factor), high risk (previous ulceration or amputation or more than one risk factor) or as active disease.

**Results:** 521 patients were on haemodialysis. 30% (n = 157) had diabetes (52% for over 20 year, 60% on insulin). HbA1c was available in 63% (99/157). Median HbA1c was 45mmol/mol (IQR 39.5-50.5). Overall risk stratification (n = 157) was: low risk 57%, medium risk 22%, high risk 14%, active disease 8%. 83% (131/157) had undergone foot check in the preceding 12 months. Of those that had not (17%), 26% had PN, 15% had medium risk and 23% had high risk (vs 27%, 23%, 12% respectively in those that had). Low risk and active disease were comparable. People with active disease were receiving appropriate care. Amongst high-risk individuals, pulses were absent in 50% of those with routine foot checks and 60% of those without.

**Conclusions:** Prevalence of diabetes and diabetic foot disease is high amongst patients on haemodialysis. Most patients have acceptable glycaemia. Patients not receiving foot checks are at higher risk of foot ulcers. Regular foot checks should be implemented in haemodialysis patients with diabetes, to reduce progression to active disease, through preventative measures.

#### P186

# The 'CPR for feet' care bundle: improving the assessment and management of inpatients with diabetes

R MacDonald, R O'Regan, H Casey, JG Boyle, KA Hughes and J Mckenzie

Diabetes, Endocrinology and Clinical Pharmacology Department, NHS Greater Glasgow & Clyde, Glasgow, UK

**Aims:** The Scottish Inpatient Diabetes Foot Audit conducted in 2013 revealed that 57% of inpatients had not had their feet checked on admission, 60% of those at risk did not have pressure relief in place and 2.4% developed a new foot lesion. In response, the Scottish Diabetes Foot Action group (SDFAG) launched the 'CPR for feet' campaign. The aim of this project was to raise awareness of the CPR campaign as well as improve the assessment and management of inpatients with diabetes.

**Methods:** A quality improvement project underpinned by Plan Do Study Act (PSDA) methodology was undertaken. The first and second cycles focused on staff education and the implementation of a 'CPR for Feet' assessment checklist using campaign guidelines, training manuals and modules. The third and fourth cycles focused on staff feedback and the implementation of a 'CPR for Feet' care bundle.

**Results:** Baseline measurements revealed 28% of patients had their feet assessed and managed correctly during inpatient stay, with 24% of this cohort having previously diagnosed foot lesions. Medical and nursing staff reported to be largely unaware of the 'CPR for feet' campaign (13%). 52% of inpatients with diabetes had their feet assessed and managed correctly following the second PDSA cycle. After completion of the third and fourth PDSA this number improved further to 72% and all staff reported to be aware of the campaign.

**Conclusions:** Introduction of a 'CPR for feet' care bundle improved the assessment and management of inpatients with diabetes.

#### P187

## A comparison of insulin administration in the community: hospitals vs community care teams

LS Houghton, KI Thorne, C Atkinson, B Lomax, M McDonald, A Jones, S Woodman, KE Fayers, HC Price, A Loveridge, E Perry, A Loveridge and E Perry

West Hampshire Community Diabetes Service, Southern Health NHS Trust, Lyndhurst, UK

**Introduction:** The National Diabetes Inpatient Audit (NaDIA) excludes community inpatients. In 2015, West Hampshire Community Diabetes Service conducted an audit of community hospitals within our area. This year we have extended the audit to include community care teams (CCTs) in order to evaluate the differences in care.

**Methods:** We designed questionnaires based on those used by NaDIA, adapted for suitability to community hospitals and CCTs. Nursing staff visited 17 inpatients at 3 community hospitals, with care team staff auditing 6 clients on their caseload with diabetes.

**Results:** 9 (53%) of the community hospital inpatients had all of their recorded blood glucose (BG) readings between the recommended targets of 4-11mmol/l. Within the CCT, only 1 client (17%) had all recorded BG readings within that target. 3 (50%) were hyperglycaemic (all BG readings above 11mmol/l) throughout the 7 days prior to the audit. In 4 of 6 cases, the reason for referral to CCT care was for help with insulin administration and blood glucose monitoring. CCTs stated that they took appropriate action to treat hyperglycaemia in accordance with their own policies and guidelines.

**Conclusion:** An ageing population coupled with rising incidence of diabetes is likely to lead to CCTs playing an increasing role in the management of insulin-treated diabetes. Our data suggest that hyperglycaemia may be undertreated in this setting. We plan to improve this by altering our prescribing processes to reduce reliance on GPs, as well as using initiatives like our Glucoheroes to promote better understanding of diabetes care.

#### P188

### A national audit of SGLT2 use in England

A McGovern, W Hinton and S de Lusignan

Department of Clinical and Experimental Medicine, University of Surrey, Guildford, UK

**Aims:** Whilst SGLT2 inhibitors are effective in Type 2 diabetes, they are costlier than older therapies, and therefore their recommended use is limited in the National Institute for Health and Clinical Excellence (NICE) guidelines. We compare current usage of these medications to this guidance in a national audit.

**Methods:** A cohort of people with diabetes was identified from the Royal College of General Practitioners Research and Surveillance Centre database, using routinely collected primary care data from 128 practices. We describe the proportion of people initiated on SGLT2 inhibitors as dual therapy with metformin, triple therapy including metformin, with insulin, and with other combinations which are not recommended by NICE (including monotherapy).

**Results:** Of those with Type 2 diabetes (N = 60,327) we identified 1,642 people (2.7%) initiated on SGLT2 inhibitors. At initiation the mean age was 58.1 years (SD 10.5), body mass index 34.0kg/m2 (SD 6.4), and HbA1c 78.0mmol/mol (SD 17.3). SGLT2 was used as monotherapy in 40 people (2.4%), dual therapy with metformin in 180 people (11.0%), triple therapy including metformin in 266 people (16.2%), and with insulin in

477 people (29.0%). SGLT2 inhibitors were used in combinations not recommended by NICE in 945 people (57.5%), including combinations with DPP-4 inhibitors in 450 people (27.4%) and GLP-1 analogues in 209 people (12.7%).

**Conclusions:** The majority of SGLT2 use is initiated in combinations which are not recommended by NICE. Combination of SGLT2 inhibitors with DPP-4 inhibitors or GLP-1 analogues may not represent a cost-effective treatment option and this usage requires further evaluation.

#### P189

# Postnatal screening in patients diagnosed with gestational diabetes

NN Patel, A Gumma, S Oyibo, S Sagi and D Wilson

Obstetrics Department, Peterborough & Stamford NHS Foundation Trust, Peterborough, UK

**Introduction:** Approximately 700,000 women give birth in England & Wales each year with up to 5% of these women having either pre-existing diabetes or gestational diabetes (GDM). Women who have diabetes during pregnancy, it is estimated that approximately 87% have GDM. It is well recognised that early diagnosis of diabetes aids in timely intervention to reduce long term complications.

**Aims:** To assess the screening for Diabetes Mellitus in post-delivery women diagnosed with GDM as per NICE guidelines 2015 NG3 part 1.6.11

**Methodology:** Diagnosis of GDM was made with results of oral glucose tolerance test (OGTT): fasting blood glucose (FBS)  $\geq$  6.1mmol/l & 2h blood sugar  $\geq$  7.8mmol/l.

140 patients were identified with GDM between 16/07/15 & 14/06/16 on records provided by PCH biochemistry laboratory and diabetes centre.

Standard 1 Patients to have FBS test performed between 6-13 w post-delivery. Standard 2: If Standard 1 not met, patients to have either HbA1c or FBS between 13-20w post-delivery.

Exclusion: Pre-existing diabetes

**Results:** 21% undertook FBS test between 6-13w. 1% & 13% of the remaining 111 patients undertook FBS & HbA1c respectively 13-20w post-delivery.

**Conclusion:** 21% adhered to NICE standard 1 (previously 27%). 14% adhered to NICE standard 2 (previously 16.5%).

54% had no screening (previously 56.5%)

99% had no OGTT, previously 100% compliance with NICE guidelines.

**Recommendations:** Further to current implemented measures: Diabetes team encouraging patient-led control in clinic by patients scheduling reminders in their smartphone calendars, alternatively providing patients with print-out request forms. Promote GP's awareness with audit presentations by diabetes specialist nurses and health visitors to remind patients. Suggest GP reception-led reminder calls to patients.

### P190

# Insulin degludec audit

F Ahmed and A Lumb

Diabetes, Endocrinology and Metabolism, Oxford University Hospital NHS Foundation Trust, Oxford, UK

**Background:** Published evidence suggests that patients switched to insulin degludec from other basal insulins may experience a reduction in episodes of hypoglycaemia. Our local CCG has approved use of insulin degludec for patients with Type 1 diabetes who suffer from intractable hypoglycaemia and recurrent admissions for DKA.

**Aim:** To evaluate the rationale for treatment with insulin degludec and to assess its clinical effect in real world use in our local area.

**Method:** We analysed data for patients enrolled in the ABDC degludec national audit. Clinical notes were reviewed. HbA1c and rates of hypoglycaemia were compared before and after treatment with insulin degludec. Lipid parameters and renal function were also compared.

**Results:** There were 31 patients enrolled in the audit. All enrolled patients had experienced problematic hypoglycaemia. A reduction in hypoglycaemia was seen in 28/31 (90%) of patients following the switch to insulin degludec. 28/31 people strongly preferred insulin degludec compared with (3/31) patients who preferred to be reverted to previous basal insulin. Recurrent DKA admission was seen in 2/31 patients, related to missed insulin doses. A slight increase in HbA1c was observed [mean 71.58mmol/l  $\pm$  1.81 pre degludec and 75.96mmol/l  $\pm$  2.15, post degludec (P value 0.827)]. There was no change in total cholesterol level (mean 4.4mmol/l pre and post degludec. There was non-significant increase in creatinine [mean 71.8mmol/l  $\pm$  30.4 pre degludec and 74mmol/l  $\pm$  45.27 post degludec (P Value 0.4803)].

**Conclusion:** A reduction in hypoglycaemia was seen with use of insulin degludec in our patients in whom this is the primary reason for degludec use. There was no significant effect on cholesterol or serum creatinine.

#### P191

# Screening for obstructive sleep apnoea syndrome in bariatric patients: audit of clinical practice at a bariatric referral centre

MFR Rafey<sup>1,2</sup>, IIA Ioana<sup>1,2</sup>, DR Ryan<sup>1,2</sup> and MFF Finucane<sup>1,2</sup>

<sup>1</sup>Diabetes and Endocrinology, National University of Ireland Galway, Galway, Ireland, <sup>2</sup>HRB Clinical Research Facility, National University of Ireland, Galway, Ireland

**Aims:** Clinical guidelines around screening for OSAS(Obstructive Sleep Apnoea Syndrome) in bariatric patients vary and condition is under-diagnosed. We sought to determine the extent to which a clinical assessment of OSAS risk was made in bariatric patients attending our centre.

**Methods:** We reviewed the medical records of 29 patients. We sought documentation of symptoms of OSAS, the STOPBANG, Epworth and Mallampati Scores and whether or not consideration of referral for formal sleep studies was made. The initial audit was presented at our hospital conference and standard questionnaire was introduced in all bariatric patients' charts.

**Results:** On initial assessment, of 29 patients, five(17%) had prevalent OSAS. A further two had formal sleep studies to exclude OSAS. Of the remaining 22, only one(4.6%) had an assessment of sleep health with a questionnaire, while 12 of 21(57%) had presence or absence of symptoms of OSAS documented. On reaudit of 32 patients, three(9.3%) were known with OSAS. Out of the 29 patients non-OSAS, 7(24.1%) had high risk on Mallinpati score and 28(96.5%) had high risk using STOPBANG and two (6.89%) had high risk applying Epworth sleep scale. Therefore 4 patients(13.7%) further identified as having high risk for OSAS.

**Conclusion and summary:** Given the reported prevalence of OSAS in obese patients of up to 45% is likely to be even higher in bariatric patients, it seems probable that we are underestimating the prevalence in our cohort. However, raising awareness in the bariatric clinic seemed to increase prevalence of detection of OSAS and improve clinical management.