new public space through the careful design and placement of buildings."

The Graduate Entry Medical School continues to grow with construction commenced on a Clinical Education and Research Building on the campus of University Hospital Limerick. The building, which is a joint venture between UL and the HSE, will enhance the delivery of UL's medical programme and the implementation of the University's health research strategy which aims to inform an equitable, safe, sustainable and patient-centred healthcare system.

## UL RESEARCHER IS ONLY IRISH CANDIDATE TO RECEIVE COVETED PLACE ON US CANCER RESEARCH FELLOWSHIP

### UL PhD Graduate Awarded Prestigious Cancer Research Fellowship



Dr. Claire Meaney, Fellowship Award, University of Limerick

University of Limerick PhD graduate, Dr. Claire Meaney has been awarded a prestigious fellowship position on the



Cancer Prevention Fellowship Programme, based in the National Cancer Institute at the National Institutes of Health (NIH), Maryland, USA. Dr. Meaney is the only Irish candidate to have secured a place on this programme in 2014 and the first UL graduate to receive this fellowship. Speaking about the significance of the award, Dr Meaney said; "Latest figures predict 1 in 3 people in Ireland will develop cancer during their lifetime. Considering the ongoing drive to advance cancer prevention, the training and experience I will gain at the NCI during this fellowship programme will greatly advance my future contribution towards cancer prevention and control in Ireland."

The National Cancer Institute Cancer Prevention Fellowship Programme (CPFP) provides state-of-the-art training for post-doctorate candidates from the health professions, biomedical, and behavioural sciences to become leaders in the field of cancer prevention and control. The fellowship will be co-sponsored by the Health Research Board (HRB) and the US Cancer Prevention Fellowship Programme. Upon completion of this fellowship, Claire will be given the opportunity to bring this knowledge back to the Irish research and healthcare systems with support from the HRB and the Irish Cancer Society.

Dr. Meaney completed her PhD in vascular tissue engineering in November 2013 at the University of Limerick. Claire received a first class honours BEng degree in Biomedical Engineering from UL. Following on from this, she combined her passion for engineering and biology in her PhD studies which focused on bioengineering and cell mechanobiology in relation to tissue engineered scaffolds for vascular repair. She is currently conducting research at the Materials and Surface Science Institute (MSSI), investigating the consequence of defective primary cilia in models of cancer. Identifying and linking these ciliary defects to cancer will lead to new targets for therapeutic intervention.

## UL RESEARCHER AWARDED €250,000 FUNDING TO TACKLE MAJOR MENS' HEALTH ISSUE



Dr. Niall Kelly, Department Mechanical, Aeronautical and Bio-Engineering, University of Limerick

University of Limerick researcher, Dr. Niall Kelly was recently awarded approximately €250,000 by the Health Research Board (HRB) to investigate a condition called Benign Prostatic Hyperplasia (BPH) which affects 50% of men over the age of 50.

A doctor with the Department of Urology, University Hospital Limerick, Dr. Kelly is undertaking his PhD research at the University of Limerick. Dr. Kelly explains: "BPH is a condition that will affect the majority of all men at some point in their lives. BPH results in the enlargement of the prostate gland which affects the ability to pass urine in a normal way." BPH affects 50% of men over the age of 50 and over 70% of men over the age of 70.

"Treatment of the condition involves the use of medical therapies and in some cases surgery. The processes which cause this condition are still not fully understood. The management of BPH is of major public health significance and is the source of considerable expenditure and is estimated to cost approximately €1billion in Europe each year."

"Through this study we hope to get a better understanding of how BPH develops and how it affects men, looking at a number of novel biomarkers that may ultimately be new targets for treatment of BPH, which we would hope will improve the quality of life for the ageing man."

Key to the successful awarding of the fellowship was the formation of a multidisciplinary team, combining clinicians, engineers, bioengineers and biologists. This research is being undertaken at the Centre for Applied Biomedical Engineering Research (CABER), in collaboration with the Material and Surface Sciences Institute (MSSI) and Graduate Entry Medical School (GEMS) at the University of Limerick (UL).

Dr. Kelly will be supervised by Mr. Hugh Flood, Consultant Urologist at University Hospital Limerick, Dr. Michael Walsh, Joint-Director at CABER and Dr. David Hoey, Lecturer in Biomedical Engineering at the Department of Mechanical, Aeronautical and Biomedical Engineering, UL. The research is also supported by Mr. Subhasis Giri, Consultant Urologist, UHL and Dr. Patrick Kiely, Lecturer at the Department of Life Sciences, UL.

## UL RESEARCHER AWARDED €330,000 FOR NEW RESEARCH INTO ACUTE KIDNEY INJURY



Dr. Con Cronin, Dr. Liam Casserly, Professor Austin Stack

It is estimated that at least 1 in 5 hospitalised adults develop Acute Kidney Injury (AKI). Emerging evidence suggests that AKI is under-recognised in clinical practice, predicts an accelerated risk of end-stage kidney disease



(ESKD), and may be a risk amplifier for many other chronic diseases with death rates in excess of 20%.

Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, University of Limerick has been awarded €330,000 funding by the Health Research Board (HRB) to improve our understanding of Acute Kidney Injury (AKI), a condition in which there is rapid decline in kidney function, often without signs or symptoms. His project is one of 36 new research projects selected from 190 to benefit from an investment of €13.5 million by the HRB over the next three to five years.

Professor Stack explains; “Despite the high frequency of this potentially lethal condition, there is very little is known in Ireland regarding the size of the problem, its management and consequences. In Ireland, we estimate that between 2-20% of patients will develop an AKI episode which may lead to serious consequences including progression to kidney failure and death. Our preliminary data would suggest that while the majority will recover from an AKI event, a large percentage, upwards of 17-20% do not, thereby putting patients at higher risk of kidney failure and death. For some patients, who develop a very severe AKI, they may progress rapidly to kidney failure and require dialysis. For others, who recover, we are unclear to what extent and whether the lack of complete recovery will lead to higher rates of cardiovascular disease and kidney failure, down the line.”

“It is vital that we have a full understanding of the size and impact of AKI in this Irish population so that we can plan effective preventive strategies. A particular focus of this research is to evaluate the quality of care following an AKI event in order to assess the rates of recovery and the extent to which the lack of recovery is associated with longer term outcomes” said Professor Stack who gave an oral presentation on this initiative at the American Society of Nephrology in Philadelphia, USA on November 15th, 2014. Professor Stack added: “We are delighted to accept this 3 year HRB Award, which will provide our team with the opportunity to conduct a detailed evaluation of the epidemiology of AKI, the first study of its kind in Ireland. Our goal is to improve our understanding of AKI by creating a large registry of patients from within the Irish Health System in order to track the frequency and outcomes of AKI. Better understanding of this complex illness will help inform national policy on prevention efforts and management practices.”

Graham Love, Chief Executive at the Health Research Board says; “The HRB focuses on driving more research into policy and practice. This is illustrated by our investment in these Health Research Awards. Innovation can help bridge the gap between demand for health services and the resources to pay for them. That innovation comes from implementing top class research, which is our raison d'être at the HRB.”

Professor Stack leads the UL Kidney Health Consortium at University Hospital Limerick and the Graduate Entry Medical School. This interdisciplinary team brings together expertise in kidney disease, epidemiology, statistics and information

systems. The consortium is leading a number of national and international studies to improve the outcomes for patients with kidney diseases and is collaborating with investigators from the School of Medicine at University College Dublin, University College Cork and the University of Michigan in the USA.

<http://www.hse.ie/eng/services/list/3/hospitals/ulh/uhl/hospdept/deptmed/RenalMedicine/research/#themes>

## UL RESEARCHER WINS IRISH HEART FOUNDATION AWARD TO STUDY HEART ATTACKS AND STROKES IN PATIENTS WITH KIDNEY FAILURE



University of Limerick Foundation Chair of Medicine and Consultant Nephrologist at University Hospital Limerick Professor Austin Stack received an Irish Heart Foundation Research Bursary for the project ‘Cardiovascular Disease in Men and Women who develop End-Stage Kidney Disease: A Comparison of Risk, Quality of Care and Clinical Outcomes.’ Pictured here with Dr. Angie Brown, Medical Director, Irish Heart Foundation and Professor Declan Sugrue, President, Irish Heart Foundation

University of Limerick Foundation Chair of Medicine and Consultant Nephrologist at University Hospital Limerick Professor Austin Stack MD was recently awarded a bursary by the Irish Heart Foundation (IHF) at a ceremony at the Royal College of Physicians in Dublin. The award will be used to support a major national study entitled: ‘Cardiovascular Disease in Men and Women who develop End-Stage Kidney Disease: A Comparison of Risk, Quality of Care and Clinical Outcomes’ led by Professor Stack and his team.

“We believe that major differences exist in the rates of heart attacks and strokes, their risk factors and the clinical outcomes between men and women with kidney failure,” said Professor Stack. However, we know very little about the frequency of heart attacks and strokes in this high risk population and even less about the quality of care they receive after starting dialysis.

To improve our understanding in this area, we will analyse data in over 1.5 million patients from the US Renal Data System, a national registry that collects detailed information on all patients who begin dialysis treatment in the United States. We will 1) determine the frequency of heart attacks, strokes and peripheral vascular disease events; 2) determine the risk of dying from premature cardiovascular events, and 3) explore differences in the use



of major diagnostic and treatment intervention procedures like angioplasty, stents and coronary bypass procedures.

According to Professor Stack “the results of this study are anticipated to hugely improve our understanding of cardiovascular disease in kidney failure and its treatment. It will also allow us to identify and target risk groups and support changes in clinical practice and shape future policy.”

Dr. Angie Brown, Medical Director of the Irish Heart Foundation and Consultant Cardiologist said: “Innovative thinking has produced some of the major advances in medicine but modern research funding is often geared towards major academic institutions, rather than towards young people with bright ideas. The Irish Heart Foundation Research Bursaries awarded for 2014 illustrate the value of taking this approach and we are grateful to our donors and Daiichi Sankyo for supporting these pioneering projects.”

## **2.6 MILLION PROJECT TO COMBAT FAILURE IN KIDNEY DIALYSIS TECHNIQUES AMONG RESEARCH COLLABORATIONS HIGHLIGHTED AT UL HOSPITALS ANNUAL RESEARCH SYMPOSIUM**

The Annual UL Hospitals Limerick Research Symposium featured world-leading research championed from the Mid-West region.

Conference organiser, Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, University of Limerick said: “This is a fantastic opportunity to bring together researchers from the Mid-West region and capitalise on the huge pool of talent at UL Hospitals and its partner institutions.”



Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, University of Limerick and Professor Niall O'Higgins, Chairman of UL Hospitals Trust at the Annual UL Hospitals Limerick Research Symposium

Among the keynote speakers was Dr. Michael Walsh, University of Limerick who is leading a team involved in a €2.6 million European-wide project (ReDVA) to improve dialysis techniques for the 750,000 Europeans who require the treatment regularly.

Dr. Michael Walsh, Centre for Applied Biomedical Engineering Research (CABER), based in the Materials and Surface Science Institute, UL explains: “The most common form of

dialysis is haemodialysis, where three times a week blood is taken from a vascular access site in the arm, passed through a dialysis machine and returned to the patient. However these vascular access sites fail in at least 50% of patients within the first year leading to revision surgeries and increased risk of infection. This research is tackling the issues for patients on long-term dialysis and will ultimately improve patient outcomes, reduce hospital stays and reduce the amount of discomfort for kidney dialysis patients”

The project brings together bioengineering expertise from University of Limerick with clinical expertise from the University of Dundee Medical School and Queen Elizabeth Hospital in Birmingham (QEHB). The industrial partners are Guerbet in France and Vascular Flow Technologies in Dundee. The project is supported by the European Union's Marie Curie IAPP (Industry-Academia Partnership and Pathways) programme. The four-year project will see staff seconded between the Universities and the industry partners and create five new research posts, two of which are based in Limerick.

The UL Hospitals Research Symposium highlighted new research in the areas of Acute Kidney Injury in the Irish Health System, Sarcopenia and the Ageing Process, Vitamin K in Cognitive Health, Infant Sleep Patterns and Maternal Health, Innovative Dialysis Technologies, Disparities in Health Care Access.

The symposium included over 150 abstracts and 18 oral presentations with 4 keynote addresses from national and international experts. Speakers included Professor Niall O'Higgins, Chairman of the UL Hospitals Trust, Professor Robert Foley (University of Minnesota), Associate Professor of Medicine, University of Minnesota School of Medicine; Professor Colin Baigent (University of Oxford), Professor of Cardiovascular Epidemiology, Clinical Trials Service Unit and Epidemiological Studies Unit (CTSU), University of Oxford; Dr Graham Love (Health Research Board), CEO, Health Research Board, Ireland.

## **UL RESEARCHER AWARDED €330,000 TO STUDY IMPACT OF PRIMARY CARE REFORMS**



Professor Anne MacFarlane

University of Limerick Professor of Primary Healthcare Research, Anne MacFarlane has been awarded €330,000 by the Health Research Board (HRB) to investigate the impact of primary care reforms in Ireland.



Professor MacFarlane explains the significance of this research; “We know that the vast majority of illness experiences are treated in the primary care setting. Therefore the organisation of primary care services in the community is extremely important. It is essential that patients can access services when they need them and that the professionals working in primary care are connected with each other.”

This grant will support an evaluation of the reform processes relating to the development of Primary Care Teams as outlined in the 2001 Department of Health primary care strategy. The reform process has been underway over the past decade with mixed results. To date, there has been no major analysis of the implementation of primary care teams involving all stakeholders. This study will address these major gaps in knowledge about the reform of our primary care services.

This project is one of four University of Limerick research programmes which were awarded a total of €1.2 million from the Health Research Board.

This multidisciplinary project also includes co-applicants Professor Walter Cullen, Graduate Entry Medical School, UL, Dr. Norelee Kennedy, Clinical Therapies, UL, Libby Kinneen, HSE and Professor Carl May, University of Southampton. Collaborators also include the Paul Partnership, a Community Project in Limerick, Regional GPs and Practice Nurses, HSE Primary Care Clinicians and Managers, Department of Health and Children, Professor Colum Dunne, Director of Research, Graduate Entry Medical School, UL.

## 100 YEARS OF ANATOMY CORRECTED LEADS TO BETTER OUTCOMES FOR PATIENTS

### Ground Breaking Anatomy Findings Lead to less Invasive Surgeries



Professor Calvin Coffey

New research led by Professor of Surgery, J. Calvin Coffey, Graduate Entry Medical School, UL and Colorectal Surgeon, University Hospital Limerick (UHL) has refuted a century of mistaken abdominal anatomy by remapping the human mesentery in a way never described before. This research has significant implications for patient outcomes, leading to less invasive surgeries, fewer complications, faster patient recovery and lower overall costs.

Professor Coffey explains: “The blood vessels which supply the gastrointestinal tract (gut) travel through the mesentery - a structure which attaches the intestine to the abdominal walls, and holds it in place and defends against the spread of disease, including cancer. However, for over 100 years the anatomy of the mesentery has been incorrectly described. Our research has found that this critical part of abdominal anatomy is a simpler structure than previously thought, and this is having a major impact across all related scientific and clinical disciplines.”

In collaboration with Professor Peter Dochery and Dr. Fabio Qunadematteo (NUIG), and Professor Colum Dunne (GEMS/UL), the team combined multiple investigatory tools including 3D imaging to fully map the correct anatomical structure of the mesentery. Their findings have recently been published in *Annals of Surgery*, the premier surgical journal worldwide, as well as in the *Journal of Anatomy*, *The Surgeon*, *Colorectal Disease* and many other journals.

As per Professor Coffey: “Inaccurate understanding of structure has greatly hampered our understanding of this organ. Increasingly we are recognising that the mesentery plays a crucial role in controlling metabolic, immunologic and endocrine functions such that it is now regarded as a driver of disease processes including diabetes mellitus, ischaemic heart disease, and peripheral vascular disease. The recent clarification of mesenteric organ structure will greatly aid pathologists in understanding gastrointestinal diseases, radiologists in interpreting the appearance of abdominal diseases in general, and surgeons in anatomically correcting these diseases. By following these findings, surgeons can now perform abdominal surgery with minimal complications, and trainee surgeons can be trained to perform it in a reproducible manner that heretofore was not possible.”

Professor Coffey added: “These findings related to structure have provided fresh approaches to diseases such as intestinal cancer, inflammatory bowel diseases including ulcerative colitis, Crohn’s disease and diverticulosis. New mechanisms of cancer spread and progression as well as novel cellular targets have been identified. We can now better personalise operations to suit the exact stage of a patient’s disease, including Crohn’s, bowel cancer and a range of abdominal conditions. This has significant impact for patients as a more accurate understanding allows us opt for less invasive keyhole surgery with minimal blood loss, and, more importantly for the patient, minimal complications. With surgery that adopts the new mesenteric-based principles, previously common complications are now a rarity, patients recover quickly and achieve a normal quality of life faster, leading to savings in healthcare and socio-economic costs.”

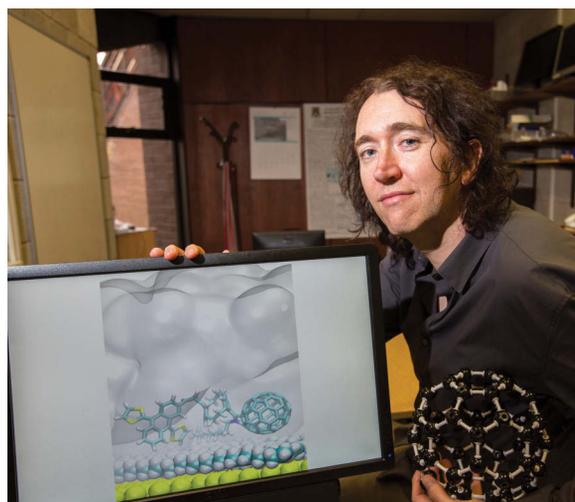
This research also has implications for disease treatment in particular helping to identify new biological markers which can be used by Oncologists to determine the most appropriate form of chemotherapy for each patient. These findings contribute to a global drive towards more personalised care, helping to identify treatments which will best benefit individual patients.



UHL and UL are partnering with world leaders in this field worldwide including the Cleveland Clinic and the Dana-Farber Institute/Harvard Cancer Centre.

## **DRIVE-THROUGH DIAGNOSTICS - MAKING DIAGNOSIS MORE ACCURATE AND LESS EXPENSIVE**

### **UL Research Solves Major Scientific Challenge Which Unlocks Potential for Rapid Diagnostics Tools**



Dr. Damien Thompson

Research from the University of Limerick has unlocked a major scientific challenge which has exciting potential for point of care medical tests. The research entitled 'Nanoelectrical analysis of single molecules and atomic-scale materials at the solid/liquid interface' is reported online in Nature Materials.

Scientists have long been working to overcome barriers in the detection of minute levels of biomarkers in blood. Sensors that can rapidly and accurately assess a person's health by detecting molecule-level traces of viruses and bacteria could save many lives by identifying the need for medical intervention at the earliest possible stage. These biomarker molecules are elusive in blood so pinning them down and interrogating them with sensors is difficult. The solution proposed in the new research is to apply "liquid brakes" to molecules using silicone oil and place a one atom-thin insulating layer in between the molecules and the sensor surface.

Dr. Damien Thompson, Department of Physics and Energy, and Materials and Surface Science Institute (MSSI), UL explains; "The trick is to slow the molecule down and hold it at a safe distance from the sensor surface. You need to slide something in between the molecule and the surface and that something is a layer of alkanes."

You use alkanes every time you cook on your stove or fill up your car with fuel. In spite of their simplicity, alkanes have a hidden talent; they can screen electrical signals, allowing scientists to fingerprint molecules because the signal from the molecule is kept pure. The molecule's energy levels are not contaminated by noise from the sensor surface.

Dr. Damien Thompson, added; "If we can measure molecules more accurately and quickly without the need for expensive laboratories then we can quickly diagnose conditions in patients. Imagine a situation where a life-threatening condition could be rapidly diagnosed in its incubation stage using a simple hand-held test outside of a lab environment. The potential is very exciting and this research has unlocked what has been a long-standing issue for the diagnostics community: how to place molecules near conducting surfaces without perturbing the molecule's electrical properties. The potential is enormous, including identification of viruses causing Ebola, HIV and the common cold."

Dr. Damien Thompson's research is funded by Science Foundation Ireland as part of a Starting Investigators Research Grant and is enabled by high-performance computing facilities at the Irish Centre for High-End Computing (ICHEC). His work has produced design rules for how molecules with functions such as electrical switching and tumour targeting can be integrated into real devices.

This research has been undertaken by the University of Limerick, IMDEA-Nanoscience, Madrid, IBM-Zurich. Nano-electrical analysis of single molecules and atomic-scale materials at the solid/liquid interface: Peter Nirmalraj, Damien Thompson, Agustín Molina-Ontoria, Marilyne Sousa, Nazario Martín, Bernd Gotsmann and Heike Riel.

## **PROFESSIONAL COMPETENCE GUIDELINES DEVELOPED BY UL RESEARCHERS SENT TO ALL EMERGENCY MEDICAL TECHNICIANS NATIONALLY**



Images from the recent Paramedic Studies Open Day held at the Centre for Prehospital Research, Graduate Entry Medical School, UL



Professional Competence Guidelines have been distributed to all Emergency Medical Technicians (EMTs) to inform them of the new requirements for continuous professional competence introduced for the first time in Ireland. Since November 2013 Emergency Medical Technicians (EMTs), Paramedics (Ps) and Advanced Paramedics (APs) must be registered with the Pre-Hospital Emergency Care Council in order to legally practice in Ireland. The new guidelines will enable practitioners to update and develop knowledge, skills and attitudes thereby supporting professional competent practice.

The guidelines were developed by Shane Knox (Assistant Chief at the National Ambulance College and PhD candidate at University of Limerick) and Professor Colum Dunne (Graduate Entry Medical School, UL) and form part of an initiative at UL to better understand the knowledge, attitudes and awareness of Irish emergency service providers to professional development and competence. Shane Knox explained that “through ‘town-hall’ meetings, surveys and interviews across Ireland the perspectives of practicing EMTs, Paramedics and Advanced Paramedics regarding how they would like to be trained have been captured. Unsurprisingly, given the nature of the role, there is a preference for a mix of practical or “hands-on” and theoretical education. This is reflected in the guidelines.” In healthcare, advances are continually being made in techniques, therapies, medications and clinical concepts that can improve the quality and safety of care for patients. In recent years the pace of this change is accelerating and so too is the expectation of care standards among the public and patients.

Director of the Centre for Interventions in Inflammation, Infection & Immunity (4i) where this work was done, Professor Colum Dunne UL, said “To date, little research has been conducted with Pre-Hospital Emergency Care Council (PHECC) registered practitioners in general or on EMTs and CPD/C internationally. This survey is the first to ascertain the opinions of EMTs regarding continuous professional competence in terms of what is being completed currently, and how it may be developed in Ireland in the coming years. Having engaged with almost 1,000 EMTs, it is very clear that there is genuine enthusiasm for continuous professional competence and recognition that it is an important aspect of professionalism. Our evidence places an emphasis on practical aspects, such as Cardiac First Response, maintaining a portfolio of evidence, completing operational shifts with Paramedics and Advanced paramedics, and a blended learning approach with e-learning. ”

The booklet can be seen at:

[http://issuu.com/636764/docs/emt\\_professional\\_competence\\_booklet](http://issuu.com/636764/docs/emt_professional_competence_booklet)  
UL’s published surveys of Irish EMTs can be accessed at:  
<http://www.biomedcentral.com/1471227X/13/25/abstract>

## MINISTER OF STATE LAUNCHES UNIQUE FRAMEWORK TO SUPPORT COMMUNITY PARTICIPATION IN PRIMARY HEALTHCARE



Professor of Primary Healthcare Research, Anne MacFarlane, Minister of State for Primary and Social Care, Kathleen Lynch, John Hennessy, National Director, Primary Care, HSE, Dr. Mary Shire, Vice President Research at the launch of ‘Framework for Community Participation in Primary Healthcare’ at the University of Limerick

Minister of State for Primary and Social Care, Kathleen Lynch launched a joint publication by the Graduate Entry Medical School and the Health Service Executive ‘Framework for Community Participation in Primary Healthcare’ on Friday, November 7th, 2014. The Framework is designed to provide clear information about the factors which promote and support community participation in primary healthcare. This research is funded by the Health Research Board (HRB), HSE and Graduate Entry Medical School, UL and undertaken in partnership with NUI Galway and the Centre for Participatory Strategies, Galway, Ireland. Professor of Primary Healthcare Research, Anne MacFarlane explains the significance of this research; “The unique feature of the research is that it moves beyond describing features of community participation in primary healthcare projects. We have focused on what is needed to support the implementation of such projects. We have translated our research findings into a practical guide which contains a series of activities which are designed to encourage stakeholders from community, HSE and primary care settings to come together as partners to address a range of issues that we know influence the likelihood of implementation – for example do all stakeholders have the same understanding of community participation and the goals of their project? Can they work together to identify champions to drive the work forward?”

Graham Love, Chief Executive at the Health Research Board says, “This is a really practical toolkit to encourage meaningful community engagement in primary care. Based on solid evidence it reveals what works, but also what doesn’t work, and provides clear guidance and actions for making it happen.”

John Hennessy, National Director, Primary Care, HSE said: “This framework is an expression of innovative, real research translated into a practical, accessible guide that can be used in primary care and other settings. The HSE welcomes the framework and is committed to progressing its application as an effective means of supporting community participation in primary care.”



A copy of 'Framework for Community Participation in Primary Healthcare' is available from [Stephane.Pinson@ul.ie](mailto:Stephane.Pinson@ul.ie)

## UL STUDY SHOWS GPs HAVE LESS CONFIDENCE IN GENERIC MEDICINES THAN PHARMACISTS

Spending on pharmaceuticals in Ireland is high, the highest in the EU per capita in 2010. For example, the annual cost of medicines under the state-funded drugs scheme increased from €564 million in 2000 to over €1.9 billion in 2010. The Irish government has recognised that increasing usage of generic medicines has the potential to make significant savings. Hence, new legislation (the Health (Pricing and Supply of Medical Goods) Act), introducing generic substitution and reference pricing for the first time in Ireland, was signed into law in June 2013.

- 94% of GPs and 89% of pharmacists reported receiving complaints from patients related to use of generic medicines.
- 12% of GPs, but only 2% of pharmacists, believed generics do not work as well as originator medicines.
- More than twice as many GPs (15%) as pharmacists (7%) would prefer to take originator medications for themselves rather than generics.

In April 2014, researchers in the Graduate Entry Medical School (GEMS) in the University of Limerick (UL) published a study which compared, in the time leading up to the enactment of the new legislation, the opinions of general practitioners (GPs) and pharmacists regarding generic medicines. This first-of-its-kind study in Ireland showed that while pharmacists hold largely positive opinions of generics, GPs were somewhat reticent and comparatively less accepting of generic medicines.

The last investigation of GP opinions of generics in Ireland was published in 1997, and no studies have been published before now that investigated perceptions of pharmacists in Ireland relating to generic medicines.

Suzanne Dunne, PhD candidate with GEMS and the study author, explained the importance of the findings: This study provides important information about how the new legislation might be accepted. If GPs have negative opinions regarding generic medicines, then their patients are likely to have a similar lack of confidence. Improving GPs' confidence in generic medicines is very likely to have a positive knock-on effect in improving acceptance of these medicines by patients.

This new study also shows that large numbers of both pharmacists and GPs have received complaints from patients that were related to use of a generic medicine. The results correspond well with previous research from this group showing that approximately a quarter of patients believe that generic medicines are of poorer quality than originators and about one in five are of the view that generics do not work as well as branded medication.

Professor Colum Dunne, author and Director of UL's Centre for Infection, Inflammation & Immunity (4i), explained the

significance of the paper: This paper is especially informative in that the most recent report on healthcare perspectives of generic medicines in Ireland dates from 1997. Due to implementation of the new Act in June 2013, Irish patients are more likely than ever to encounter generic medicines. Our study delved deeper than simple questionnaire-based research and investigated the similarities and differences in perspectives of influential prescribers and dispensers of those medicines in Ireland at a time of major policy change.

Professor Walter Cullen, author and Chair of General Practice, commented on the study, saying GPs and pharmacists in Ireland are influential in providing balanced and professional healthcare advice to their patients. Their opinions regarding generic medicines develop through their experience and knowledge of the products they prescribe and dispense. As a result, in certain cases, the GP may decide that it is better for individual patients receive tried and tested medicines rather than newer, generic variants. However, in all cases, the patient's well-being is at the centre of GP prescribing practices and their dispensing at pharmacies.

The published paper can be accessed at:

[http://www.healthpolicyjml.com/article/S0168-8510\(14\)00080-3](http://www.healthpolicyjml.com/article/S0168-8510(14)00080-3)

<http://www.sciencedirect.com/science/article/pii/S0168851014000803>

## UL STUDY SHOWS THAT IRISH PATIENT UNDERSTANDING AND CONFIDENCE IN GENERIC MEDICINES MAY BE OVERESTIMATED

31% of patients had no knowledge of generic medicines, 39% of those exhibited confusion between the words 'generic' and 'genetic.'

24% view generics as poorer quality than originators, 18% thought they didn't work as well.

Nearly 90% would take a generic if prescribed by their GP, but 24% would prefer the originator medicine if offered a choice.

In June 2013 Ireland introduced generic substitution and reference pricing for the first time. In January 2014, University of Limerick (UL) researchers have published a study on how generic medicines were perceived amongst patients in the time leading up to the enactment of the new legislation.

Suzanne Dunne, PhD candidate, UL Graduate Entry Medical School (GEMS), explained the significance of the research "The study has shown that Irish patients' understanding of what generic medicines are may have been overestimated in previous reports. Simple "Do you know what a generic medicine is?"- type surveys do not capture the potential misunderstanding or confusion caused by the term. For instance, we determined that some patients confuse the work "generic" with "genetic." Such misinterpretation can only be detected by spending more time with patients than is usual in brief vox pop surveys."



Spending on pharmaceuticals in Ireland is high, the highest in the EU per capita in 2010. For example, the annual cost of medicines under the state-funded drugs scheme increased from €564 million in 2000 to €1,961 million in 2009. The Irish government has recognised that increasing usage of generic medicines has the potential to make significant savings. New legislation introducing generic substitution and reference pricing in Ireland was signed into law in June 2013.

However, no studies have been published before now that investigated Irish patient perceptions of generic medicines. Professor Walter Cullen, PhD supervisor and Chair of General Practice in UL said "this study has shown that patients are not fully aware of what generic medicines are and express doubts as to their quality. Despite these misgivings, patients exhibit a high degree of trust in their medical professionals and would take a generic drug if prescribed by a trusted physician."

Director of the Centre for Interventions in Inflammation, Infection & Immunity (4i) where this work was done, UL Professor Colum Dunne, said "this study is focused on developing greater insights into patient perspectives of Irish healthcare policy. One of the findings was that there is some confusion regarding commonly-used terms, and lack of confidence in the equality and effectiveness of some medicines. The clear message is that targeted education approaches may address these issues and, by doing so, improve the potential of new policies to succeed."

The published paper can be accessed here:

<http://link.springer.com/article/10.1007/s40271-013-0042-z#page-1>

## COULD MILK PROTEINS IMPROVE SPORTS PERFORMANCE AND HEALTHY AGEING? UL RESEARCHERS TO INVESTIGATE



Professor Dick FitzGerald and Professor Phil Jakeman, University of Limerick

The University of Limerick will take the lead in Phase 2 of Food for Health Ireland's (FHI) research programme to explore the role of milk proteins in healthy ageing and performance nutrition.

Professor of Sport and Exercise Sciences, Phil Jakeman, who is the lead PI for FHI's Healthy Ageing and Performance Nutrition Health Pillar, explains the research;

"Our principal expertise is in human skeletal muscle. Healthy active ageing and improving sports performance have a lot in common as far as muscle is concerned. As we age the amount of muscle and lean tissue mass begins to decrease. This can lead to frailty, disability and loss of independence in older adults. Conversely, high performance athletes generally try to increase muscle mass and muscle function that has to recover and adapt quickly to sustain and improve optimal performance. Many of the nutrient and metabolic regulators of these effects on muscle in ageing and performance overlap."

Can milk, specifically the proteins within milk, help older people and athletes to rebuild their muscle and to recover quickly for the next race, respectively?

"Over the next five years the Healthy Ageing and Performance Nutrition research team will be investigating whether milk proteins and their bioactive derivatives have the potential to be of benefit to these two population groups. This is an exciting Health Pillar within the FHI2 programme. Using a multidisciplinary approach we seek to develop and evaluate a range of naturally produced, milk-based, bioactive ingredients for incorporation into food matrices targeting the area of muscle health."

Professor Dick FitzGerald, Department of Life Sciences, UL is also working on this project. He explains his area of interest;

"Milk is a valuable and highly complex biological material, composed of multiple constituents such as proteins, carbohydrates, fats, vitamins and minerals. In FHI2, milk is the source material potentially providing an innovative pipeline of bio-functional ingredients to the consumer market."

"We are using enzymes, natural food-grade catalysts, to breakdown the proteins in milk to release a new range of biofunctional ingredients, known as peptides, which may have a positive impact on human health. Our work brings together diverse expertise, for example, protein chemistry, separation science and biochemistry, where milk proteins are specifically modified to release a number of potential health benefits. This research provides a pipeline of new generation ingredients that support Professor Jakeman and other researchers within the FHI programme investigating the effect of milk peptides on healthy ageing, glycaemic and appetite management."

Other Principal Investigators on this project are Dr. Brian Carson (PESS), Dr. Pat Kiely and Professor Sean Arkins from the Department of Life Sciences.



## UL RESEARCHERS FIND SIMPLE BLOOD IRON TEST PREDICTS FATAL OUTCOMES IN THE GENERAL POPULATION - STUDY FINDS EXTREME LEVELS OF TRANSFERRIN SATURATION RATIO REFLECTING BLOOD IRON LEVELS LINKED TO INCREASED RISK OF DEATH



Members of the Kidney Health Research Consortium at the Graduate Entry Medical School and University Hospital Limerick. L. to R. Dr. Ells Gillis, Darya Yermak, Dr. Mohamed Elsayed, Dr. Liam Casserly, Professor Austin Stack, Professor Ailish Hannigan, Dr. John Ferguson, Dr. Hatim Yagoub, Dr Waleed Mohamed.

A new study led by researchers at the Graduate Entry Medical School (GEMS), University of Limerick (UL) has found that people with low levels and very high levels of a commonly measured laboratory test, the “transferrin saturation ratio” are at an increased risk of death. The test is a measure of the amount of available iron in the bloodstream with low levels generally reflecting a state of iron deficiency and high levels suggesting a relative excess. The study found that subjects with extremely low transferrin saturation levels (less than 17.5%) were at a 45% higher risk of death. On the other hand, the risk of death was also significantly higher for subjects with very high levels of transferrin saturation above 31.3%.

According to primary author, Professor Austin Stack, Foundation Chair of Medicine at University of Limerick Graduate Entry Medical School, and Consultant Nephrologist at University Hospital Limerick, “the transferrin saturation ratio” is a commonly used blood test to assess the amount of iron in a patient. Low levels of transferrin saturation ratio generally indicate iron deficiency, while high levels, - traditionally >50% indicate an excess of iron, which can be detrimental to health. High levels usually occur in states of iron overload like haemochromatosis, multiple blood transfusions and cirrhosis. There is some uncertainty as to what the optimal levels of transferrin saturation ratio are to maintain normal health, and while some studies to date have shown that low levels are associated with elevated death risk, others have suggested the contrary.” In this study of 15,823 adults from the Third National Health and Nutrition Examination Survey (NHANES III) conducted from 1988 to 1994 in the US and with follow-up in 2006, the research team sought to examine in detail the risks associated with transferrin saturation ratio and determine the optimal levels that were associated with best survival.

“In this very large population-based study, we found that individuals at both ends of the spectrum-people with very high and very low levels were at increased risk of death,” said Professor Stack. This pattern of association was what we call a j-shaped relationship. We found that adults with the lowest levels of transferrin saturation ratio (<17.5%) had higher percentage of anaemia and several other chronic conditions like heart disease, diabetes, and poor socioeconomic status, indicators that might have accounted for the higher rates of death. Yet, when we accounted for these factors in our analysis, low levels continued to predict higher death risk.”

“What was even more surprising, was that adults who had high transferrin saturation ratio >31% also experienced higher rates of death, a relationship that was not accounted for by levels of inflammation or other medical conditions.”

“When we looked at the relationship between transferrin saturation and deaths from cardiovascular disease, the results were even more striking. A low transferrin saturation ratio less than 17.5% increased the risk of cardiovascular death by over 200% while a higher TSAT level above 31% increased the risk by almost 60%,” said Dr John Ferguson PhD, biostatistician and senior author of the study.

“We believe that these results have important practical implications for the wider medical community,” said Professor Stack. Our analysis suggests that the optimal transferrin saturation range for patient survival should be between 23% to 40% and that careful clinical assessment is warranted for patients with low and high levels in order to identify states of iron deficiency or iron excess. Our study demonstrates that transferrin saturation ratio is a useful prognostic tool in assessing a patient’s health and while we support the correction of low transferrin saturation levels in the general population, we would also advise caution against excessive iron loading to levels beyond 40%.

The study ‘Transferrin Saturation Ratio and Risk of Total and Cardiovascular Mortality in the General Population’ is published by Quarterly Journal of Medicine (QJM): An International Journal of Medicine and authored by Austin G. Stack MD MSc, Arif I. Mutwali MBBS, Hoang T. Nguyen PhD, Cornelius J. Cronin MBBCh, Liam F. Casserly MBBCh MSc, John Ferguson PhD.

The Graduate Entry Medical School is leading a number of national and international projects to evaluate the health status and clinical outcomes for patients with chronic disease in order to improve patient outcomes. The study was performed at the Graduate Entry Medical School in collaboration with the Departments of Nephrology and Internal Medicine, University Hospital Limerick.



## UL STUDY ADVISES SIMPLE BLOOD TEST COULD HELP EARLIER DETECTION OF FATAL OUTCOMES IN PATIENTS WITH KIDNEY DISEASE



Professor Austin Stack

In a new study, led by researchers at the University of Limerick Graduate Entry Medical School, high levels of plasma “fibrinogen” - a clotting factor that can be measured in the blood stream - were associated with higher death rates in patients with kidney disease. The study evaluated data of 9,184 US adults, age 40 and over who were followed for up to 15 years as part of the US-based Third National Health and Nutrition Examination Survey (NHANES III). The UL research team found that even a small rise in blood fibrinogen levels (1  $\mu\text{mol/L}$  increase) led to increased risk of death (7%) and that figure rises to over 50% when the levels rose beyond 10.5  $\mu\text{mol/L}$ .

According to primary author, Professor Austin Stack MD, Foundation Chair of Medicine at University of Limerick Graduate Entry Medical School, and Consultant Nephrologist at University Hospital Limerick, “This study is significant as it is the first time evidence has shown that fibrinogen levels can be used to predict future heart attacks, strokes and premature death in patients who have pre-existing kidney disease.”

The findings have important implications according to Professor Stack. “At least 1 in 10 people suffer from chronic kidney disease in Ireland. It is becoming increasingly obvious that traditional risk factors such as raised blood pressure, smoking and diabetes do not completely explain the high death rates that are found in patients with chronic kidney disease. Many scientists believe that novel cardiovascular risk factors may contribute to excess deaths in this high risk population. Although plasma fibrinogen levels are not measured routinely in clinical practice, there is an increasing body of evidence to suggest that fibrinogen may damage blood vessels and lead to atherosclerosis. Our study found significantly higher levels among patients with abnormal kidney function compared to those without.”

“When we looked at the relationship between fibrinogen levels and cardiovascular deaths, we found that higher levels of fibrinogen were directly associated with higher death rates and the pattern was similar for subjects with normal and abnormal kidney function” according to Professor Ailish Hannigan PhD and senior author of the study, “The relationship between fibrinogen and premature death was still evident after accounting for traditional cardiovascular risk factors.”

This study suggests that renewed attention be given to the potential importance of fibrinogen as a cardiovascular risk factor in patients with kidney impairment and calls for definitive randomised controlled clinical trials to evaluate the efficacy of potential treatments.

Professor Stack added; “This simple blood test could help in the earlier identification of high-risk patients with kidney disease in order to prevent major complications.”

This research led by the Graduate Entry Medical School and funded by the Health Research Board (HRB) is based on data from the Third National Health and Nutrition Examination Survey (NHANES III) a population-based survey conducted by the National Center for Health Statistics, USA.

The study ‘Plasma fibrinogen associates independently with total and cardiovascular mortality among subjects with normal and reduced kidney function in the general population’ is published by Quarterly Journal of Medicine (QJM): An International Journal of Medicine and authored by Austin G Stack, MD, Urszula Donigiewicz MBBCh, Ahad. A. Abdalla MBBCh, Astrid Weiland MBBCh, Cornelius J Cronin MBBCh, Liam F Casserly MBBCh, Hoang T Nguyen PhD, and Ailish Hannigan PhD.

## HOME DIALYSIS MAY BE BETTER THAN IN-CENTRE HEMODIALYSIS FOR PATIENTS WITH KIDNEY FAILURE

Home dialysis therapies may help to prolong the lives of patients with kidney failure compared with hemodialysis treatments administered in medical centres, according to a study by researchers at the Graduate Entry Medical School, University of Limerick.

Home dialysis therapies are more convenient and less expensive than in-centre treatment, but it’s unclear whether all home therapies - which include peritoneal dialysis and home hemodialysis - can prolong patients’ survival. Research led by Professor Austin Stack, Foundation Chair of Medicine, University Hospital Limerick, Graduate Entry Medical School, University of Limerick analysed data to compare dialysis survival among 585,911 patients who started dialysis in the United States between 2005 and 2010.

Among the major findings:

- Patients who were treated with peritoneal dialysis were about 10% less likely to die during the study period than patients treated with standard 3 times per week in-centre hemodialysis
- Patients receiving high frequency home hemodialysis delivered 6 times per week were 26% less likely to die during the study period than those receiving standard in-centre hemodialysis
- Patients receiving less frequent home hemodialysis (4 or 5 times per week) had mortality risks that were similar to those of patients receiving in-centre hemodialysis
- Patients receiving home hemodialysis at a frequency of 3 times per week were 47% more likely to die than patients receiving in-centre hemodialysis



"We suggest that a treatment approach that adopts a peritoneal dialysis first or frequent home hemodialysis first strategy should be considered for all suitable patients who develop end stage kidney disease," said Professor Stack. "Such an approach may offer superior survival, better quality of life, and be cost effective for national health care systems."

Presentation Title: 'Survival Differences between Home Dialysis Therapies and In-Center Haemodialysis: A National Cohort Study' (Abstract 2626)

## UL RESEARCHER RECEIVES FUNDING TO RESEARCH CARDIOVASCULAR DISEASE IN ADOLESCENTS



Dr. Angie Brown, Medical Director, Irish Heart Foundation, Professor Alan Donnelly, University of Limerick and Professor Declan Sugrue, President, Irish Heart Foundation

Teenage girls spend on average 19 hours a day either sitting or lying down - UL research is looking to understand the impact this has on their cardiovascular health.

A UL study which seeks to understand the impact which long periods of inactivity among adolescents has on their cardiovascular health has received funding from the Irish Heart Foundation. Led by Professor Alan Donnelly of the Centre for Physical Activity and Health Research, UL, the study is entitled "Sitting around all day doing nothing? The effects of sitting, standing and light activity on adiposity and cardiovascular disease risk in adolescents."

In an associated study, Professor Donnelly and his team found that teenage girls spend an average of 19 hours a day either sitting or lying down. Professor Donnelly explains "There is no doubt that performing moderate or vigorous physical activity is good for the long term health of adolescents. However, we believe that long periods of sitting might be a separate risk factor in this group. Replacing some of this sitting time with light activity might be an effective means of improving health risk and reducing the risk of obesity in these adolescents."

There is evidence that children and adolescents have become more inactive in recent times, as heavy physical chores and active transport have decreased, and seated activities like watching TV, social networking and gaming have increased. To date, the response to this has been to encourage adolescents to engage in sport or other high-intensity activities, but many adolescents find this difficult to sustain. The proportion of adolescents who are

overweight and obese is rising in many developed nations, and Ireland is no exception; one in five Irish adolescents are overweight or obese. This change in body composition is likely to increase the risk of these adolescents developing heart and arterial disease as they age.

This Irish Heart Foundation funded research will take a new and very different approach to changing adolescent health risk; instead of a focus on sport and high intensity activity, it will examine the effects of sitting and the potential effects of light intensity physical activity.

Professor Donnelly added; "Sitting time is surprisingly hard to measure accurately, but recent technological developments have allowed the direct examination of sitting through a leg-worn device that accurately records sitting behaviour over 7 days or more. Our research centre in Limerick has developed analysis techniques for these devices that enable us to record and quantify sitting time, standing time and physical activity intensity. We have previously collected and published data showing that adolescent girls sit for a large part of their waking day, and this study will extend that work by tracking 100 male and females from late adolescence through to early adulthood, to observe whether sitting behaviour and the associated risk from sitting are modified when adolescents leave school and go to college or into the workplace."

## UL RESEARCH BREAKTHROUGH LEADS TO BETTER OUTCOMES FOR PATIENTS WITH BOWEL CANCER

Researchers at University of Limerick and University Hospital Limerick have identified several new genetic biomarkers which better predict outcomes for patients with bowel/colorectal cancer. The research team identified genes that are predictors of cancer recurrence and can also help to identify a patient's suitability to specific types of chemotherapy.

Professor J. Calvin Coffey Graduate Entry Medical School, UL and Colorectal Surgeon, University Hospital Limerick explains: "One of the key early events in the spread of cancer is its spread to involve the lymph glands that drain the colon. The identification of tumours that will spread to the glands is a key challenge for clinicians as these are the patients most likely to benefit from chemotherapy. The ability to avoid harmful chemotherapeutic side-effects is a clinical need that has yet to be met by the diagnostic tools available to clinicians. In Ireland colorectal cancer is the 3rd most common cancer with 2,435 new cases diagnosed each year. This diagnostic instrument that we have developed, and this research in general, will impact on patients globally as we can now pin-point precisely patients who will develop spread to glands, and thus benefit from chemotherapy."

Standard testing for nodal status (i.e. pathologic) is limited as greater than 25% of cases are inaccurately staged. This has major significance as accurate staging is required in order to tailor oncologic treatment to the individual patient. Professor Coffey, in collaboration with Professor Colum Dunne and Dr. Pat Kiely at UL, and Professor Matt Kalady



at the Cleveland Clinic, developed a multigene assay for the preoperative determination of lymph node status in colorectal cancer. The diagnostic tool can be universally applied to all forms of solid organ malignancy (including breast, oesophageal, lung and pancreatic cancer), and has led to the identification of several novel biomarkers.

This research is contributing to a global drive towards more personalised care, helping to identify treatments which will best benefit individual patients. These research findings were published in the *Annals of Surgery* (the premier surgical journal worldwide) - <http://www.ncbi.nlm.nih.gov/pubmed/24169164>

"Introducing a novel and robust technique for determining lymph node status in colorectal cancer." UHL and UL are partnering with world leaders in this field worldwide including Cleveland Clinic and Dana-Farber Institute/Harvard Cancer Centre.

## FOETAL ALCOHOL SPECTRUM DISORDERS - INTERDISCIPLINARY UNDERSTANDING

June 5th & 6th, 2014.

The Doctoral Programme in Clinical Psychology at the University of Limerick in conjunction with the Irish Research Council (New Foundations Award), HSE West and Social Inclusion, Primary Care Division hosted a two-day interdisciplinary conference on Foetal Alcohol Spectrum Disorders, the first of its kind in Ireland. The conference brought together some of the world's leading experts in the fields of Education, Psychiatry, Psychology and other disciplines with the specific aim of disseminating current international research findings, discussing and debating current evidence-based intervention strategies and highlighting the need for effective preventative strategies.



L-R: Professor Barry Carpenter; Dr. Raja Mukherjee; Dr. Fergus McCarthy; Ms. Cynthia Silva; Dr. Barry Coughlan; Ms. Olivia Sexton; Mr. Danny Meenan; Ms. Marion Rackard; Dr. Kieran O'Malley; Ms. Michelle Savage.

Foetal alcohol spectrum disorders (FASDs) have emerged as a significant phenomenon within the fields of health, education and social care worldwide. FASDs represent a range of lifelong conditions that are caused by alcohol exposure to a developing foetus. Current prevalence figures suggest that one in a hundred children and young people have FASDs. Over 280 delegates attended the conference each day.

## JOHNSON AND JOHNSON ANNOUNCE 100 JOBS FOR LIMERICK



The Minister for Jobs, Enterprise and Innovation, Richard Bruton TD, pictured at Nexus, University of Limerick where global giant Johnson & Johnson announced 100 new jobs at their Castletroy facility.

Dr. Mary Shire, Vice President Research welcomed the announcement: "The University of Limerick is delighted to welcome the new Johnson and Johnson's (J&J) Development Centre which will be based on campus in the UL Enterprise Corridor. Minister for Jobs, Enterprise and Innovation Richard Bruton TD; Minister for Finance Michael Noonan TD and Minister for Education, Jan O'Sullivan TD were at the University on December 1st, 2014 to make the announcement of 100 jobs at the new centre which is part of J&J's Information Technology Shared Services Division." "Health, biomedical engineering and pharmaceuticals are among the research strengths of the University of Limerick and our ecosystem of innovation and excellence provides a pipeline of highly skilled graduates and a network of multidisciplinary researchers in these fields who will play an important part in the success of this initiative," continued Dr Shire.

"We pride ourselves on a reputation for delivering research which makes an impact on industry, society and the wider community. A significant aspect of our research strategy is a commitment to deliver research which moves the world forward. The establishment of the Johnson & Johnson Development Centre here on campus with the creation of 100 high value jobs is an excellent example of the benefits a research-driven institution with a focus on real-world impact can bring to the country."

The J&J Development Centre will be based in IBC Building, Enterprise Corridor, University of Limerick. This facility is adjacent to a number of key research and innovation facilities at UL including: Lero - The Irish Software Engineering Research Centre, Nexus Innovation Centre, Computer Science and Information Systems Department of UL and The Bernal Building - UL's Centre of Excellence for Science and Engineering which is currently under construction.

University of Limerick - Research Strengths are in Software, Health, Materials Science and Engineering - Pharmaceutical, Biomedical and Energy.

- The Bernal Project - In 2013 the University of Limerick launched a €52 million science and engineering initiative 'The Bernal Project' which will make a significant



contribution to Ireland's national research initiatives in the strategically important areas of Pharmaceutical, Biomedical and Energy Research and Development.

- The University of Limerick is home to two SFI research centres covering the fields of Pharmaceuticals (SSPC) and Software (Lero) and, together with our investment in The Bernal Project, we are furthering our commitment to excellence in science and engineering research and assisting Ireland's economic recovery.
- Established in 2011, the Nexus Innovation Centre at UL has exceeded all targets for spin-out activity and jobs since opening.
- UL's 70% graduate employment rate for 2013 primary degree-holders is now 18% higher than the HEA's most recently-available national average figure which is 52% for 2012.
- The University of Limerick has been named 'University of the Year 2015 in the Sunday Times Good University Guide. UL's leading position in graduate employability, strong research commercialisation, the €52 million Bernal Project in science and engineering and a rising academic performance were among the reasons for the award.

## **BUILDING RESILIENCE - REVOLUTIONISING THE WAY WE TREAT BACK PAIN**

Researchers at the University of Limerick are revolutionising the way we understand and treat back pain and other musculoskeletal conditions through a holistic approach which ranges from diagnosis and treatment to impacting public health policy. Back pain accounts for 25% of GP visits in Ireland and is one of the most costly conditions to diagnose and treat.

Dr. Kieran O'Sullivan explains: "It's all about treating the person, not just the bones or the muscles. Globally there are vast levels of misinformation around conditions like back pain, such as the idea that structures such as bones and discs can go out of place. Not only is this inaccurate, the fear it creates actually adds to disability. What is important is that we identify the impact pain has on people's lives, understand their personal and unique barriers to recovery and empower them to regain control of their lives."

The team co-led with the HSE the establishment of a first-of-its kind programme National Musculoskeletal Triage Initiative across 12 HSE hospitals which reduced hospital waiting lists by 22,000 patients.

Dr. Norelee Kennedy explains: "Each year, thousands of patients present in our hospitals with back pain and other musculoskeletal conditions which if not treated appropriately will reoccur and put further strain on our healthcare system. Our ethos is to evaluate the person quickly and to give them the appropriate advice and treatment." Dr. O'Sullivan explains that attempts in recent decades to

treat chronic back pain by only treating the back itself through massage, manipulation, injections and surgery have had only marginal success. The effectiveness of medications to manage symptoms is similarly underwhelming. He explains: "While people with chronic pain may be very stiff and sore in their back, it appears that overall health factors such as stress, sleep, mood, activity levels are very important. In particular, how a person thinks about their back problem is critical. If a person believes their back is vulnerable and could be easily injured, they are more likely to avoid usual activities or move too carefully, which limits the potential for recovery."

Dr. O'Sullivan added: "There's an opportunity here to embed real change which will have a lasting impact on people's lives. As physiotherapists we can lead the way in building resilience through public health programmes, encouraging activity, understanding pain is not just about bones and muscles and not always looking for a quick fix." Ultimately, this research has had a significant impact on public health through reduced hospital waiting lists, surgeries and medications and overall better outcomes for patients.

Dr. Norelee Kennedy and Dr. Kieran O'Sullivan are Lecturers in Physiotherapy at the Department of Clinical Therapies, University of Limerick. This research is supported by the Health Research Board (HRB), Irish Research Council, EU Social Fund/Department of Social Protection.

## **CHILDRENS' TV PROGRAMMING IN IRELAND AND ENGLAND POSITIVELY PORTAYING UNHEALTHY FOOD**

Unhealthy food and drinks are common in childrens' TV programmes broadcast in Ireland and England, and frequently portrayed in a positive light, According to new research from the Graduate Entry Medical School at the University of Limerick.

Statutory legislation to curb children's exposure to high sugar and fat food/drink in TV advertisements was introduced in the UK in 2007 ,and similar regulations have recently come on stream in Ireland, however, these regulations are not being applied to programme content.

Professor of Paediatrics at University of Limerick's Graduate Entry Medical School Clodagh O'Gorman and her colleagues assessed the frequency and type of food and drink portrayals in Childrens' TV programme, broadcast between 0600 and 1700 houes from Monday to Friday, on the RTE and BBC TV channels in 2010. Both RTE and BBC are national public broadcast chanel that do not carry any commercial product advertising, and which aim to inform educate, and empower their audiences.

All food and drink cues were coded according to type of product, use, motivation, outcome, and the characers involved.

A total of 1,155 food and drink cues were recorded across 82.5 hours of programming, accounting for 4.8% of the



total broadcast material, and averaging 13.2 seconds for each cue. Just under 40% of the content came from the USA.

Sweet snacks (13.3%) were the most common food cue, followed by confectionary/candy (11.4%). Tea and coffee were the most common beverage cue (13.5%), closely followed by sugar sweetened drinks (13%).

Unhealthy foods accounted for almost half of food cues (47.5%), while sugary drinks made up 25% of drinks cues.

Most of the cues involved a major character, 95% of which were 'goodies.' The cue was presented in a positive light in one in three instances (32.6%), portrayed negatively on almost one in five occasions (19.8%), and neutrally in around half of instances (47.5%).

The most common motivating factors associated with each cue were celebratory or social (25.2%) and hunger/thirst (25%). Only 2% of cues were related to health.

Co-author and Director of Research at the Medical School, Professor Colum Dunne, commented "Over 90% of characters were not overweight, despite consuming unhealthy products. This is not a helpful or accurate portrayal of current Irish or UK populations, where overweight and obesity are prevalent and increasingly problematic." Speaking about the research findings Professor Clodagh O'Gorman said: "While there is a clear link between exposure to advertising of unhealthy foods and their consumption in younger children, the impact of unhealthy food/drink content in TV programmes aimed at children, is not clear. Eating and drinking are common activities within children specific programming with unhealthy foods and beverages especially common and frequently associated with positive motivating factors, and seldom seen with negative outcomes. This is something that parents, policy makers and physicians should be aware of, and this should be balanced by more frequent and positive portrayals of health foods and behaviours."

A direct comparison between the content of UK and Irish programmes spanning 27.5 recorded hours showed that food/drink cues were more common on content broadcast on the BBC, with the total recorded time for these amounting to 2.3 hours for content broadcast in the UK and 45.6 minutes for content broadcast on RTE.

The published paper can be accessed here:

Embargoed link to research:

<http://press.psprings.co.uk/adc/july/adc305430.pdf>

Public link to research:

<http://adc.bmj.com/lookup/doi/10.1136/archdischild-2013-305430>

## **PAPER HIGHLIGHTS MAJOR INCREASE IN GP VISITS WITH INTRODUCTION OF FREE CARE FOR CHILDREN UNDER SIX**

A paper published in this month's Irish Medical Journal highlights an estimated three-quarters of a million extra GP visits per year with the introduction of free GP care for children under six. The study examined 1,931 children at six practices selected to be comparable to Ireland's national population and evaluated the current landscape in service demand and expected impact of the new programme due to be rolled out in June of this year.

The study found that if all children under six have free point of access GP care, then Ireland's health system should plan for an additional 750,000 GP consultations per year. The authors found that the rate of GP attendance visits for private patients is 2 per year and 5 per year for those with free GP care.

Dublin GP and lead author of the study, Dr. William Behan explains: "The study also highlights the need for accurate data to establish effective and sustainable models of healthcare and the importance of information from general practices themselves in planning these models."

UL Foundation Professor of General Practice and practising GP, Dr. Walter Cullen explains the significance of the study: "Every GP in Ireland would welcome any policy that will enhance access to primary care by removing financial barriers. General practice has been pivotal to the successful establishment of Ireland's newest medical school at the University of Limerick, and is supported by a network of more than 100 teaching practices across Ireland. GPs have been telling us in recent weeks that this proposal cannot be safely implemented within existing resources and capacity. Our study data support this message, and suggests it will also impact across the system - especially on our colleagues in Paediatrics and Primary Care Teams."

The study was undertaken by a team of researchers from the UL Graduate Entry Medical School, UCC, Complete GP, Mallow Primary Healthcare Centre, HSE-TCD Specialist Training Programme in General Practice and Walkinstown Primary Care Centre.

The paper 'Does Eliminating Fees at Point of Access Affect Irish General Practice Attendance Rates in the Under 6 Years Old Population?' A Cross Sectional Study at Six General Practices' by W Behan, D Molony, C Beame, W Cullen is available to view at: <http://www.imo.ie/news-media/publications/April-2014-IMJ.pdf>



## **UL STUDY FINDS PARENTS OF CHILDREN WITH DISABILITIES AT HIGHER HEALTH RISK - 15% OF PARENTS OF CHILDREN WITH DISABILITIES SUFFER FROM DEPRESSION**

A University Of Limerick Study Has Found That Parents Of Children With Learning or developmental disabilities have an increased risk of depression and are more likely to suffer from chronic health conditions. The figures showed that 15% of parents of children with disabilities were classified as depressed and unfortunately less than half of them reported being treated for depression.

Study co-author, Dr. Stephen Gallagher, Department of Psychology, University of Limerick explains the significance of the report; "Providing care to a child with a disability can often be very stressful. When parents lack the resources to manage the difficult situations they are experiencing their health is likely to suffer. Moreover, if their condition goes untreated the ill-effects can extend beyond the parent to influence the whole family. Supporting these families may not only bring health benefits to the parents but indirectly benefit the whole family."

In data generated from the Growing Up in Ireland study, a nationally representative sample of over 8,500 9-year old children in Ireland, the study found higher rates of depression and a higher prevalence of chronic health conditions such as respiratory and metabolic diseases in parents caring for children with learning and developmental disabilities compared to parents of typically developing children.

Study co-author, Professor Ailish Hannigan, Graduate Entry Medical School said: "The study took into account differences in demographics and pre-existing ill-health before the birth of the child between the two groups of parents but found that one of the main contributing factors to the increased risk of depression was parental reports of child problem behaviours such as hyperactivity."

The study, which was published in the international journal Research in Developmental Disabilities, was undertaken by Dr. Stephen Gallagher from the Psychology Department and Professor Ailish Hannigan from the Graduate Entry Medical School, UL. It is available at: <http://www.sciencedirect.com/science/article/pii/S089142221300543X>

## **UL HOSTS MAJOR FORUM EXPLORING THE PROVISION OF A WHEELCHAIR AS A BASIC HUMAN RIGHT**

The University of Limerick hosted a major forum on July 17th, 2014 exploring the rights of wheelchair users in Ireland. The Inaugural European Wheelchair and Seating Provision Forum coincided with the European Power Chair Football Nationals Cup which took place at UL from July 17th to 20th.

Forum organiser and Lecturer in Occupational Therapy, Dr. Rosie Gowran explains; "There are over 40,000 people who

use wheelchairs and seating assistive technologies in Ireland but they are being failed by a worrying lack of uniformity when accessing services, receiving their wheelchair, repair and maintenance. Posture, movement and mobility are essential for every human being to function and gain access to the world. The forum will open the debate on key issues and actions for the development of appropriate wheelchair and seating provision infrastructures to meet this primary need now and in the future."

The forum aimed to give a voice to wheelchair service users, providers and policy led makers, with attendees from Ireland and abroad taking part. The event aims to highlight key issues such as: access to services, timely assessment and delivery systems, adequate follow-up and management services and the advancement in education and research in this area.

A recent study on wheelchair provision, undertaken by the University of Limerick, highlighted issues around waiting times for assessment and provision. Dr. Gowran explains; "The delays in assessment and provision are leading to Irish children, adults and older people sitting in wheelchairs that are unsuitable for them. For a child, being in a wheelchair that is too small could have major health consequences on their development and self-esteem, not only impacting their limbs but also leaving them at risk of chest infections and pressure ulcers."

Wheelchair and seating service user and photographer, Arun Asan gave his perspective: "Action, passion, expression, the movement for life, as a photographer without the wheelchair these phases mean nothing. You need to be able to move about and access the world, to be with your friends, your family and contribute as an equal member of society."

"We need to stop seeing a wheelchair as just a piece of equipment and need to start to acknowledge that this is not a luxury item. That this is something our children cannot do without." explained parent, Dr. Marina Lupari. "We would never take insulin away from a diabetic; we would never take an inhaler from an asthmatic. Does society not realise that a poorly fitted wheelchair has serious health implications leading to a shorter life expectancy for our children."

A new Postgraduate Certificate in Posture, Seating and Wheelchair Mobility Across Life Course has been launched at the University of Limerick in partnership with SeatTech Enable Ireland. Running from September 2014, the programme is the first of its kind in Ireland, and is described by Dr. Gowran as: "an important step in the pursuit of effective wheelchair and seating assistive technology policies and services in Ireland."

For further information about the Certificate in Posture, Seating and Wheelchair Mobility Across Life Course go to: <http://www.ul.ie/graduateschool/course/posture-seating-and-wheelchair-mobility-across-life-course-postgraduate-certificate>



## **WHEELCHAIR AND SEATING ASSISTIVE TECHNOLOGY PROVISION SHOULD BE EQUATED TO THE PRESCRIPTION OF PHARMACEUTICAL DRUGS**

A study on wheelchair provision, undertaken by the University of Limerick, has highlighted a worrying lack of any national policies or guidelines in support of the 40,000 people who use wheelchairs and seating assistive technology in Ireland.

This HRB-funded study in partnership with SeatTech, Enable Ireland as the host organisation and the University of Limerick, has worked with key stakeholders to identify system improvements and to develop a strategy for more efficient provision of wheelchair services.

The research, led by UL's Dr. Rosie Gowran, involved qualitative interviews with key stakeholders including service users, service providers, healthcare professionals, clinical engineers, administrators, suppliers, manufacturers, regulators and policy makers. Participants engaged in a series of workshops, which identified major bottlenecks in unregulated wheelchair provision processes in Ireland and which ultimately led to a proposed strategy document for more sustainable wheelchair and seating provision and a model to review and develop policy relating to wheelchair and seating provision nationally.

Major issues included:-

- The length of waiting times throughout the wheelchair provision process which has significant impact on growing children, and people with progressive conditions
- The funding for wheelchair provision is sanctioned by the Health Service Executive, depending on the part of country in which a person lives and how this is prioritised
- Follow-up and management services to review changing needs are ad hoc
- Breakdown/Repair and Emergency Services can be ad hoc and inadequate
- Refurbishment, Reissue, Recycling Services are being developed, yet are not appropriately regulated
- Common Language needs to be used to develop sufficient and efficient communication systems
- Education and training for all citizens at a national and local level need to be developed, particularly for those involved in healthcare services
- Research and development of service and technology advancement
- Identifying who takes responsibility for wheelchair provision as this is currently unregulated

Dr. Gowran states: "The focus of this research was wheelchair and seating provision in the Republic of Ireland, which has developed and grown rapidly over the past twenty years, seeing an increase in localised, more accessible specialist services and the availability of advanced technology. However, even with these positive developments, current wheelchair provision, as with many other countries, lacked uniformity and could not be regarded as sustainable. A wheelchair becomes a person's legs, it becomes part of their skin, and it is a person's

freedom. A wheelchair, if you need one, is essential for survival and it should be seen as a priority.

As one participant said when the wheelchair breaks down it is like cutting their two legs off. The current system or lack thereof in Ireland needs to be addressed urgently by Government. Many, Irish children are currently sitting in wheelchairs that are too small for them being squashed in a wheelchair could have major consequences on their development, not only impacting their limbs but also leaving them at risk of chest infections and pressure ulcers."

"This research has highlighted that the importance of wheelchair provision is misunderstood and there are four key processes which need to be addressed nationally, these include access to services, assessment and delivery, tracking, tracing and taking care of equipment and education and research. I call on the Irish Government to bring these issues onto the programme for government and sanction a national review of wheelchair services as a matter of public priority, equating the importance of appropriate and regulated provision to the prescription of pharmaceutical drugs. As one research participant told me, you wouldn't let someone do heart surgery on you if they hadn't been to college, why should I let someone fix my wheelchair if they don't know what they are doing? While the impact of inadequate and unregulated infrastructure may not be immediately apparent, the side effects may have long-term and or lethal consequences. This is a human rights issue," said Dr. Gowran.



## MEDICAL TREATMENT FOR SICK TEDDY BEARS AT UL GRADUATE ENTRY MEDICAL SCHOOL

Medical School students at the University of Limerick hosted the University's annual Teddy Bear Hospital (TBH) on Tuesday, March 11th, 2014 with over 400 Limerick's primary school children and their teddy bears. The aim of the event, which has been organised by five current Graduate Entry Medical School (GEMS) students with a particular interest in childhood medicine, is to alleviate childhood anxiety about the medical environment, its procedures and the professionals that work within it.



Twins Anna Leice and Michael Wyse age 6 from Saint Munchin's Infant Schools bring their Teddy Bears for Medical Treatment at UL Graduate Entry Medical School.

Over 100 1st and 2nd year medical students took part in the event which saw 10 medical stations set up in the University Arena focusing on activities including: Triage; Stethoscopes; Vital Signs; X-ray; Exercise; Surgery/Gowning; Asthma; Safety; First Aid, Ear Nose and Throat and Healthy Eating.

Speaking from the event UL GEMS student Melissa Shack said "this is our second annual Teddy Bear Hospital at UL. Our main goal this year was to expand the number of primary schools we were able to invite to the event. The idea of the event remains the same; primary school students bring their teddy bear which then plays the role of the patient for the day. This visit to the Teddy Bear Hospital provides the children with an opportunity to interact with and assist in a range of simulated healthcare settings, while also allowing them to learn about healthy habits, like the importance of eating well and exercise."

The promotion of a healthy lifestyle and preventative medicine was at the forefront of this educational and fun event. The topics covered included the importance of regular exercise, thorough hand-washing techniques and a healthy diet. It is also hoped that this initiative will strengthen the relationship of UL GEMS and its students with the surrounding community.

Speaking about the Teddy Bear Hospital UL President, Professor Don Barry said "This is just the second year that UL has run this event and already it has grown in terms of attending schools. 'Bearing' in mind the fact that the

Graduate Entry Medical School was only recently established and that its students are undertaking a highly intensive medical education programme it is remarkable that this type of initiative has developed so early in the School's history. It is a testament to the type of student that the Medical School at the University of Limerick attracts."



Twins Anna Leice and Michael age 6 with their brother Jordan Wyse age 7 from Saint Munchin's Infant Schools bring their Teddy Bears for Medical Treatment at UL Graduate Entry Medical School.

The Teddy Bear Hospital at the University of Limerick, which took place today on March 11th, 2014 at the University Arena is the first of its kind for the Limerick region. This initiative in Limerick was run by five current, University of Limerick, Graduate Entry Medical School (GEMS) students: Melissa Shack, Sarah Cheeseman, Deirdre O'Sullivan, Ann Morris, and Jennifer Schacter.



Dara Deegan age 5 and Rory O'Grady age 5 from Milford National School bring their Teddy Bears for Medical Treatment at UL Graduate Entry Medical School.





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