Strategy 432448/8

#	Database	Search term	Results
8	EMBASE	(((audit* OR "quality improvement").ti,ab OR exp "CLINICAL AUDIT"/) AND ((NHS OR england OR UK OR "united kingdom" OR "national health service").ti,ab OR exp "UNITED KINGDOM"/ OR exp "NATIONAL HEALTH SERVICE"/)) [Since 27-Aug-2019]	189

Contents 100 of 189 results on EMBASE - (((audit* OR "quality improvement").ti,ab OR exp "CLINICAL AUDIT"/) AND ((NHS OR england OR UK OR "united kingdom" OR "national health service").ti,ab OR exp "UNITED KINGDOM"/ OR exp "NATIONAL HEALTH SERVICE"/)) [Since 27-Aug-2019]

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1. Uk national CF healthhub programme: Using real-time digital adherence data to support habit formation for self-care

Authors	Wildman M.
Source	Pediatric Pulmonology; Oct 2019; vol. 54 ; p. 92-93
Publication Date	Oct 2019
Publication Type(s)	Conference Abstract
Database	EMBASE

Abstract CFHealthHub (CFHH) is a digital behaviour change platform which has received around $7 million in investment over the past 5 years. CFHH has been used in 80% of UK adult CF units accumulating over 1000 patientyears of objective adherence data which has been shared with people with CF (PWCF) on a co-produced real time patient-facing platform and with clinicians at local and national level via a co-produced clinician-facing platform to create a learning health system. Studies using chipped nebulisers have demonstrated that median adherence to nebulised preventative therapy in adults with CF to be around 36% (1) and when adherence is poor exacerbations increase along with healthcare costs predominantly driven by hospital admissions for rescue (2). Health economic modelling using UK registry data suggested that implementing CFHH in adults with chronic Pseudomonas in the UK might be expected to save 9.5 million over 5 years largely as a result of enabling PWCF to avoid hospital admissions by establishing habits of sustained self-care (3). CFHH uses the COM-B model (4) as a coherent conceptual framework to develop behavioural interventions to support the establishment of habits of self-care. In addition and of equal importance CFHH is designed to support behaviour change in clinical teams in order to shift some of the attention of clinicians from reactive hospital-based rescue to a focus that pays attention to developing the skills and routines that enable communitybased prevention. CFHealthHub captures date and time-stamped data during the routine use of the E-track nebuliser such that PWCF receive real time feedback on treatment without having to do anything other than use the nebuliser as normal. Automatically collected data pass via the cloud to an app on the patient's phone and also to the clinical team. Meta-analysis has demonstrated that feedback of adherence data alongside cognitive-educational components can increase adherence by around 20% (5). Habit and routine is important in sustaining self-care with studies suggesting that habit may be a better predictor of long-term medication adherence than conscious motivational factors (6). Studies amongst PWCF using CFHealthHub have shown that high adherers have higher habit scores than low adherers (7). The Lind alliance (8) identified that simplifying the burden of care was the first priority for people with CF. Since habits are automatic behaviours the automaticity means that habits are associated with less burden than behaviours driven by will power and attention. CFHealthHub provides a tailored multifaceted intervention delivered via the digital platform that empowers clinical teams to work with PWCF to address necessity and concerns around treatment that impact motivation whilst addressing barriers that impact capability and opportunity. CFHH also contains modules specifically designed to provide skills to the clinical team to enable habit formation via the creation of implementation plans and coping plans that are effective in empowering PWCF to form habit and routine (9). In addition to the patient-facing domain of CFHH the clinical teams using CFHH have access to a clinician- facing portal within CFHH that is intended to create a learning health system. The learning health system platform shares centre-level adherence data across the UK to allow benchmarking and shared learning between centres with the intention of driving the emergence of a nationwide community of practice. System transformation is an explicit aim of the learning health system. Aggregated centre-level adherence data are presented to clinical teams whilst the clinical teams receive training in the Microsystems approach to quality improvement with the aim of supporting clinical teams to redesign systems to ensure that the behaviour change tools and the real-time data within CFHH become incorporated into routine clinical practice. An important factor driving CFHH implementation and the system changes that enable clinical teams to better support sustained self-care is the fact that CFHH allows automatically collected adherence data to be available at every consultation. Traditionally clinicians have considered that clinical consultations should be accompanied by measurement of FEV1 and BMI. If the FEV1 has declined the clinician will then seek to diagnose the cause of that decline. In adult CF clinics where the median nebuliser adherence is in the region of 36% it is likely that in many patients low adherence is playing a part in FEV1 decline. If a consultation is only accompanied by a data set containing FEV1 and BMI whilst adherence is invisible confident diagnosis of the cause of FEV1 decline may be difficult. In a patient with declining FEV1 but 100% adherence a clinician might be prompted to think of new diabetes or ABPA etc whereas declining FEV1 in a patient with an adherence rate of only 10% might be best supported by interventions that focus on enabling patients to build routines of self-care. Adherence data in every consultation is likely to place a "burning platform" at the heart of CF care. That is to say when CFHH provides adherence data in every consultation the clinical team will become increasingly aware of the importance of supporting PWCF to form habits of self-care. CFHealthHub development is ongoing with initial co-production of the patient-facing platform completed in 2015 (10) and a subsequent two-centre feasability pilot and mixed methods process evaluation completed in 2016 (11). A 608-patient 19-centre randomised controlled trial accompanied by a further mixed methods process evaluation and health economic evaluation was completed in June 2019 and will report shortly. Just over 450 PWCF have been contributing to a learning health system across 3 adult centres over the past 2 years and many of the 19 centres involved in the RCT are now joining the learning health system with more than 1000 patients expected to be sharing data by late 2019. Work is ongoing to explore the possibility of enabling US sites to join the learning health system in the near future. (Figure Preseted) .

2. Making the uk CF registry work for patients with cystic fibrosis

Authors Meira J.; Madge S.; Carr S.B.; Yip M.; Cosgriff R.
Source Pediatric Pulmonology; Oct 2019; vol. 54 ; p. 438-439
Publication Date Oct 2019
Publication Type(s) Conference Abstract

Database EMBASE
Abstract Background: In the UK, annual reviews (AR) aim to assess, monitor and record clinical and psychosocial aspects of cystic fibrosis (CF). A report is written and shared with patients. An advisory group of people with CF, working with clinicians and members of the CF Registry team identified AR reports and discussions as an area requiring improvement. People with CF wanted to actively participate during discussion and negotiation of their report, however no formal access to their data meant these discussions were limited.
Aim(s): To provide people with CF access to their clinical data held in the UK CF Registry in a user friendly form.
Objective(s): To enable the CF Registry Dashboard to produce individual patient AR reports including graphic longitudinal data, and to make the reports available for clinicians to utilise during AR discussions.
Method(s): Semi-structured interviews were carried out with clinicians to gain insight into the different styles of AR and reporting used across the UK. Annual review report templates from different CF centres were analysed to identify what markers of health are commonly included. Focus groups with people with CF and clinicians were used to inform and produce prototypes of AR reports that were progressed using quality improvement methodology.
Result(s): The patient and professionals focus groups decided that the Dashboard should produce an individualised standard AR report that includes: date of current and last AR; genotype; date of last hospitalization; last course of home IVs; number of IV and oral courses of antibiotics since last AR; lung function results (LF) at AR; microbiology results; current and previous complications; oxygen requirements and noninvasive ventilation; insertion of gastrostomy; results from DEXA, liver ultrasound scan and chest X-ray. Additionally they wanted graphs displaying data over a 10-year time period of: LF, hospital and home IVs and BMI trends. Elements of both focus groups felt that the inclusion of centre and national data was more sensitive with fear it has the potential to cause anxiety in certain patients. Functionality to display stratified centre and national data will be available but can be supressed and will be at the centre's discretion when they produce an individual's AR report from the Registry data. The Dashboard will also contain a feature to produce more tailored reports. It will be possible to print paper reports. The Registry Dashboard advisory group has validated the final AR report prototype and the software requirements have been incorporated in the Registry. The new Dashboard will be offered to people with CF and clinicians for preliminary testing in August 2019. We believe this enhancement provides better access to the data held in the CF Registry and will prove to be a valid contribution for AR discussions.

3. Exploring the challenges of accessing medications for patients with cystic fibrosis

Authors Herbert S.; Rowbotham N.J.; Smith S.J.; Smyth A.R.
Source Pediatric Pulmonology; Oct 2019; vol. 54 ; p. 379
Publication Date Oct 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction: The majority of patients with cystic fibrosis (CF) are on complicated and time-consuming treatment regimens. The James Lind Alliance Priority Setting Partnership in Cystic Fibrosis identified the number one research priority as investigating ways that we can simplify treatment burden for patients with cystic fibrosis. We aimed to explore further the specific barriers of CF patients and their caregivers accessing medications.
Method(s): An online questionnaire was conducted in March-April 2018. The data were subjected to quantitative analysis (closed questions) and thematic analysis (free text comments).
Result(s): Patients with CF or their families completed the questionnaire. We received 941 responses from 21 countries. From those that disclosed their location, 390 (87%) were from the UK, and 31 (7%) from USA. We report 734 (78%) of patients have difficulties accessing their medications. Qualitative data from 65 participants expanded on the specific barriers and problems of attaining the correct medications. These were subdivided into 6 core themes: the duration of medications issued to patients (n=17); primary care annual medication reviews (n=5); timely dispensing of urgent prescriptions (n=9); repeat prescriptions (n=32); errors in prescribing (n=17); and communication between primary and secondary care (n=22). The Table displays specific quotations representing the population group. Emotive language was used by the patients and their families to demonstrate the difficulties of accessing medications. Particularly important statements include, "it makes you feel like you're not giving your child the best they can have" and "it makes life unnecessarily harder," and "I feel like I have to beg."Conclusion: The project has explored the difficulties associated with obtaining medications within the CF population. This is adding to the already high treatment burden experienced. The next step will be to design a quality improvement programme with the goal of reducing the difficulty obtaining medications. (Table Presented).

4. Cost minimization analysis of a preferred ARV prescribing pathway for treatment-naive HIV-positive patients

Authors Kerr C.; Allen N.; Moriarty M.; Murphy S.; Moynan D.; Farrell G.; Bergin C.
Source Open Forum Infectious Diseases; Nov 2018; vol. 5
Publication Date Nov 2018
Publication Type(s) Conference Abstract

Database EMBASE
Abstract Background. Tere were 266 new attendees to the HIV clinic of St. James' Hospital in 2016. HIV care is expensive. The modelled lifetime cost of treating one HIV-positive patient in the UK is estimated at 360,800, with ARVs accounting for 68% of the cost. Tis audit aims to assess potential savings in ARV spend if a cost-based prescribing approach was adopted for suitable treatment-naive patients of the clinic. Methods. A retrospective analysis of newly attending HIV-positive patients attending the HIV Clinic in 2016 was undertaken. Treatment-naive patients were identifed. 2016 ARV drug acquisition costs were obtained from the St. James' Hospital Finance department. The cost of frst-line ARV regimens were calculated. Patients were evaluated for their suitability for the lowest-cost, frst-line ARV regimen by analysing baseline viral loads, CD4 counts, resistance patterns, renal function, bone health and HLA B5701 status. The price diference between their prescribed regimens and the most cost-efective frst-line regimen was calculated. Results. From January to December 2016, there were 266 new attendances. One hundered ffy-four of these patients (58%) were treatment naive. The treatment regimens were ascertained for 145/154 (94%). A cost diference of approx. 390 per month existed between the most expensive and least expensive frst-line ARV regimens. The monthly cost of ARV regimens prescribed came to 152,949.09, equating to an annual spend of 1,835,389.08. The predicted monthly ARV cost of the cost-based prescribing approach has been calculated at 139,186.27 with an annual cost of 1,670,235.24. Tis would lead to an annual saving of 165.153.84, equating to 9% of the 2016 ARV spend for this population. Conclusion. Tis audit outlines the potential cost-efectiveness of a cost-based prescribing approach for suitable treatment-naive patients that also adheres to best clinical practice guidelines. It demonstrates that signifcant cost savings (9%) can be made by simple analysis of ARV costs. Tese data can be used to support future options in ARV procurement and tender-processing for the department and nationally. It can also serve as a template in the construction of a pathway for the safe and cost-efective switching of ARV regimens of patients already on established regimens when generic ARV medications become available in Ireland.

5. Barriers and enablers to the implementation of a complex quality improvement intervention for acute kidney injury: A qualitative evaluation of stakeholder perceptions of the Tackling AKI study

Authors Lamming L.; McDonach E.; Mohammed M.A.; Stoves J.; Roberts R.; Lewington A.J.; Samarasinghe Y.; Shah N.; Jones C.; Fluck R.J.; Selby N.M.; Jackson N.; Johnson M.
Source PLoS ONE; 2019; vol. 14 (no. 9)
Publication Date 2019
Publication Type(s) Article
PubMedID 31539376
Database EMBASE
Abstract Background Acute kidney injury in hospital patients is common and associated with reduced survival and higher healthcare costs. The Tackling Acute Kidney Injury (TAKI) quality improvement project aimed to reduce mortality rates in patients with acute kidney injury by implementing a multicomponent intervention comprising of an electronic alert, care bundle and education in five UK hospitals across a variety of wards. A parallel developmental evaluation using a case study approach was conducted to provide the implementation teams with insights into factors that might impact intervention implementation and fidelity. The qualitative element of the evaluation will be reported. Methods 29 semi-structured interviews with implementation teams across the five hospitals were carried out to identify perceived barriers and enablers to implementation. Interviews were taped and transcribed verbatim and Framework analysis was conducted. Results Interviews generated four 'barriers and enablers' to implementation themes: i) practical/contextual factors, ii) skills and make-up of the TAKI implementation team, iii) design, development and implementation approach, iv) staff knowledge, attitudes, behaviours and support. Enablers included availability of specialist teams (e.g. educational teams), multidisciplinary implementation teams with strong leadership, team-based package completion and proactive staff. Barriers were frequently the converse of facilitators. Conclusions Despite diversity of sites, a range of common local factors-contextual, intervention-based and individual-were identified as potential barriers and enablers to fidelity, including intervention structure/design and process of/approach to implementation. Future efforts should focus on early identification and management of barriers and tailored optimisation of known enablers such as leadership and multidisciplinary teams to encourage buy-in. Improved measures of real-time intervention and implementation fidelity would further assist local teams to target their support during such quality improvement initiatives.

6. Incidentally diagnosed cancer and commonly preceding clinical scenarios: A cross-sectional descriptive analysis of English audit data

Authors Koo M.M.; McPhail S.; Lyratzopoulos G.; Rubin G.
Source BMJ Open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019

Publication Type(s) Article
PubMedID 31530591
Database EMBASE
Abstract Objectives Cancer can be diagnosed in the absence of tumour-related symptoms, but little is known about the frequency and circumstances preceding such diagnoses which occur outside participation in screening programmes. We aimed to examine incidentally diagnosed cancer among a cohort of cancer patients diagnosed in England. Design Cross-sectional study of national primary care audit data on an incident cancer patient population. Setting We analysed free-text information on the presenting features of cancer patients aged 15 or older included in the English National Audit of Cancer Diagnosis in Primary Care (2009-2010). Patients with screen-detected cancers or prostate cancer were excluded. We examined the odds of incidental cancer diagnosis by patient characteristics and cancer site using logistic regression, and described clinical scenarios leading to incidental diagnosis. Results Among the studied cancer patient population (n=13 810), 520 (4%) patients were diagnosed incidentally. The odds of incidental cancer diagnosis increased with age (p<0.001), with no difference between men and women after adjustment. Incidental diagnosis was most common among patients with leukaemia (23%), renal (13%) and thyroid cancer (12%), and least common among patients with brain (0.9%), oesophageal (0.5%) and cervical cancer (no cases diagnosed incidentally). Variation in odds of incidental diagnosis by cancer site remained after adjusting for age group and sex. There was a range of clinical scenarios preceding incidental diagnoses in primary or secondary care. These included the monitoring or management of pre-existing conditions, routine testing before or after elective surgery, and the investigation of unrelated acute or new conditions. Conclusions One in 25 patients with cancer in our population-based cohort were diagnosed incidentally, through different mechanisms across primary and secondary care settings. The epidemiological, clinical, psychological and economic implications of this phenomenon merit further investigation.

7. Evaluating the impact of cycle helmet use on severe traumatic brain injury and death in a national cohort of over 11000 pedal cyclists: A retrospective study from the NHS England Trauma Audit and Research Network dataset

Authors Dodds N.; Johnson R.; Walton B.; Thompson J.; Bouamra O.; Yates D.; Lecky F.E.
Source BMJ Open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31519669
Database EMBASE
Abstract Objectives In the last 10 years there has been a significant increase in cycle traffic in the UK, with an associated increase in the overall number of cycling injuries. Despite this, and the significant media, political and public health debate into this issue, there remains an absence of studies from the UK assessing the impact of helmet use on rates of serious injury presenting to the National Health Service (NHS) in cyclists. setting The NHS England Trauma Audit and Research Network (TARN) Database was interrogated to identify all adult (>=16 years) patients presenting to hospital with cycling-related major injuries, during a period from 14 March 2012 to 30 September 2017 (the last date for which a validated dataset was available). Participants 11 patients met inclusion criteria. Data on the use of cycling helmets were available in 6621 patients. Outcome measures TARN injury descriptors were used to compare patterns of injury, care and mortality in helmeted versus non-helmeted cohorts. results Data on cycle helmet use were available for 6621 of the 11 192 cycle-related injuries entered onto the TARN Database in the 66 months of this study (93 excluded as not pedal cyclists). There was a significantly higher crude 30-day mortality in un-helmeted cyclists 5.6% (4.8%-6.6%) versus helmeted cyclists 1.8% (1.4%-2.2%) (p<0.001). Cycle helmet use was also associated with a reduction in severe traumatic brain injury (TBI) 19.1% (780, 18.0%-20.4%) versus 47.6% (1211, 45.6%-49.5%) (p<0.001), intensive care unit requirement 19.6% (797, 18.4%-20.8%) versus 27.1% (691, 25.4%-28.9%) (p<0.001) and neurosurgical intervention 2.5% (103, 2.1%-3.1%) versus 8.5% (217, 7.5%-9.7%) (p<0.001). There was a statistically significant increase in chest, spinal, upper and lower limb injury in the helmeted group in comparison to the un-helmeted group (all p<0.001), though in a subsequent analysis of these anatomical injury patterns, those cyclists wearing helmets were still found to have lower rates of TBI. In reviewing TARN injury codes for specific TBI and facial injuries, there was a highly significant decrease in rates of impact injury between cyclists wearing helmets and those not. Conclusions This study suggests that there is a significant correlation between use of cycle helmets and reduction in adjusted mortality and morbidity associated with TBI and facial injury.

8. Language and executive functions in primary progressive aphasia

Authors Lefebvre L.; Arachchige K.K.; Rossignol M.; Loureiro I.S.; Basaglia-Pappas S.; Laurent B.
Source IBRO Reports; Sep 2019; vol. 6
Publication Date Sep 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Objectives: Oyr goal was to describe the language and executive profiles of the three variants of primary progressive aphasia (PPA) and to clarify the relationship between these processes. We also compared the APP profiles to an Alzheimer's disease patients (AD) group as well as to a healthy matched group.
Method(s): We recruited 68 PPA (22 non-fluent/agrammatic (nf/avPPA), 25 semantic (svPPA), 21 logopenic (lvPPA)), 32 AD and 41 age-matched healthy controls. Materials: Participants underwent a language and executive functions (EF) assessment: discourse, confrontation naming, repetition, reading, auditory/visuospatial span tasks, Trail Making Test, Stroop test, tower of London and verbal/design fluency.
Result(s): Scores on measures differed significantly in PPA and AD groups relative to healthy controls. Only repetition, auditory/visuospatial span tasks and design fluency testing was preserved in svPPA and visuospatial forward span in lvPPA. A principal component analysis regrouped all language and executive tests onto one factor for controls, but not for PPA and AD groups. Regression analysis highlighted relationships between language and EF in all groups.
Discussion(s): Dysexecutive difficulties are observed at the onset of the disease in the three variants of PPA. This breakdown appears to be more important than what it was expected according to current diagnostic criteria of Gorno-Tempini et al. (2011). SvPPA is the less dysexecutive variant. The interrelationship between language and EF is less important in patients than in controls.
Conclusion(s): (i) Although language deficits remain the core symptoms, executive dysfunction is also observed at the early stages of PPAs, even though it has been described to remain relatively unaffected and is currently excluded from diagnostic criteria; (ii) the relationship between language and EF seem to weaken with the disease. We then propose that high-level cognitive functions such as EF should contribute to classification of PPAs.

9. National Asthma and COPD Audit Programme and the NHS Long Term Plan

Authors Sinha I.P.; Calvert J.; Hickman K.C.; Hurst J.R.; McMillan V.; Quint J.K.; Singh S.J.; Roberts C.M.
Source The Lancet Respiratory Medicine; Oct 2019; vol. 7 (no. 10); p. 841
Publication Date Oct 2019
Publication Type(s) Article
Database EMBASE

10. A national UK audit of suprapubic catheter insertion practice and rate of bowel injury with comparison to a systematic review and meta-analysis of available research

Authors Hall S.; Parkinson R.; Ahmed S.; Reid S.; Thiruchewam N.; Biers S.; Sahai A.; Rizwan H.; Harding C.
Source Neurourology and urodynamics; Sep 2019
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31532853
Database EMBASE
Abstract OBJECTIVES: Limited data exist on the risks of complications associated with a suprapubic catheter (SPC) insertion. Bowel injury (BI) is a well-recognized albeit uncommon complication. Guidelines on the insertion of SPC have been developed by the British Association of Urological Surgeons, but there remains little evidence regarding the incidence of this complication. This study uses contemporary UK data to assess the incidence of SPC insertion and the rate of BI and compares to a meta-analysis of available papers.
METHOD(S): National Hospital Episodes Statistics data were searched on all SPC insertions over an 18-month period for operating procedure codes, Code M38.2 (cystostomy and insertion of a suprapubic tube into bladder). Patients age, 30-day readmission rates, 30-day mortality rate, and catheter specific complication rate were collected. To estimate the BI rate, we searched patients who had undergone any laparotomy or bowel operation within 30 days of SPC insertion. Trusts were contacted directly and directed to ascertain whether there was SPC-related BI. PubMed search to identify papers reporting on SPC related BI was performed for meta-analysis RESULTS: 11473 SPC insertions took place in the UK in this time period. One hundred forty-one cases had laparotomy within 30 days. Responses from 114 of these cases reported one BI related to SPC insertion. Meta-analysis showed an overall BI rate of 11/1490 (0.7%).
CONCLUSION(S): This is the largest dataset reported on SPC insertions showing a lower than previously reported rate of BI. We recommend clinicians use a risk of BI of less than 0.25% when counseling low-risk patients.

11. Genetic testing for familial hypercholesterolaemia, are we testing the right patients?

Authors Haslam S.; Allcock R.; Salazar L.
Source Atherosclerosis Supplements; Oct 2019; vol. 38
Publication Date Oct 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Introduction: Familial Hypercholesterolemia (FH) is a genetic disease characterized by elevated LDL-Cholesterol and total cholesterol (TC). It manifests a gene dosage effect such that the heterozygous and homozygous forms cause mild and severe phenotypes respectively. The prevalence of heterozygous FH is 1 in 250 which means approximately 260 000 people in the UK are affected. However it is estimated that 85% of patients with FH are undiagnosed and in an attempt to address this NG71 was updated in November 2017. Here we present an audit which has two main aims based on recommendation 1.1.6 in NG71. We aim to determine the number of FH patients we identify in our Teaching Hospital population who are referred to the specialist Lipid Clinic and secondly to determine if we are genetically testing the correct group of patients.
Method(s): Recommendation 1.1.6 states if a person has either possible or definite FH with the Simon Broome criteria or a Dutch Lipid Clinic Network Score (DLCNS) >5 then they should be referred to a FH specialist for DNA testing. All FH genetics sent over the past year were audited and test outcomes compared against DLCNS and Simon Broome criteria. The genetic testing looked for mutations in four genes, LDLR, APOB, PCSK9 and LDLRAP1 by next generation sequencing. Additionally we received a 12 SNP score to determine the likelihood of a polygenic cause of the hypercholesterolaemia if FH genetics were negative.
Result(s): Over a 12 month period we sent 40 requests for FH genetics, 16 were positive for FH and 24 were negative. Of the negative samples 18 had a high or intermediate probability of polygenic hypercholesterolaemia and 6 had a low probability. When these patients were classified by the DLCNS alone 3 patients would have not had genetic testing sent, using the Simon Broome criteria alone one would have potentially been missed (table 1).
Conclusion(s): During the audit period we identified 16 FH index patients which led to a further 13 FH patients being identified by cascade testing. Neither scoring system was 100% sensitive, however use of the Simon Broome criteria would have resulted in more FH patients being identified. [Figure presented]

12. Quality of care in ibd patients transferring between healthcare providers

Authors anonymous
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction Continuity of care is vital in managing IBD. Many patients with IBD are young and more likely to change location frequently. However little is known about the quality and impact of a transfer of care between gastroenterologists. This study aims to assess the quality of information provided when patients are referred to a new provider and assess the impact on disease. Methods The GLINT network retrospectively audited outpatient IBD referrals between 1st Jan and 28thFeb 2018. Patients with an existing diagnosis of IBD transferring to a new secondary or tertiary healthcare provider were included. Hospital records were assessed using Cornerstones Health 'IBD Checklist for Care ContinuityTM'. A positive outcome was defined as the absence of a primary care attendance for IBD, clinically-diagnosed disease flare, steroid prescription or hospitalisation in the 6 months post referral. Discrete variables were analysed by Fisher's Exact test and continuous variables by Kruskall-Wallis (corrected for multiple comparisons). Results 149 cases were identified from 16 hospitals with a median of 11 (IQR 4-15) patients per hospital. Diagnoses were CD in 44% (n=66), UC in 54% (n=81) and IBD unclassified in 1% (n=2). The median age of patients was 31 (IQR 25-45) years. The sources of the referral letter were primary care (PC) (n=101, 68%), secondary care (SC) (n=36 24%) and private practice (PP) (n=11, 7%). The reason for transfer included re-location (n=75, 50%), tertiary opinion (n=35, 23%), transferring from PP (n=23,15%) and transfer from paediatric care (n=8, 5%). The referral letters received from SC included a significantly greater median number of data points (4, IQR 3-5, n=36) compared with from PC (2, IQR 2-3, n=101, p<0.0001), but not significantly more than from PP (3, IQR 2-5, n=11, p=0.06). Referrals from SC were more likely to include the most recent endoscopy report compared to those from PC (51% vs 22%, p=0.002) and the latest imaging (44% vs 11%, p<0.0001). Other data points including medication history were equally well provided by either source (86% vs 89%, n.s.). Positive outcome was associated with the inclusion of more than 3 data points (OR 2.266, 95% CI 1.092-4.569, p=0.03), and specifically the inclusion of the most recent imaging (OR 2.844, 95% CI 1.185-7.19, p=0.04). Referrals from SC were associated with a positive outcome compared to those from PC (OR 2.941, 95% CI 1.264-7.021, p=0.01). Conclusion This multicentre audit of IBD centres in London demonstrates that referrals pertaining to a transfer of care often lack key pieces of clinical data. Most referrals come from PC, yet tend to include less information, possibly due to a lack of access to investigation results in PC. Hence, the IBD transfer of care checklist and greater involvement of SC in this process may improve the quality of information provided and ultimately positively impact on outcome.

13. Four years' experience of the use of endoscopic ultrasound for the diagnosis of pancreatic malignancy

Authors Dong C.; Devaraj M.; Majumdar D.; Dean J.; Mitra V.; Oliver A.; Rasteli F.
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019
Publication Type(s) Conference Abstract

Database EMBASE
Abstract Introduction EUS guided tissue acquisition is an extensively used investigation to confirm the histopathological diagnosis in PB lesions. The Joint Advisory Group (JAG) suggests an adequacy rate of more than 75% for EUS-Fine Needle Aspiration cytology (FNAC) [1]. The aim of this study was to determine the diagnostic performance, adequacy of tissue acquisition and safety of EUS-FNA in PB lesions in a non- HPB centre in the UK. Methods We carried out a retrospective audit of all patients (identified from endoscopy and pathology database) who underwent EUS-FNA between 1st January 2015 and 31st December 2018. Data collected include patient demographics, cross-sectional imaging, cytopathological diagnoses (Panc 1 to 5 based on European cytopathology classification of PB terminology[2]; neuroendocrine tumours were included in Panc 5), treatment modality, complications and 30 day procedure related mortality. Final diagnoses were confirmed from EUS FNAC, surgical resection specimen or cross-sectional imaging discussed in a MDT setting (if histology negative). Results A total of 152 patients [mean age 66.9 years, 53.9% females] underwent 161 PB EUS-FNAC procedures. 135 patients had a final diagnosis of cancer. 144 (89.4%) samples were deemed adequate for analysis. Sensitivity, specificity, overall accuracy, positive predictive value (PPV) and negative predictive value (NPV) were 87.7%, 100%, 88.9%, 100%, and 46.7% respectively [with Panc3 included as false negative in patients with cancer as final diagnosis]. These figures would improve to 94.2%, 100%, 94.8%, 100%, and 66.7% respectively if Panc3 is excluded from false negative category in cancer group. There was no procedure related complications or mortality. Conclusion This study confirms that EUS-FNA of PB lesions can be highly effective and safely carried out in a non-HPB centre. Overall adequacy of tissue acquisition is in compliance with JAG guidelines. Our diagnostic yield is in in keeping with the published literature[2]. Our NPV is relatively low because the purpose of EUS-FNA was to confirm suspected cancer on cross-sectional imaging. (Table Presented) .

14. Regional IBD surveillance endoscopy northwest (Rise Now): A prospective audit of practice in north-west England

Authors anonymous
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction Interval surveillance colonoscopy plays a crucial role in identifying and managing colitis related dysplasia to reduce the risk of colorectal cancer. Dye based or image enhanced chromoendoscopy has been endorsed by multiple organisations as the preferred means of detecting dysplasia since 2015. We aimed to assess the methods of surveillance utilised within the North West of England using the established trainee research network, Gastroenterology Trainee Research and Improvement Network North West (GasTRIN NoW). Methods GasTRIN NoW investigators prospectively collected data from 10 hospitals in North West England to assess surveillance practice between June and October 2018. All IBD interval surveillance colonoscopies were included. SCENIC consensus guidelines were used as the standard for adequate surveillance while BSG standards were used for the interval surveillance standard.1 2 Results 226 patients underwent IBD surveillance endoscopy (143 UC, 66 CD, 17 IBDU) with a median disease furation of 12 years (IQR9-20). There were 122 males and the median age was 54 years (range 20-86). A total of 46 (20%) procedures did not adhere to guidelines and 21 (46%) were delayed (>6 months). Dye spray was used in 22% (n=49) of procedures while the remaining had random colonic biopsies. Image enhanced chromoendoscopy was not used in our cohort. There was more visible dysplasia identified in the dye spray cohort 913 dye spray vs. 8 non dye spray, chi sq $p=7x10^{-6}$). Adenocarcinoma was confirmed in the dye spray groupo while no cancers were identified in the non dye spray group. There were no differences in histoligical dysplasia between these groups (5 vs. 6 respectively, p=0.11). Where withdrawal time was recorded (n=139), median times were significantly different between both groups (dye spray 16 min (IQR 12-25) vs. no dye spray 10 min (8-14 min); Wilcox test, $p=3.7x10^{-4}$). Conclusions Our data demonstrates that there are delays to elective IBD surveillance in clinical practice. Dye spray colonoscopy is not widely practised across North west England. Dye spray colonoscopy identified more visible dysplasia and was associated with longer withdrawal time, a recognised surrogate marker for colonoscopy quality. Our data will inform future work in optimising IBD surveillance in England.

15. Economic impact of non-response to ursodeoxycholic acid in primary biliary cholangitis patients

Authors Sharma P.; Crighton L.; Vijayan B.; English S.; Mukhopadhya A.
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Abstract Introduction NICE recommends the use of Obeticholic acid (OCA), as a second-line treatment for failed or intolerant ursodeoxycholic acid (UDCA) drug therapy in primary biliary cholangitis (PBC). This audit aims to determine the proportion of PBC patients, in a tertiary referral hospital experiencing failed UDCA drug therapy, to gauge the potential economic impact of a switch to OCA. Methods A total of 120 patients with PBC were identified from an existing patient database. 24 patients were excluded due to inappropriate diagnosis, missing data, non-attendance or failure to tolerate UDCA. Baseline characteristics, UDCA dosage and biochemical response were recorded for all patients. For the purpose of this study, failed UDCA drug therapy was defined as an alkaline phosphatase (ALP) level of greater than 1.67 times the upper limit of normal (ULN) (Toronto Criteria)1. Results Of the 96 patients included for analysis, 9 were male and the remaining 87 were female. The mean age and weight were 64.4+/- 11.9 years and 75.9+/- 15.4 kg respectively. The mean blood results for haemoglobin, platelets, bilirubin, ALP, alanine aminotransferase, and creatinine were 126.8+/- 15.0 g/ L, 254.5+/- 94.3 x10^9/L, 9.4+/- 4.3 mumol/L, 144.4+/- 75.6 u/ L, 30.3+/- 19.3 u/L, and 75.1+/- 28.3 mumol/L respectively. The mean UDCA dose for the cohort was 13.9+/- 5.9 mg/kg/day. Biochemical failure was documented in 13 patients who had an ALP of greater than 1.67 times the ULN at the end of 1 year of therapy with UDCA (13.5%). Of these 13 patients, 4 were found to be on suboptimal dosage of UDCA (<10 mg/ kg/day), leading to a true non-response rate in 9/96 subjects (9.4%). The annual cost of UDCA at NHS Grampian is 191.90 per patient and 14,813.28 for OCA. Shifting these non-responsive patients to OCA would accrue recurring annual expenditure of 131,592.42. Conclusions A substantial proportion of PBC patients were found to be biochemically unresponsive to UDCA. Shifting these patients to OCA would lead to significant drug expenditure for NHS Grampian. An intermediary step of shifting non-responsive patients to the cheaper drug, Bezafibrate, may prove to be cost-effective, but this drug has been revealed to have no benefit in a recent Cochrane review2.

16. Alcohol use disorders and liver fibrosis-can we improve the referral pathway to secondary care?

Authors Rhodes F.; Cococcia S.; Patel P.; Connoley D.; Rosenberg W.
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Abstract Introduction Alcohol is the leading cause of cirrhosis in the UK, which often presents late when patients have already decompensated. Mortality from cirrhosis has increased 400% since 1970. There is therefore an urgent need for earlier detection of advanced fibrosis in primary care (PC), so that interventions can be implemented to improve outcomes. Detecting fibrosis/cirrhosis in PC is challenging as patients are often asymptomatic. There is increasing interest in the use of non-invasive tests (NIT) for liver fibrosis. We aimed to review referrals from PC to hepatology clinic for patients with alcohol use disorders (AUD), and evaluate the proportion of these patients that had evidence of advanced fibrosis. Methods 1,657 new GP referrals to hepatology clinic at the Royal Free Hospital from Jan 2015-Jan 2017 were reviewed, and those with suspected alcohol-related liver disease (ALD) as reason for referral were selected and analysed. Data were collated on demographics, fibrosis staging, reason for referral and alcohol use. Results 141 patients were referred with suspected ALD (71% male, median alcohol intake 70 units/week) (IQR 49-140). Most patients (64%, 90/141) were referred on the basis of abnormal liver function tests (LFTs), alcohol history, steatosis on ultrasound (US), or examination findings. Of those referred 24.8% (35/141) had US findings of chronic liver disease prior to referral. Of these, 34% (12/35) were subsequently deemed not to have advanced fibrosis or cirrhosis in secondary care. Prior to referral, 89% (125/141) of patients had not had a NIT for liver fibrosis. Once seen by hepatology, only 36.2% of the referred patients (51/141) were confirmed to have either advanced fibrosis or cirrhosis (by fibroscan, imaging, biopsy or ELF), and were kept under follow up. The remaining 63.8% were discharged back to PC and represent unnecessary referrals that may have been avoided through the use of NIT in primary care. Current BSG guidance does not recommend routine NIT in patients with AUD drinking <35/50 units/week(F/M) with AUDIT score <19 but in this review of patients referred from PC a diagnosis of advanced fibrosis or cirrhosis was confirmed in 3/23 of male patients drinking 14- 49 units/week. Conclusions We propose that the use of NIT in PC patients with AUD would significantly reduce the number of 'unnecessary' referrals to secondary care, and increase the earlier detection of advanced fibrosis. US cannot always be relied on for a diagnosis of cirrhosis. Further research is needed to determine which thresholds of alcohol intake warrant application of NIT, and it would be interesting to repeat this study in 2020 to evaluate the impact of the 2017 BSG LFT guidelines. (Figure Presented) .

17. Palliative care in liver cirrhosis: Are we effective in providing appropriate end of life care?

Authors Phillpotts S.; Green C.; Shah K.; Lo J.; Saksena S.
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Database EMBASE

Abstract Introduction Liver disease accounts for 2% of deaths in the UK and is the third commonest cause of premature death. The GMC and Gold standards framework recommend identifying and providing support to patients in the final 12 months of life. A British study from 2017 showed good results after creating a dedicated Liver MDT, discussing cases that were identified as having a poor prognosis1. Aim To assess the palliative care input and levels of inpatient care for patients who died with a diagnosis of liver cirrhosis. Method Retrospective audit of all in hospital deaths with a coded diagnosis of cirrhosis, from September 2016-2017 at a large Tertiary Referral Centre in London. Results Three quarters of patients were known to the Hepatology service yet only a third were referred to palliative care service; median time of referral was 6.5 days (1-523) before death. The criteria used by Hudson to identify patients suitable for palliative care input identified only 7 (13%) patients in this retrospective cohort. Nearly half the patients were admitted to level 2/3 care in their last hospital admission before death. Conclusions This audit highlights a number of areas for improvement in provision of palliative care for patients with liver cirrhosis. These include, better prognostic tools to identify patients that would benefit from best supportive care; applying these tools at an earlier point in patient's care; and considering whether higher levels of care are appropriate. Solutions include dedicated MDTs and improved communication of decision making and advance care planning, with the objective of ensuring patients receive appropriate supportive care, whilst providing support and funding for all health care professionals involved. (Table Presented) .

18. Decompensated cirrhosis is the commonest presentation for nafld patients undergoing liver transplant assessment

Authors Patel P.; Hussain A.; Rhodes F.; Srivastava A.; Patch D.; Rosenberg W.
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Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction Non-alcoholic fatty liver disease (NAFLD) accounts for 15-20% of orthotopic liver transplants (OLT) in the United Kingdom. Index presentations with cirrhotic decompensation impact morbidity and mortality and represents missed opportunities for preventive treatment leaving OLT or palliation as the only options. We aimed to determine the proportion of patients undergoing OLT assessment for NAFLD in whom the first presentation was an episode of cirrhotic decompensation by expanding upon our previous audit. Methods Patient records were interrogated for all NAFLD patients undergoing assessment for OLT at the Royal Free London NHS Foundation Trust liver transplant unit between January 2003 and December 2017. Demographic, clinical, laboratory and outcome data were extracted. Those with an index presentation of jaundice, ascites, variceal bleeding, encephalopathy or HCC at presentation were classified as 'decompensated'. Results Data were available for 81 patients with NAFLD as the primary diagnosis. At first presentation to healthcare with chronic liver disease (CLD) 52 patients had decompensated cirrhosis while 29 had compensated cirrhosis. A decompensation event diagnosed in secondary care represented the first presentation with liver disease for 91 7% of patients compared to 52 6% referred from primary care. Cirrhosis was not suspected at the time of referral to hospital in 24 7% of patients subsequently assessed for OLT. OLT was performed in 43 patients. Thirty-one (72 1%) of these patients were decompensated at first presentation compared to 55 3% who were not transplanted. Four deaths occurred in OLT recipients within 6 months of transplantation, all of whom presented for the first time with decompensated cirrhosis. figure 1 illustrates the difference in survival between those patients who did and did not undergo OLT. Patients who underwent OLT had a significantly longer mean survival time of 9 81 years (95% CI 8 51- 11 12) compared to those who did not undergo OLT 4 62 years (95% CI 3 35-5 89, p<0 001). Conclusions Most patients undergoing assessment for OLT for NAFLD had decompensated cirrhosis at their first diagnosis of CLD. These data underline the association between the late diagnosis of CLD in NAFLD with emergency hospitalisation and mortality and reinforce the necessity for greater awareness and earlier diagnosis of cirrhosis in NAFLD. (Figure Presented) .

19. Hepatitis b screening prior to rituximab and subsequent management to reduce the risk of reactivation

Authors Dolman G.; Kennedy P.; Theocharopoulos I.
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Abstract Introduction Hepatitis B (HBV) reactivation can occur during immune suppression in patients with serological evidence of current infection (HBsAg positive) or past exposure to HBV (HBsAg negative, anti-HBc positive). Rituximab poses a particular risk, with reported rates of reactivation >10% in those with positive HBV markers. Reactivation can result in delays to ongoing treatment and, in small numbers of cases, acute liver failure leading to transplantation or death. Methods We performed a retrospective audit of screening for HBV markers prior to rituximab and management of patients at risk of HBV reactivation in an East London NHS Trust serving a multi-ethnic population. Our cohort was identified from a search of electronic records for a pharmacy order for rituximab placed in 201-018 across clinical specialties. Results 461 patients were included, of whom 191 were male (41%). Ethnicity was as follows: British or Irish 169 (36.6%); Asian or Asian British 118 (25.6%); Black or Black British 44 (9.5%); Any other white background 44 (9.5%); Mixed 4 (0.9%); Chinese 1 (0.2%); Any other ethnic group 22 (4.8%); Not known 59 (12.8%). Screening was adequate in 384 patients (83.3%). 62 patients (13.4%) had undetectable HBsAg, but no record of anti-HBc. 2 patients (0.4%) were not tested for HBsAg, but were anti-HBc negative, making past/current infection unlikely. 13 patients (2.8%) had no record of either HBsAg or anti-HBc testing. 339 patients (72.7%) had undetectable HBsAg and anti-HBc. 3 patients (0.7%) tested positive for HBsAg, all of whom received appropriate antiviral prophylaxis. 42 patients (9.1%) tested positive for anti-HBc, with undetectable HBsAg. It was probable that passive transmission had occurred as a result of immunoglobulin infusions in 2 cases and was confirmed in 3 cases. Repeat anti-HBc was pending in 2 patients. 5 of these 7 patients received antiviral prophylaxis. Anti-HBc positivity was thought to be due to past HBV exposure in 35 patients (7.6%). One patient was already on Truvada for HIV infection. A further 27 patients received antiviral prophylaxis with either lamivudine, entecavir or tenofovir, although in 7 of these the prophylaxis commenced after rituximab infusions had started. No prophylaxis was given to 8 patients at risk of HBV reactivation based on serological markers (21% of at risk group). There were no episodes of reactivation during the audit period. Conclusion In this audit of a multi-ethnic population receiving rituximab, we found that screening was adequate in only 83% of cases. Of those adequately screened, nearly 10% were at risk of hepatitis B reactivation with B-cell depleting therapies. 21% of those at risk did not receive appropriate prophylaxis. We propose cross-specialty guidelines and safety checkpoints in pharmacy and infusion units to reduce the risk of HBV reactivation in this patient group.

20. Implementation of UK acute upper GI bleeding bundle results in significant improvements in quality standards

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Abstract Introduction The 2015 NCEPOD report 'Time to Get Control' highlighted the need to improve the quality of care of patients with acute upper GI bleeding (AUGIB). The BSG Endoscopy Quality Improvement Project created an evidence based care bundle for AUGIB targeting ward based management of patients within the first 24 hours (The UK AUGIB bundle). The impact of implementation of the UK AUGIB bundle has not been assessed in clinical practice. Methods An audit of the impact of the UK AUGIB bundle was undertaken in 15 Scottish hospitals on behalf of the Scottish Society of Gastroenterology. Data were collected relating to demographics and management of patients with AUGIB within the first 24 hours of presentation, for a six-week period preand post-implementation of the UK AUGIB bundle. A period of bundle promotion was undertaken in all centres between the data collection cycles. Outcome measures included documentation of bundle implementation, risk scores and transfusion strategy. Caldicott approval was obtained in each site. Results A total of 459 patients were included in the pre-bundle audit period, and 434 patients in the post-bundle audit period. Following implementation the AUGIB bundle was utilised in 41.2% of patients. The table 1 demonstrates patient demographics and the impact of bundle implementation. Data were analysed using STATA 14.0. Chi-2 tests were used for categorical variables. For continuous variables, t-tests and Wilcoxon rank sum tests were used according to variable distribution. No significant differences were observed in use of PPI in high risk bleeders, use of terlipressin/antibiotics in variceal haemorrhage or resumption plan for antithrombotics, with high pre-bundle performance in these domains. Conclusions Implementation of the UK AUGIB bundle in Scottish hospitals resulted in significant improvements in quality standards including documentation of risk scoring, target haemoglobin, transfusion thresholds and re-bleed plan (Table Presented) .

21. Indications and outcomes of patients receiving in-patient parenteral nutrition: Type 3 if patients on HPN

Authors O'Flynn L.; Wyer N.; Burch N.
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Abstract Introduction Parenteral nutrition (PN) enables nutritional requirements to be met in cases of intestinal failure (IF) where enteral nutrition is insufficient or not possible.1The main objective of our audit was to evaluate the indication, outcome, and survival of patients who received PN during their acute hospital admission. Methods Data on in-patients receiving PN was collected prospectively using the Nutrition Team database. This was then retrospectively analysed, including review of overall outcome and mortality within 12-months of the in-patient spell. All patients receiving PN as an in-patient between January 2014 and December 2017 were included. Patients were categorised according to type of IF: T1IF (inpatient PN <28 days); T2IF (in-patient PN>28 days; or inpatient PN <28 days who were discharged on HPN with a plan to electively restore intestinal continuity later); and T3IF admissions (established HPN patients admitted acutely). Here we discuss the results of patients with T3IF requiring acute in-patient admission. Results A total of 55 in-patient admissions were identified in 26 existing HPN patients (16 female; 10 male). Age ranged from 2-0 years (mean 60). Cause of IF (indication for HPN) was: short bowel syndrome (40%); dysmotility (38%); palliative cancer (13%); mesenteric ischaemia (7%); and malabsorption (2%). Duration of in-patient episode was -2 days (mean 16; cumulative total 875). Assuming average cost of an NHS bed day of 222 (NICE 20152); this equates to 194,250 in bed days without considering cost of in-patient treatment. Number of admissions per patient ranged from - (mean 2). Indication for admission included sepsis (35%); disease flare (22%); elective surgery (13%); elective admission to commence HPN (9%); electrolyte derangement (7%); cancer progression (4%); GI Bleed (4%); chemotherapy complications (2%); fractured pelvis (2%); overdose (2%); and tube change (1%). Source of sepsis included: urinary (n=6), chest (n=5), CRBSI (n=3), discitis (n=2), cholecystitis (n=2), and abdominal collection (n=1). Elective surgery included: venting PEG (n=1); GI surgery e.g. intestinal continuity (n=4); and non-GI surgery (n=2). Outcome of admission in the majority was discharge on HPN (n=49; 89%); one stopped HPN following continuity surgery. A total of 4 patients died during the admission (7%), and 1 was commenced on the 'care of the dying' pathway (2%). 12-month follow-up data was available in 54 of the admissions (98%); 1 patient had only 9-months following last admission at the time of analysis. 12-month survival was 62% following admission (16/26); overall survival to end August 2018 was 54% (14/26). Conclusions This audit highlights the significant cost and complexity of patients with T3IF on HPN requiring in-patient admission to hospital. With an increase in prevalence of T3IF of 20% per annum nationally, it is vital that HPN centres are sufficiently resourced and funded to facilitate management and care of this complex cohort of patients.

22. Indications and outcomes of patients receiving in-patient parenteral nutrition: Type 2 if patients on HPN

Authors O'Flynn L.; Wyer N.; Burch N.
Source Gut; Jun 2019; vol. 68
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Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction Parenteral nutrition (PN) enables nutritional requirements to be met in cases of intestinal failure (IF) where enteral nutrition is insufficient or not possible.1The main objective of our audit was to evaluate the indication, outcome, and survival of patients who received PN during their acute hospital admission. Methods Data on in-patients receiving PN was collected prospectively using the Nutrition Team database. This was then retrospectively analysed, including review of overall outcome and mortality within 12-months of the in-patient spell. All patients receiving PN as an in-patient between January 2014 and December 2017 were included. Patients were categorised according to type of IF: T1IF (inpatient PN <28 days); T2IF (in-patient PN>28 days; or inpatient PN <28 days who were discharged on HPN with a plan to electively restore intestinal continuity later); and T3IF admissions (established HPN patients admitted acutely). Here we discuss the results of patients with T2IF requiring acute in-patient admission. Results A total of 117 T2IF admissions were identified, in 98 patients; 44% male; age 1-3 years (mean 55). In 25 admissions the patient received PN for <28 days; however all were discharged as new HPN patients (16 T2IF; 9 T3IF (6 palliative)). Duration of PN in the remaining patients was 2-53 days (mean 52). Cumulative duration of all T2IF admissions was 5219 days. Assuming average cost of an NHS bed day of 222 (NICE 20152); this equates to 1,158,618 (approx. 289,655/yr) in bed days without considering cost of inpatient treatment. 12 patients had multiple admissions with T2IF (-, mean 2); 58% of these occurred in the same year, 42% in separate years. Indication for PN included: fistulae (21%); obstruction (13%); short bowel (9%); failure of enteral nutrition (8%); post-surgical complications (7%); dysmotility (7%); ischaemic bowel (5%); malabsorption (5%); pancreatitis (4%); cancer (4%); anastamotic leak (3%); perforation (3%); post-op ileus (3%); gastric outlet obstruction (3%); no access for enteral nutrition (3%); crohn's (1%); pre-op nutrition (1%); planned IF surgery (1%). Outcome of T2IF was discharge on HPN in 55%. Outcome in the remaining patients included: oral nutrition (26%); NJ/Jejunostomy (9%); NG (6%); and RIP on PN (4%). 12- month follow-up data was available in 109 patients; 12-month survival was 77%; overall survival to end August 2018 was 71% (n=83). Conclusions This audit demonstrates the significant financial cost and bed burden to centres managing patients with T2IF; and highlights the need for an IF tariff. In 45% patients there was return of intestinal function and resolution of intestinal failure, highlighting reversibility of T2IF. It was perhaps surprising that 12-month survival in this cohort was lower than the sub-analysis of all T3IF in-patient admissions (77% versus 62%); this likely reflects that acute in-patient admission in patients with T3IF is a sign of disease progression/ decompensation and therefore an indicator for reduced 12-month survival.

23. Audit of biological therapy for inflammatory bowel disease: Results from the UK IBD registry

Authors Shawihdi M.; Bodger K.; Cummings F.; Bloom S.
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Abstract Introduction Ensuring the safe, appropriate and effective use of costly biological agents presents a significant challenge for healthcare systems. Although no longer funded as a national audit programme, NHS England has identified audit of biologics for IBD as a priority area for QI activity for hospitals (Quality Accounts List). The UK IBD Registry provides a system for collecting, submitting and reporting data to support participation in biologics audit. Methods Participating centres submit quarterly extracts of standardised data collected via a range of software solutions, including demographics, clinical characteristics, infection screening, drug initiations, clinical review visits and disease activity scores. Eligible cases for audit require a record of drug start date and baseline visit. Algorithmic analysis identifies most relevant review visit and associated disease score if recorded (time-windows: post-induction, 8-16 wks; 12-month review, 44-60 wks). The rolling audit focuses on seven key performance indicators (KPIs). Cumulative results are presented, focused on each patient's first biologic initiation (April 2016-Present). Results 3,617 eligible cases (CD: 61%; UC: 35%; IBD-U: 3%). Humira 36%; Remsima 24%; Inflectra 18%; Vedolizumab 14%; Remicade 3%; Golimumab 2%; Ustekinumab 2%; Not specified 1%. Table 1 shows mean KPIs (%) across all sites, and sub-divided by eligible cases. Across the seven KPIs, 20-45% of hospitals had results below the registry-wide mean value (arbitrary benchmark). Conclusions The UK IBD Registry is supporting a growing network of hospitals with participation in continuous biologics audit, providing benchmarking reports to drive local and registry- wide quality improvement. Although incomplete case ascertainment and missing data are inevitable challenges, the biologics data is maturing as sites establish live registers. Results highlight an ongoing need for most centres to improve biologics monitoring through better-organised and documented review visits with objective recording of standardised outcomes.

24. Complexity of polyps identified via bowel screening programme in NHS greater Glasgow and Clyde

Authors Berriman T.; Brownson E.; Pace L.; Morris J.; Winter J.W.
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Abstract Introduction Colonic polyps are a common finding in the bowel screening colonoscopy program (BCSP). Standard practice is to remove at index colonoscopy if possible. The SMSA polyp scoring system is a method of scoring the difficulty of polypectomy and is not currently recorded in routine practice in our institution. We wished to prospectively audit the spread of SMSA scores in polyps identified in BCSP colonoscopy in NHS Greater Glasgow and Clyde (GGC). Knowledge of the frequency of higher SMSA scores will allow resource planning for the volume of cases which need to be undertaken by an expert endoscopist. We also anticipated the exercise would be formative to our cohort of BCSP colonoscopists when assessing adenoma complexity. Methods NHS GGC features 8 endoscopy units with BCSP colonoscopy performed at all sites. Between 1st November 2017 and 28th February 2018 we prospectively audited the spread of complexity of adenomas detected on bowel screening colonoscopy. We recorded SMSA polyp characteristics, endoscopic techniques used and the deferral rate and reason. Results 626 records of polyp assessment were returned. 149 were excluded (outwith date window, invalid CHI, non-BCSP colonoscopy indication). 477 polyps were therefore included in the audit, from a total of 207 BCSP endoscopies. This cohort comprised approximately 30% of bowel screening colonoscopies undertaken during that time period. 16 Colonoscopists performed BCSP colonoscopy in the studied time-frame: 1 nurse endoscopist, 2 gastroenterologists, 13 colorectal surgeons. The range of SMSA Scores for polyps was 4-17 (Median 6). 174 (36.5%) were level 1 polyps, 259 (54.3%) were level 2 polyps, 32 (6.7%) were level 3 polyps and 7 (1.5%) were level 4 polyps. 457 Polyps were removed at index colonoscopy (96%). Polypectomy deferral rates varied by SMSA level: 42.9% (3 of 7) for SMSA Level 4 polyps, 18.8% (6 of 32) for SMSA level 3 polyps, 1.5% (2 of 259) for level 2 polyps, and 4% (7 of 174) for level 1 polyps. The commonest reason for deferring level 1 and 2 polyps was failure to stop the patient's anticoagulant or antiplatelet medication. Conclusion 8.2% of polyps detected on bowel screening colonoscopy were SMSA level 3 and 4. The majority of these were removed at index colonoscopy. It is uncertain whether removal at index procedure was uniformly the correct approach in patients with level 3 and 4 polyps and we require to do further research looking at completeness of excision. This audit was undertaken when Guaic based faecal testing was being utilised by the bowel screening programme. Since the change to Faecal Immunochemical Test with a threshold of 80ug/g stool we have seen an increase in adenoma detection rates from 40% to 52% and therefore the spread of SMSA scores may have changed.

25. Should we all be looking for marginal gains in endoscopy efficiency?

Authors Bryce K.; Tai C.K.; Fearn R.; Murray S.
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Abstract Introduction Demand for endoscopy in the UK has doubled in the last 5 years. In 2017, 64% of units failed to meet suspected cancer targets despite 66% of units having weekend lists and 27% outsourcing to external providers1. UCL Cancer Collaborative (UCLCC) data showed demand can be met by improving efficiency. This is important in a resource-limited setting. Our Quality Improvement (QI) Project aimed to improve efficiency by improving turnaround time, non-attendance and on-the-day cancellations. Methods The Endoscopy QI fellow, endoscopy unit manager and Gastroenterology service manager participated in the UCLCC Improvement Programme, and utilised QI methodology. We collected data from electronic patient records and scheduling system. At baseline, we identified that underutilisation of lists was multifactorial. We introduced a turnaround nurse role to consent patients. Healthcare assistants (HCAS) and nurses were trained in cannulation. As poor bowel preparation contributed to cancellations, we introduced telephone pre-assessment to educate patients. Finally, the administrative team sent text reminders before appointments. Results At baseline, our unit performed an average of 7.9 points per list, out of a planned 10. On average, 28.5 patients per month had procedures cancelled on the day due to poor bowel prep or inadequate fasting. After the introduction of pre-assessment, it improved to 23.5 per month, saving 5 procedures which would have had to be rearranged. The average points performed improved to 9.3 points per list. The average DNA rate has improved from 9% to 7% after the introduction of text reminders. After the introduction of the turnaround nurse and HCA cannulation, turnaround time reduced from an average of 18 to 9 minutes between procedures. This could save 90 minutes over a 12-point list. Despite these improvements, only 41.6% of lists are booked for 1-2 points. Inadequate staffing numbers and late start times are contributing factors. A start time audit showed that only 5 out of 27 lists in a week started within 10 minutes of supposed start times, a target for further cycles of this QI project. Conclusions Multiple small improvements in efficiency can achieve significant impact on productivity. Interventions focused on turnaround time can reduce underuse of list time. Patient-centred approaches to procedural preparation may reduce squandered appointments. Sustainability of these improvements is difficult to assess in the short term but will be promoted by the continuing QI fellow role and implementation of endoscopy QI champions from the administrative and nursing team.

26. Upper gastrointestinal bleeding (augib) in Sierra Leone-audit of outcomes when minimal endoscopy access

Authors Sowa M.; Smith M.; Russell J.; Curry C.; Soni S.; Nylander D.
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Abstract Sierra Leone is a developing country in W. Africa. Medical facilities are rudimentary. There was no gastroscopy service till 2016, when supported by a grant from the British Society of Gastroenterology (BSG), 4 gastroenterologists from northeast UK travelled to the capital, Freetown. We trained 3 doctors to perform gatroscopy (OGD). Since then we have supported the doctors remotely and by annual visits. They have done procedures in private hospital that owns endoscopy stack. Aims No endoscopy equipment exists in Government sector. We felt that we should demonstrate the need for a service by concentrating on the management of a distinct clinical entity, AUGIB, in which the benefit of OGD is clear. We undertook an audit of UGIB presenting to the main government hospital in Freetown (Connaught Hospital) to look at clinical presentation and outcomes. Method 2 house officers (HO's) allocated to collect data. The audit was publicised at weekly medical meetings and also, details were put in the hospital medical WhatsApp group. HO's visited outpatient department regularly to identify patients. Then, as record keeping is paper based and poor, they visited regularly to keep a record of clinical details results and outcomes. A proforma developed by the UK team and head of medicine was used to record demographic clinical and outcome details. Details from the proforma were transcribed on to an excel spreadsheet. Results 24 patients identified in the period. 63.6% male. Median age- 45 (26-67); Symptom duration at presentation - 3 days (0.5-28). 10 patients had haematemesis, 2 melaena and 12 with both. None taking anticoagulant/antiplatetelet drugs. 2 patients on non NSAID. Significant comorbidities as follows; Hep B +ve - 2 (one clinically cirrhotic); HIV +ve - 1. One patient had previous AUGIB. Clinical parameters on admission as follows: Median haemoglobin - 5 g/dl (2-13.5); Median systolic BP - 98.5 mmHg (60-224); Median pulse - 115/min (80-146). 21 patients had at least one dose of IV Omeprazole. 15 patients had at least 1 unit of blood ((median Hb = 5 (2- 7.3)). A single patient (Female aged 56) with admission Hb of 5 g/dL underwent OGD day 7 of admission: Diagnosis - erosive oesophagitis. 15 patients discharged after mean 11.3 days (5-27). 8 patients died giving crude mortalty -3.4%. Mean time to death 3. Days (0-12). Conclusion This 1st audit of outcomes of AUGIB in Sierra Leone shows a comparatively high mortality in relatively young patients. Reasons for this probably multifactorial. However, lack of access to endoscopy probably a contributory factor. We have developed a AUGIB bundle which we hope to administer whilst waiting for the government to invest in endoscopy equipment.

27. Colonoscopy surveillance for adenomatous polyps: Are we doing it right! a retrospective audit

Authors Tahir I.; Hicken B.; Cheung D.
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Abstract Introduction Colorectal cancer (CRC) is the third most commonly diagnosed cancer worldwide. The identification of colonic polyps can reduce CRC mortality through earlier diagnosis and removal of polyps: the precursor lesion of CRC. Following the initial colonoscopy, finding and removal of a polyp, some patients are at increased risk of developing CRC in the future. This is the rationale for post-polypectomy surveillance colonoscopy. Not all polyps seen are adenomas with potential of malignant transformation. The potential benefits of surveillance procedures must be weighed against the burden of colonoscopy: resource use, the potential for patient discomfort, and the risk of complications. The aim was to assess the practice for polyp surveillance against gold standard BSG guidelines based on polyp number, size and histological features. Methods A retrospective audit of colonoscopies performed in Worcestershire Acute Hospitals NHS Trust in 2017 where polyps were reported. Patients were excluded if cancer was identified, a duplicate procedure performed or they were on another surveillance programme. Colonoscopy reports, histology and clinic letters were reviewed to assess planned followup and compliance. Results 1378 colonoscopies reported polyps. 260 patients were excluded. 1118 patient notes were reviewed. 674 men (60%) and 444 females (40%) were assessed with an average age of 67. 965 (86%) were compliant with BSG guidelines. 153 (14%) patients were not compliant. Of those not compliant, 16 (10%) should have been screened more frequently and 102 (67%) should have received less frequent colonoscopy follow- up. 35 (23%) patients did not require any follow-up as histology did not demonstrate an adenoma incurring a cost implication of 16,275 to the trust (465 tariff per procedure). Conclusions The results provide insight into the importance of appropriate surveillance. It highlights the implications of unnecessary procedures in terms of costs, psychological stress and risks associated with the procedure. Of those not requiring follow-up it was apparent the endoscopist was predicting the follow-up timescale prior to receiving the histology report, commonly mis-identifying hyperplastic polyps as adenomas. The predicted size of the polyp also varied between endoscopist and histologist. Keeping a record of surveillance patients and filtering out un-necessary procedures may reduce this risk.

28. Cochlear nerve hypoplasia identified years after passing newborn hearing screen

Authors Tabtabai R.D.; Ballard D.P.; Preis M.
Source Otolaryngology - Head and Neck Surgery; Sep 2019; vol. 161 (no. 2)
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Database EMBASE
Abstract Universal newborn hearing screening (NHS) has been a mainstay of immediate postpartum care since the National Institutes of Health released its recommendation for screening in the 1993 Consensus Conference Report. Evaluation of hearing within 3 months of age has reduced the time to identification of hearing disorders, enabling intervention before there are lifetime detriments to the child's auditory processing, language, and learning. Screening is effective but not perfect, and parents of children who "pass" NHS are given information on auditory milestones. We present the case of a 4-year-old girl who passed in-hospital NHS with transient evoked otoacoustic emission (TEOAE) test in both ears yet presented 4 years later to the clinic with parental complaints of hearing dysfunction. Audiologic evaluation demonstrated profound sensorineural hearing loss (SNHL) and absent TEOAEs in the right ear. Magnetic resonance imaging revealed either absent or severely hypoplastic right vestibulocochlear nerve. This case represents a rare presentation of hearing loss wherein outer hair cell function was initially preserved and then progressively lost in the ear that was affected by cochlear nerve deficiency. This case raises the possibility of initial preservation of outer hair cell function in instances of cochlear nerve aplasia or deficiency, as evidenced by the presence of TEOAEs. Reduced TEOAEs in our case suggests an ongoing process of hearing loss that progressed from isolated dysfunction of the vestibulocochlear nerve to dysfunction of the outer hair cells. We present our case and review the current literature regarding newborn hearing screening and cochlear nerve deficiency.

29. Variation in assessment of outcomes for IBD in routine clinical practice: An ethnographic study

Authors Razanskaite V.; Young B.; Williamson P.; Bodger K.
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Publication Type(s) Conference Abstract
Database EMBASE

Abstract Introduction Several global initiatives are seeking to standardise outcome assessment for IBD in clinical trials (Core Outcome Sets) and routine care (e.g. ICHOM). The UK IBD Biologics Audit found inconsistent use of clinical disease activity indices among UK clinicians. We aimed to explore variability in outcome assessment in routine practice, evaluating the range of individual outcomes elicited and extent of standardisation and quantification. Methods Ethnographic observations of 52 IBD clinic consultations by 17 IBD clinicians (8 consultants, 7 IBD nurses and 2 trainees) across four acute hospitals in the North West region of England. Consultations were observed, audio-recorded, transcribed and analysed for IBD outcomes elicited by clinicians (or volunteered by patients), including specific items required for Harvey-Bradshaw Index (HBI) and Simple Clinical Colitis Activity Index (SCCAI). Results Most commonly elicited outcomes are shown in the table 1. HBI or SCCAI were collected in only 4 (8%) of consultations. In the remainder, domains of HBI and SCCAI were discussed in variable detail. Complete HBI coverage: 5/29 (17%); symptom components of HBI (wellbeing, liquid stools, abdominal pain): 16/29 (55%). No Crohn's disease consultation involved specific discussions about symptoms over past 24 hrs (including 2 where HBI was calculated). Complete SCCAI coverage: only 1 consultation. Partial coverage (5 out of 6 SCCAI domains): 8/21 (38%). Symptoms were never specifically defined over past 3 days. Certain symptoms were elicited significantly more often by nurses than doctors ($p<0.05$), and coverage varied by disease severity. Interviews are under way to explore views, barriers and facilitators to standardisation of outcomes assessment. Conclusions There is high variability in breadth, depth and quantification of outcomes during routine clinical assessments. Most domains for activity indices were elicited but formal scoring and assessment for a fixed time period was rare. Standardised outcomes may be better-captured directly from patients (PROMs) than via clinician-generated indices.

30. Early clinical management of acute upper gastrointestinal bleeding: A UK multisociety consensus care bundle

Authors Siau K.; Hearnshaw S.; Stanley A.; Donnelly M.; Drummond R.; Morris A.J.; Estcourt L.; Rasheed A.; Walden A.; Thoufeeq M.; Veitch A.; Ishaq S.
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction Medical care bundles have been shown to improve standards of care and patient outcomes. Acute upper gastrointestinal bleeding (AUGIB) is a common medical emergency which has been consistently associated with suboptimal care. We aimed to develop a multisociety care bundle centred on the early management of AUGIB for national implementation to improve standards of care. Methods Under the remit of the British Society of Gastroenterology (BSG) Endoscopy Quality Improvement Project, a UK multisociety taskforce was assembled to produce a pragmatic evidence and consensus-based care bundle detailing key wardbased interventions to be performed within the first 24 hours of presentation with AUGIB. A modified DELPHI process was conducted with expert stakeholder representation from BSG, Association of Upper Gastrointestinal Surgeons (AUGIS), Society of Acute Medicine (SAM) and the National Blood Transfusion Service. A formal literature search was conducted on major databases and international guidelines reviewed. Evidence was appraised using the GRADE quality framework. Once working groups had formulated initial evidence-based statements, a face-to-face meeting with anonymised electronic voting was arranged to evaluate consensus with statements and care bundle items. Consensus was defined as reaching 80%+ agreement on each statement, with revisions and up to three rounds of voting permitted. Accepted statements were eligible for incorporation into the final bundle after a separate round of voting. The final version of the care bundle was approved by corresponding stakeholder and patient groups. Results Consensus was reached on 19 recommendation statements; these culminated into 14 corresponding care bundle items (figure 1), enveloped within 6 management domains: Recognition (to facilitate early diagnosis), Resuscitation, Risk assessment, Rx (Treatment), Refer and Review (post-endoscopy care). Conclusion A multisociety care bundle for AUGIB has been developed for adoption in acute departments to facilitate timely delivery of evidence-based interventions and drive quality improvement in AUGIB.

31. Don't ask, won't tell: Improving alcohol screening and hospital alcohol team referrals in A&E

Authors Robinson G.; Bhalme M.; Hall V.; Heyes G.; Gillian L.; Nicola L.; Osborne S.
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Introduction This Hospital's Alcohol Team provides a 7-day service, cited in the 10 Year NHS England Plan as having improved the quality of alcohol-related care. The Alcohol Team receive over 1700 referrals per year - predominantly from assessment wards where screening for potential alcohol issues of new admissions is mandatory and routine. Alcohol screening had not traditionally been routine for A&E patients. There were concerns that the introduction of mandatory screening might risk complicating patient assessment, treatment and timely discharge. Initiatives were introduced to increase the incidence of screening in A&E. An analysis was undertaken on the impact of these initiatives on referrals and patients. Methods Initiatives introduced in 2018 1) Partnership working between A&E and Hospital Alcohol Team; . Development of an Alcohol Assessment sticker, for optional incorporation into patient A&E notes, to facilitate the identification and management of potential alcohol issues ; . Training targeted to A&E Nurses; . A&E Link Nurse developed promotional displays and acted as a champion in A&E to raise awareness. Referral data was audited to assess the impact of the initiatives on referrals. A 10% randomised sample of referrals was further analysed to assess the impact of the increase in referrals. Case Studies were captured to illustrate the benefits of earlier identification of alcohol issues. Results There was a 16% increase (240 patients) in total referrals received: 1523 (2017) to 1763 (2018). A&E referrals rose 79% from 217 to 389. This is against a back-drop of the rate of hospital admissions attributed to alcohol, nationally and locally, remaining broadly flat. 59% of patients referred to the Alcohol team were discharged from A&E (compared to 55% in 2017); the average length of stay of those discharged patients was 5.6 hours (compared to 6.0 hours in 2017), and 48% of these patients were discharged in under four hours (compared to 42% the previous year). Specific cases were captured in case studies to illustrate the mechanisms through which early identification of potential alcohol issues can lead to better management of alcohol-related issues, facilitate safe discharge and reduce length of stay. Conclusions The screening, education, and partnership initiatives led to an increase in referrals from A&E to the hospital alcohol team. An audit of referrals suggests the earlier identification of alcohol-related issues in A&E has not had negative impacts on discharges and length of stay from A&E. In practice the Alcohol Team has found that earlier identification of potential issues has enabled them to intervene earlier to improve the management and timely discharge of patients. (Figure Presented).

32. Identifying differences in management of PBC to inform future practices-results from allwales trainee collaborative

Authors Harborne P.; Shakespeare R.; Haboubi H.; Abdul-Sattar A.; Shenbagaraj L.; Navaratnam J.; Phillips A.; Appanna G.; Yahya I.; Edwards K.; Alrubaly L.; Newbould R.; Vincent R.; Mannem S.; Gardezi S.A.; Aslam U.; Jennings V.; Samuel D.; Srivastava B.; Pembroke T.; Yousef F.; Yeoman A.
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Database EMBASE
Abstract Introduction Primary biliary cholangitis (PBC) is a chronic autoimmune liver disease, which can progress to end-stage biliary cirrhosis. Risk stratification and assessment of response to treatment is important to target care and identify patients who may benefit from newer treatments to improve prognosis. We studied the clinical practice of patients with PBC across Wales, a geographically diverse region of over 3 million. Methods A clinical audit tool was developed with UK-PBC and EASL guidelines. Data was retrospectively collected by specialist trainees in each health board. This included the use of ursodeoxycholic acid (UDCA), its appropriate dosing and assessment of response. The prevalence of cirrhosis and identification of high risk patients was also assessed. Results A total of 406 patients with a diagnosis of PBC were identified across five Welsh health boards. Of these, the majority were female (73%). Mean age at diagnosis was 59.7 years (+/-13.5). Serological testing for PBC (AMA > 1/40) was present in 88.5% at time of diagnosis. Mean Alkaline Phosphatase (ALP) at diagnosis was 334U/L (56-2020). Mean follow- up since diagnosis was 7.9+/-6 years. Of 214 patients with recent clinic letters, 179 (83.6%) were on UDCA. Across health boards this ranged from 67.9% to 91.5%. Patients managed by hepatologists were more likely to be on the appropriate dose of UDCA (92.9%) compared to gastroenterologists (39.3%), p=0.018. Assessment of response to UDCA at 1 year was 59.3%. This was performed more frequently by hepatologists (86.8%) than gastroenterologists (62.5%), p=0.024. 47.8% of patients had cirrhosis. 18.4% of patients were identified as high risk as defined by a bilirubin >50umol/L or dropping albumin. Of 82 patients with clinic letters documenting a conversation about transplant, 26 patients were considered with 12 patients undergoing liver transplant. Conclusions This study provides valuable insight into the care of PBC patients across Wales. It serves to highlight the wide variation and discrepancies in adherence to standards between hepatology and gastroenterology managed patients, despite widely available guidelines. In particular, patients managed by hepatologists were more likely to receive optimal UDCA dosing and have response documented at 1 year. This has important implications on accessing newer therapies. These findings will be used to review the PBC care pathway in Wales to improve adherence to standards and improve patient care.

33. Dysplasia diagnosis at Barrett's surveillance-seattle protocol dominant strategy in real world non-expert centres

Authors Keyte G.; Iqbak M.; Viswanath Y.K.S.; Dhar A.
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Abstract Introduction Detection of dysplasia at Barrett's surveillance depends on a number of factors - the endoscopist's skill, use of advanced imaging, adherence to Seattle protocol, and high risk patient factors like male sex, smoking, length of Barrett's segment and family history of oesophageal adenocarcinoma. Whether the high rates of dysplasia diagnosis reported from expert tertiary centres can be replicated in the real world is debatable. Aim The aim of this study was to analyse the routes to dysplasia diagnosis in a dedicated Barrett's surveillance programme in County Durham, specifically looking at the grade of the endoscopist, use of advanced imaging (NBI, Acetic Acid), diagnosis by targetted biopsy vs. Seattle Protocol, and the nature of dysplasia (Low grade vs. high grade). Methods An electronic database search of over 600 Barrett's surveillance histology was carried out for the period 2015- 2018, extracting all reported dysplasia. The endoscopy database was then interrogated for the following: patient demographics, grade of endoscopist (medical consultant gastroenterologist, non-medical endoscopist and surgical consultant), sedated vs. unsedated procedure, visible dysplasia, HD-white light vs. image enhancement, length of Barrett's segment and Prague classification, Paris classification of any visible lesions, targeted vs. Seattle Protocol biopsies, and grade of dysplasia. All endoscopies were carried out using high-resolution scopes and where a visible lesion was identified a targeted biopsy was taken. Results 94 patients with dysplasia were analysed, M:F ratio 3.5:1, mean age 71 yrs. Barrett's length ranged from 1-14 cm, with 32% endoscopists reporting the Prague classification. Surveillance was done by: consultant gastroenterologists (48pts), nurse endoscopists (42pts) and consultant surgeons (4pts). Although only 3.2% endoscopists explicitly mentioned a Seattle biopsy protocol in their report, histology showed that protocol had been followed in 51% of endoscopies. 52% consultant gastroenterologists, 45% nurse endoscopists and 100% consultant surgeons adhered to Seattle biopsy protocol. The distribution of low grade dysplasia (LGD):high grade dysplasia (HGD):carcinoma- in-situ (situ) in the Seattle group 21:21:6 compared with a random biopsy protocol of 8:19:19. Image enhancing techniques were used in just 4% pts. Conclusions In this real world NHS study, we found that after 4 years of the BSG guidelines, visible dysplasia is extremely difficult to detect. The Seattle biopsy protocol was followed in only 51% of endoscopies. There is a need for quality improvement & training for Barrett's surveillance amongst medical and non-medical endoscopists, including image enhanced surveillance and chromoendoscopy.

34. Radiology-guided oesophageal stenting for the palliation of dysphagia: A single center experience

Authors Tralau-Stewart L.; Roy R.
Source Annals of Oncology; Jul 2019; vol. 30
Publication Date Jul 2019
Publication Type(s) Conference Abstract
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Abstract Introduction: Oesophageal cancer is the 14th most common cancer in the UK with 8,900 people being diagnosed per year. The majority of patients present late with advanced disease; 5-year survival for all histological types is 15%. [1] Oesophageal stent insertion is used widely as a palliative procedure for relief of dysphagia and pain in patients with oesophageal cancer. It is considered to be an effective and safe palliative procedure. There is however little data on the timing of and complications following stent insertion. Neoplastic growth at the end of the stent has been found to occur in up to 20% of patients causing recurrence of dysphagia. Chest pain following stent insertion has been reported in 12-14% of cases. [2] Methods: We audited consecutive patients undergoing oesophageal stenting in our institution over a 2 year period (January 2016 to December 2017). Sixty-two patients were identified from the radiology database and details of procedure and complications were identified from patient notes and electronic patient records.
Result(s): The average age of patients was 73 years. Of the 62 patients, 30 were elective procedures and 32 were emergent. 21/30 elective procedures were completed within 24 hours of admission with an average in-patient stay of 4.1 days. Emergency admissions had an average length of stay of 15.6 days with an average wait of 7.8 days for the procedure. Emergency procedures had a 44% complication within 30days of stent insertion (chest/abdominal pain [8], back pain [1], stent blockage [1], gastric mucosal prolapse causing stent blockage [1]) and elective procedures had 20% complications (chest/epigastric pain [4], hospital-acquired pneumonia [1], odynophagia [1]). Complication rates after 30 days were similar for both groups (31% vs 27%) including 1 case of stent migration in each group. There were no deaths in either group attributable to the procedure, but 1 patient in the elective group and 3 patients in the emergency group died within 30 days of the stent insertion.
Conclusion(s): The audit emphasised the efficacy of stent insertion as a reliable procedure to relieve dysphagia and enhance patient quality of life. Chest discomfort was the most common complaint following the procedure followed by stent blockage and stent migration. It also emphasised the need for earlier identification of dysphagia and planning the procedure electively rather than waiting for symptoms to be critical before intervening. It clearly reduces acute complications and morbidity, length of in-hospital stay and health-care related costs.

35. Home-delivered infliximab infusion programme in IBD patients: Safety evaluation and patient satisfaction

Authors Goodoory V.; Shaikh F.A.; McConnell J.; Shenderey R.
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Database EMBASE
Abstract Introduction Treatment with infliximab for patients with Inflammatory Bowel Disease (IBD) in the UK consists of intravenous infusions usually delivered in hospital via a nurse-led service. Several studies have proven the safety of infliximab infusions at home which also eases the capacity for hospital infusions. However, the uptake in clinical practice has been slow in the UK. We aim to evaluate the safety and patient satisfaction of home infliximab infusions in a district general hospital 4 years after its introduction. Methods This is a retrospective audit of all IBD patients enrolled in a home infliximab infusion programme from July 2014 to July 2018. Data were collected from the electronic database and case notes. Data collected included serious adverse reactions requiring hospital admission and number of times home infusions were put on hold/stopped because of safety concerns. Patients currently on the home infliximab infusion programmed were interviewed by telephone by 2 Gastroenterology specialist trainees. Satisfaction rate (out of 10) were collected for adequate communication, delivery times, customer service, driver assistance/attitude, nurse support service, clinical waste collection and overall satisfaction. Results A total of 41 patients were included in the analysis (3 excluded due to insufficient follow up data): median age was 42 years, 19 (46.3%) were women, 9 (22%) had ulcerative colitis and 32 (78%) had crohn's disease. Three hundred and seventy three (373) infliximab infusions were given at home: there were no deaths and no adverse reactions requiring hospital admission. There were 3 (0.8%) instances where home infliximab infusions were put on hold or stopped as shown in table 1. Patients were given a median number of 7 doses of infliximab in hospital before moving to the home infliximab infusion. The median follow up time on home infliximab was 14 months and the median number of doses given at home was 7. (Figure Presented) Eighteen (69.2%) out of 26 patients on home infliximab in July 2018 responded to a telephone interview. Mean and median satisfaction rates were 9.7 and 10 (out of 10). Conclusion A home infliximab infusion programme for patients with IBD is safe with all adverse reactions being minor and managed in the community. Patient satisfaction rate is high.

36. Reduced stricture rates with a novel halo 360 radiofrequency regime for Barrett's dysplasia

Authors Saffouri E.; Haddock R.; Berriman T.J.; Fullarton G.; Morris A.J.; Pugmire J.
Source Gut; Jun 2019; vol. 68
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Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction In the UK, radiofrequency ablation (RFA) is established as treatment of choice for flat oesophageal neoplasia or after removal of focal lesions by endoscopic mucosal resection (EMR) to eradicate Barrett's mucosa. Standard practice is treatment with the HALO 360 Express RFA catheter. A specific complication of RFA is oesophageal stricture development. The UK national RFA registry has quoted a 11-17% rate of strictures requiring dilatation, with higher rates in patients treated with 12J rather than 10J paired ablations ($p<0.01$). Two 10J ablations, separated by a cleaning step requiring removal of the catheter device, is now standard of care. The cleaning step is a time-consuming part of the procedure and can be poorly tolerated. Methods In December 2017, we adapted our practice to include irrigation with 30cc normal saline between 10J ablations as a cooling phase during the HALO 360 express procedure and removed the cleaning phase between ablations. We have audited patient and disease demographics and outcomes data, especially oesophageal stricture rate, for all patients who had first HALO 360 express between 1/12/16-1/12/18 in our hospital. This represents 12 months before and after technique modification. Statistical analysis of variables was calculated using fisher's exact test, Wilcoxon ranksum, and logistic regression analysis. Results In the capture period, 36 patients had standard treatment, and 48 patients underwent modified technique. In the latter group, a significantly longer mean Barrett's segment was treated (6.1 cm vs 8.2 cm; $p=0.01$). We identified a stricture rate of 22.2% (8/36) in the standard treatment group, and 4.2% (2/48) in the modified group ($p=0.014$). Stricture rate was significantly higher ($p=0.026$) with increasing Prague circumferential and maximum Barrett's length ($p=0.023$). There was no statistical difference in stricture rate when prior EMR or degree of dysplasia was considered. A logistic regression model showed 85% reduced odds of stricture using the modified treatment ($p=0.036$) after adjusting for age, procedure type, grade of dysplasia, prior EMR, and Prague measurements. Conclusions Our audit demonstrates an improved outcome with the novel treat-cool-treat technique, with significantly lower rate of stricture development with this modified practice. This has an important bearing on patient care, as dilatation carries its own risk of complication. These findings suggest a benefit to the use of this novel adaptation of standard HALO 360 RFA treatment in Barrett's neoplasia. (Table Presented) .

37. Learning from adverse events: A study of jag endoscopy units

Authors Ravindran S.; Thomas-Gibson S.; Ashrafian H.; Darzi A.; Broughton R.; Dron M.; Shaw T.
Source Gut; Jun 2019; vol. 68
Publication Date Jun 2019

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Database EMBASE
Abstract Introduction To meet JAG accreditation standards, endoscopy services are expected to have processes to identify, respond to and learn from adverse events (AEs). Units provide evidence to demonstrate they have met the set standard through audits of mortality and readmission after endoscopy. We conducted the first analysis of UK-wide learning outcomes from AEs based on mortality and readmission data. The aims were to understand how evidence is collected, describe relevant learning outcomes and resultant actions and processes used to share learning. Methods A retrospective analysis of JAG 30-day mortality and 8-day readmission evidence from 2013-2018 was undertaken, assessing methods of data collection and documentation of learning outcomes. Data from evidence files were extracted and thematically analysed to identify and categorise learning outcomes and action points. This study was approved by the JAG research committee. Results Complete data was available for 59 units. 42 units (71%) used the JAG audit proforma in providing evidence. Where no JAG proforma was utilised, data was sourced from other audit summaries (14%), PowerPoint slides (8%) or other tabulated data (7%). 35 units (59%) documented learning outcomes following readmission or mortality, with 85% stating that outcomes were discussed in a formalised meeting. Learning outcomes and action points are summarised below: Conclusions Learning outcomes centre around managing highrisk patients, pre-assessment and endoscopist factors. Developing systems and training are actions in direct response to learning outcomes. Refining data collection methods was identified as a way to improve learning from AEs. There were a variety of methods to disseminate learning and feedback to endoscopists but no discernible mechanisms to share learning between units were identified. There needs to be a more robust way of collecting and collating endoscopy AE data, with a focus on shared learning between services.

38. An evaluation of CT head reporting radiographers' scope of practice within the United Kingdom

Authors Lockwood P.
Source Radiography; 2019
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Publication Type(s) Article
Database EMBASE
Abstract Introduction: This study investigated the scope of practice of CT head reporting radiographers in the UK, and to compare adherence to professional body standards.
Method(s): An online questionnaire was utilized applying both multiple-choice and response (closed questions), and qualitative open question free-text responses. The 30 questions covered four key areas of demographics, the scope of practice, referrals, and ongoing competence, as described in professional body national guidance standards. The questionnaire was disseminated (convenience sampling) via Twitter and email to the National CT Head Reporting Special Interest Group. Responses were transcribed and coded; the results applied descriptive statistics to summarise observations of the study sample.
Result(s): The sample of participant response data analysed was n = 54. Most respondents were from England, with a postgraduate certificate award in clinical reporting, and a mean length of 8.3 years of reporting experience. The accepted referral pathway included a wide range of medical and surgical specialities, including both in and outpatients and acute and chronic pathways. Furthermore, 96.2% of the sample had a scope of practice that authorised referral recommendations to a broad and inclusive group of medical and surgical teams, and if required further or repeat diagnostic imaging. To maintain quality and evidence of ongoing competency, all radiographers were involved in audit cycles.
Conclusion(s): The data collected confirmed the reporting practice within this sample group aligns to national recommended guidance. The data provided key information on the range and variation of individuals scope of practice within age restrictions of patients, examination types, referral teams, and ongoing competency practices. Implications for practice: This paper details the scope of practice of CT head reporting by radiographers and the contribution made to the healthcare sector.

39. Defining the Neuropsychological Characteristics of Surgical Interns

Authors Anton N.E.; Martin J.R.; Huffman E.M.; Nickel B.L.; Perkins L.A.; Lee N.K.; Abecassis M.; Choi J.N.; Stefanidis D.
Source Journal of the American College of Surgeons; Oct 2019; vol. 229 (no. 4)
Publication Date Oct 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Introduction: Matching into a surgery residency program is highly competitive and attracts high achieving individuals. Neuropsychological characteristics, which reflect a subset of cognitive skills such as processing speed, attention, and executive functions and personality traits that define higher-level cognitive abilities, have not been well studied in incoming surgical interns. The purpose of this study was to compare the neuropsychological characteristics of surgical interns with those of the general population.
Method(s): Consenting general surgery interns at a single institution completed an assessment battery of self-report measures of psychological grit (Short Grit Scale, Grit-S), trait anxiety (State-Trait Anxiety Inventory-Trait Scale, STAI-T), and executive functions (Behavioral Rating Inventory of Executive Function, BRIEF). Participants also completed objective measures of selective attention (D2 Test of Attention, D2), auditory information processing speed (Paced Auditory Serial Addition Task, PASAT), problem solving (Tower of London, TOL), and cognitive processing speed (Trail Making Test-A and B). Interns' scores on these assessments were averaged and compared to normative data for age-matched adults using one sample t-tests.
Result(s): Twenty-one interns (42.9% female, 26.8+/-1.2 years old) completed all assessments. Interns displayed significantly better grit, selective attention, auditory information processing speed, behavioral inhibition, self-monitoring, emotional control, and problem solving than age-matched adults. There were no differences between interns and age-matched adults in regards to trait anxiety or cognitive processing speed.
Conclusion(s): Compared to age-matched adults, surgical interns displayed significantly better neuropsychological characteristics in several areas. These characteristics may be important factors to consider when identifying potential candidates for surgical residency.

40. Prognostic Significance of Ethnicity on Differential Attainment in Core Surgical Training (CST)

Authors Robinson D.B.; Hopkins L.; Brown C.; Abdelrahman T.; Egan R.J.; Lewis W.G.
Source Journal of the American College of Surgeons; Oct 2019; vol. 229 (no. 4)
Publication Date Oct 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Introduction: Differential attainment related to equality and diversity and ethnicity is a pressing concern for the UK General Medical Council. This study aimed to assess differential attainment during core surgical training (CST) in a single UK deanery.
Method(s): Consecutive 227 Core Surgical Trainees (2010- 2016) in a single UK Deanery were included. Intercollegiate Surgical Curriculum Programme (ISCP) portfolios were examined and the primary outcome measure was success at Higher Surgical Training National Training Number (NTN) selection related to ethnicity (British White [BW] vs Black and Minority Ethnic [BME]).
Result(s): MRCS success rates were 78.3% vs 73.5% in BW and BME trainees respectively (p=0.452). Higher Surgical Training NTN selection success related to ethnicity was 53/149 in BW (36.6%) vs 18/78 in BME CSTs (23.1%, p=0.054). NTN success was associated with CST's country of primary medical qualification: UK 70/202 (34.7%) vs non-UK 1/25 (4.0%, p=0.002). Annual Record of Competence Progression (ARCP) outcomes were unrelated to ethnicity (p=0.533), as reflected in logbook operative numbers (BW vs BME, median 481 vs 466, p=0.747), validated work-based assessments (106 vs 118, p=0.169), learned society communications (3 vs 3, p=0.596), audits completed (3 vs 3, p=0.881), and publications (0 vs 0, p=0.254).
Conclusion(s): Differential attainment, in terms of promotion to higher surgical NTN was 50% better in British White compared with Black and Minority Ethnic CSTs, bordering on significance. Counter measures to address this national trend should be developed.

41. A cost effectiveness analysis of preimplantation genetic testing for sickle cell trait couples

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Source Fertility and Sterility; Sep 2019; vol. 112 (no. 3)
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Database EMBASE

Abstract Objective: Sickle cell disease (SCD) is a common autosomal recessive disease that results in significant morbidity and early mortality. Preimplantation genetic testing for monogenic diseases (PGT-M) is the process in which embryos created via in vitro fertilization (IVF) are tested for diseases like SCD; unaffected embryos may then be selected for transfer. In the United Kingdom, this technology is available to couples with SCT; in the U.S., insurance does not routinely cover this intervention. Whether the costs of IVF with PGT-M (IVF+PGT-M) to avoid the birth of a child with SCD outweigh the lifetime medical costs of a person with SCD is unknown.
Design(s): Cost effectiveness analysis.
Material(s) and Method(s): We constructed a decision analytic model using TreeAge Pro 2019 (TreeAge Software Inc, Williamstown, MA) for couples known to both have SCT, attempting to conceive with natural conception (NC) versus IVF+PGT-M. The primary outcome variable was quality adjusted life years (QALYs) for children born with or without SCD. The model incorporated probabilities and cost estimates of relevant clinical events using data from published literature. The total cost for each potential child included the cost of conception, lifetime medical care, and future potential income. We assumed all patients undergoing IVF+PGT-M also test embryos for aneuploidy (PGT-A); data were thus derived for euploid embryo transfers for all IVF+PGT-M patients. To determine whether IVF+PGT-M is cost effective, we calculated the incremental cost effectiveness ratio (ICER). Here, the ICER is defined as the ratio of the difference between the per patient per QALY costs of IVF+PGT-M compared with NC. Costs were converted to 2018 U.S. dollars. To examine the impact of changes in model input parameters, a sensitivity analysis was performed. We assumed a willingness to pay of $30,000 which is equal to the average cost to conceive a non-SCD child in one IVF+PGT-M cycle with embryo transfer.
Result(s): Healthy adults in the US have an average life expectancy of 79 years, versus 54 for individuals with SCD. By avoiding SCD, IVF+PGT-M for SCD offers a 23.27% increase in QALYs. The mean cost of SCD-related care is $26,319 per patient per life-year, while the average cost of IVF+PGT-M is $24,750 per non-SCD embryo transferred. The ICER for IVF+PGT-M as compared with NC was $22,881 per QALY added to the lifespan. Therefore, the cost per QALY of conceiving a healthy child with IVF+PGT-M is $22,881 less than the cost of SCD-related care. The ICER was less than the expected willingness to pay, and improved substantially with a decrease in PGT-M cost. Monte Carlo simulations demonstrated that IVF+PGT-M is cost effective in nearly all iterations at an acceptability cut off of $30,000.
Conclusion(s): IVF+PGT-M is a cost effective strategy to increase QALYs for children conceived by SCT couples. These data beg for quality improvement studies to increase patient awareness of and access to IVF+PGT-M. Offering this option to SCT couples on a more widespread basis might help families avoid the financial, emotional and familial burdens of raising a child with SCD, and decrease the societal costs of SCD.
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42. Incidentally diagnosed cancer and commonly preceding clinical scenarios: a cross-sectional descriptive analysis of English audit data

Authors Koo M.M.; McPhail S.; Lyratzopoulos G.; Rubin G.
Source BMJ open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31530591
Database EMBASE
Abstract OBJECTIVES: Cancer can be diagnosed in the absence of tumour-related symptoms, but little is known about the frequency and circumstances preceding such diagnoses which occur outside participation in screening programmes. We aimed to examine incidentally diagnosed cancer among a cohort of cancer patients diagnosed in England. DESIGN: Cross-sectional study of national primary care audit data on an incident cancer patient population. SETTING: We analysed free-text information on the presenting features of cancer patients aged 15 or older included in the English National Audit of Cancer Diagnosis in Primary Care (2009-2010). Patients with screen-detected cancers or prostate cancer were excluded. We examined the odds of incidental cancer diagnosis by patient characteristics and cancer site using logistic regression, and described clinical scenarios leading to incidental diagnosis.
RESULT(S): Among the studied cancer patient population (n=13810), 520 (4%) patients were diagnosed incidentally. The odds of incidental cancer diagnosis increased with age (p<0.001), with no difference between men and women after adjustment. Incidental diagnosis was most common among patients with leukaemia (23%), renal (13%) and thyroid cancer (12%), and least common among patients with brain (0.9%), oesophageal (0.5%) and cervical cancer (no cases diagnosed incidentally). Variation in odds of incidental diagnosis by cancer site remained after adjusting for age group and sex.There was a range of clinical scenarios preceding incidental diagnoses in primary or secondary care. These included the monitoring or management of pre-existing conditions, routine testing before or after elective surgery, and the investigation of unrelated acute or new conditions.
CONCLUSION(S): One in 25 patients with cancer in our population-based cohort were diagnosed incidentally, through different mechanisms across primary and secondary care settings. The epidemiological, clinical, psychological and economic implications of this phenomenon merit further investigation.
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43. Development and cohort study of an audit approach to evaluate patient management in family practice in the UK: the 7S tool

Authors Fisher S.J.; Margerison L.N.; Jonker L.
Source Family practice; Sep 2019
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Database EMBASE
Abstract BACKGROUND: In the UK, there is increased pressure on general practitioners' time due to an increase in (elderly) population and a shortage of general practitioners. This means that time has to be used efficiently, whilst optimizing adherence to consistent, appropriate and timely provision of care. OBJECTIVE(S): Create an audit tool that assists general practitioners and family practice staff to evaluate if patients are managed as effectively as possible, and to test the usefulness of this tool in a family practice.
METHOD(S): The '7S' audit tool has seven outcome elements; these broadly stand for what the actual and desired patient contact outcome was, or should have been. Terms include 'surgery', 'speak' and 'specific other' for an appointment at the practice, by telephone or with a dedicated specialist such as a practice nurse or phlebotomist, respectively.
RESULT(S): A very small, rural, general practice in the UK was audited using the 7S tool. Five hundred patient contacts were reviewed by an independent general practitioner and the decision made if the mode of contact was appropriate or not for each case; in one of the three cases, the choice of care provision was inappropriate and chronic disease cases contributed most to this. General practitioners instigated the majority of poor patient management choices, and chronic disease patients were frequently seen in suboptimal settings.
CONCLUSION(S): Inefficiencies in the management of patients in family practice can be identified with the 7S audit tool, thereby producing evidence for staff education and service reconfiguration.

44. Hospital-level evaluation of the effect of a national quality improvement programme: Time-series analysis of registry data

Authors Stephens T.J.; Haines R.; Pearse R.M.; Peden C.J.; Grocott M.P.W.; Murray D.; Cromwell D.; Johnston C.; Hare S.; Lourtie J.; Drake S.; Martin G.P.
Source BMJ Quality and Safety; 2019
Publication Date 2019
Publication Type(s) Article
PubMedID 31515437
Database EMBASE
Abstract Background and objectives: A clinical trial in 93 National Health Service hospitals evaluated a quality improvement programme for emergency abdominal surgery, designed to improve mortality by improving the patient care pathway. Large variation was observed in implementation approaches, and the main trial result showed no mortality reduction. Our objective therefore was to evaluate whether trial participation led to care pathway implementation and to study the relationship between care pathway implementation and use of six recommended implementation strategies.
Method(s): We performed a hospital-level time-series analysis using data from the Enhanced Peri-Operative Care for High-risk patients trial. Care pathway implementation was defined as achievement of >80% median reliability in 10 measured care processes. Mean monthly process performance was plotted on run charts. Process improvement was defined as an observed run chart signal, using probability-based shift' and runs' rules. A new median performance level was calculated after an observed signal.
Result(s): Of 93 participating hospitals, 80 provided sufficient data for analysis, generating 800 process measure charts from 20 305 patient admissions over 27 months. No hospital reliably implemented all 10 processes. Overall, only 279 of the 800 processes were improved (3 (2-5) per hospital) and 14/80 hospitals improved more than six processes. Mortality risk documented (57/80 (71%)), lactate measurement (42/80 (53%)) and cardiac output guided fluid therapy (32/80 (40%)) were most frequently improved. Consultant-led decision making (14/80 (18%)), consultant review before surgery (17/80 (21%)) and time to surgery (14/80 (18%)) were least frequently improved. In hospitals using >=5 implementation strategies, 9/30 (30%) hospitals improved >=6 care processes compared with 0/11 hospitals using <=2 implementation strategies.
Conclusion(s): Only a small number of hospitals improved more than half of the measured care processes, more often when at least five of six implementation strategies were used. In a longer term project, this understanding may have allowed us to adapt the intervention to be effective in more hospitals.

45. Effect of a Standard vs Enhanced Implementation Strategy to Improve Antibiotic Prescribing in Nursing Homes: A Trial Protocol of the Improving Management of Urinary Tract Infections in Nursing Institutions Through Facilitated Implementation (IMUNIFI) Study

Authors Ford J.H.; Vranas L.; Selle K.M.; Ewers T.; Crnich C.J.; Coughlin D.; Nordman-Oliveira S.; Ryther B.; Griffin V.L.; Eslinger A.; Boero J.; Hardgrove P.
Source JAMA Network Open; Sep 2019; vol. 2 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31509204
Database EMBASE
Abstract Importance: Suspicion of urinary tract infection (UTI) is the major driver of overuse and misuse of antibiotics in nursing homes (NHs). Effects of interventions to improve the recognition and management of UTI in NHs have been mixed, potentially owing to differences in how interventions were implemented in different studies. An improved understanding of how implementation approach influences intervention adoption is needed to achieve wider dissemination of antibiotic stewardship interventions in NHs.
Objective(s): To compare the effects of 2 implementation strategies on the adoption and effects of a quality improvement toolkit to enhance recognition and management of UTIs in NHs.
Design, Setting, and Participant(s): This cluster-randomized hybrid type 2 effectiveness-implementation clinical trial will be performed over a 6-month baseline (January to June 2019) and 12-month postimplementation period (July 2019 to June 2020). A minimum of 20 Wisconsin NHs with 50 or more beds will be recruited and randomized in block sizes of 2 stratified by rurality (rural vs urban). All residents who are tested and/or treated for UTI in study NHs will be included in the analysis. All study NHs will implement a quality improvement toolkit focused on enhancing the recognition and management of UTIs. Facilities will be randomized to either a usual or enhanced implementation approach based on external facilitation (coaching), collaborative peer learning, and peer comparison feedback. Enhanced implementation is hypothesized to be associated with improvements in adoption of the quality improvement toolkit and clinical outcomes. Primary outcomes of the study will include number of (1) urine cultures per 1000 resident days and (2) antibiotic prescriptions for treatment of suspected UTI per 1000 resident-days. Secondary outcomes of the study will include appropriateness of UTI treatments, treatment length, use of fluoroquinolones, and resident transfers and mortality. A mixed-methods evaluation approach will be used to assess extent and determinants of adoption of the UTI quality improvement toolkit in study NHs.
Discussion(s): Knowledge gained during this study could help inform future efforts to implement antibiotic stewardship and quality improvement interventions in NHs. Trial Registration: ClinicalTrials.gov identifier: NCT03520010.

46. Enhancing care of patients requiring a tracheostomy: A sustained quality improvement project

Authors Twose P.; Jones G.; Lowes J.; Morgan P.
Source Journal of Critical Care; Dec 2019; vol. 54 ; p. 191-196
Publication Date Dec 2019
Publication Type(s) Article
PubMedID 31521015
Database EMBASE

Abstract Introduction: Within the UK approximately 5000 surgical and 12,000 percutaneous tracheostomies are performed annually. Whilst an essential component of patient care, the presence of a tracheostomy is not without concern. Landmark papers have demonstrated recurrent themes related to the provision of training, staff and equipment, leading to avoidable patient harm, life-altering morbidity and mortality. The development of the Global Tracheostomy Collaborative (GTC) and the Improving Tracheostomy Care (ITC) project have provided the necessary infrastructure to make improvements, with individual organizations responsible for its implementation.
Method(s): This quality improvement project, funded by the NHS Wales Critical Care and Trauma Network, developed a dedicated tracheostomy team to improve the quality of care provided to those patients requiring a tracheostomy through staff education, equipment standardisation and multidisciplinary tracheostomy ward rounds. Global Tracheostomy membership was funded through involvement in the ITC project.
Result(s): Formal tracheostomy teaching was delivered by the tracheostomy team to 165 clinicians involved in tracheostomy care. Improvements in self-assessed confidence with knowledge and were observed for all aspects of tracheostomy care. Standardisation and centralisation resulted in reduction in waste and unnecessary variation. Compliance with 'emergency tracheostomy blue box' availability with an increase from 5% to 100%. Comparison of data from the QI period against baseline data, demonstrated improvement in rates of decannulation, and non-significant improvements in time to decannulation, critical care and hospital length of stay. Additionally, there were associated reductions in adverse events.
Conclusion(s): This QI project, supported by involvement with the GTC and ITC, resulted in reductions in adverse events, improved patient safety, non-significant reduction in time to achieve weaning milestones and a reduction in hospital length of stay.

47. UK maternity services: audit finds wide variation in birth complications

Authors Mayor S.
Source BMJ (Clinical research ed.); Sep 2019; vol. 366
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31519765
Database EMBASE

48. National Diabetes Inpatient Audit: how can inpatient teams make patients feel safer?

Authors Johnston P.
Source British journal of nursing (Mark Allen Publishing); May 2018; vol. 27 (no. 10); p. 534-536
Publication Date May 2018
Publication Type(s) Article
PubMedID 29791214
Database EMBASE

49. The National Radium-223 Dichloride Audit group: Data from patients in UK oncology centers with metastatic castration-resistant prostate cancer treated with radium-223 dichloride

Authors Randhawa M.; Jones R.J.; Stratton I.
Source Journal of Clinical Oncology; May 2019; vol. 37
Publication Date May 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Background: Clinicians in 17 UK oncology centres comprise the National Radium-223 Dichloride Audit (NRDA) group which is evaluating treatment outcomes in patients with metastatic castration-resistant prostate cancer (mCRPC) treated with radium-223 dichloride (Xofigo).
Method(s): Patients commencing treatment from 1st September 2017 were included. Clinical and laboratory parameters were collected throughout treatment. Analyses used frequency tables and univariate analysis.
Result(s):As of February 2019, data from 400 patients has been collected. We report the outcomes on the first 150 patients who are evaluable. At first treatment, median age was 72 years (25th to 75th centile: 67-78), 54% of patients had an ECOG performance status (PS) of 1, 32.6% of patients had a WHO pain score of 1, 60% of patients had an ALP level of < 220U/L and 26% of patients received docetaxel for mCRPC. The mean number of cycles completed was 5. Sixty patients (40%) did not complete 6 cycles and 42/60 (70%) discontinued due to disease progression. Changes in variables between treatment 1 and 6 are shown in Table. Adverse events reported were fatigue (76%), diarrhoea (38%), nausea/vomiting (35%), constipation (32%), anaemia (28%), thrombocytopaenia (12%) and neutropaenia (5%). There was no overall change in ECOG PS. In those who completed quality of life (QOL) questionnaires at treatment 1 and 6 (58%), there was no difference.
Conclusion(s): The ongoing NRDA Group records data from mCRPC patients treated across the UK in routine care. To our knowledge, it is the first prospective analysis of such patients and the largest in assessing treatment patterns and outcomes including QOL data as well as standard laboratory parameters. Disclosures: The NRDA Group has been funded by a research grant from Bayer.(Table Presented).

50. Quality of life among HAE patients in South West England (Devon and Cornwall) using HAE-QoL questionnaire designed by Foundation for Biomedical Research of la Paz University Hospital Madrid (FIBHULP)

Authors Symons C.C.; Bethune C.A.; Whyte A.F.; Leeman L.; Caballero T.
Source Allergy, Asthma and Clinical Immunology; Aug 2019; vol. 15
Publication Date Aug 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Background: Hereditary Angioedema (HAE) is a rare but potentially life-threatening inherited condition. HAE is characterised by episodes of angioedema afecting various body parts including the hands, feet, face and airway. Incidence is approximately 1 in 50,000. The Department of Clinical Immunology and Allergy at University Hospitals Plymouth has 43 patients with HAE from across Devon and Cornwall: an incidence of approximately 1 in 42,000. Dedicated HAE clinics are held 3 times a year where patients are seen, clinically assessed, have treatment reviews and are encouraged to enroll in clinical trials and research studies or have ongoing review by the research team.
Method(s): In June 2017 permission was granted to the lead author to use the HAE-QoL v.2 questionnaire, and the project was registered with UHPNT Audit Department. Between October 2017 and February 2019 patients attending HAE clinics were approached to complete the questionnaire and 24 agreed. All HAE patients in our clinics have access to a range of therapies. Some prefer to take traditional oral prophylactic therapies (attenuated androgens, tranexamic acid); others treat symptoms with icatibant or C1 esterase inhibitor concentrate (C1INH). C1INH (plasma-derived or recombinant) is available for short-term prophylaxis (pre-surgery, dental) or longer term (school/college exams) according to the UK HAE consensus document [1].
Result(s): The questionnaire comprises 25 questions refecting the previous 6 months. The answers are graded out of 5 or 6 with higher score refecting 'not a problem' and lower score 'extremely'. Answers are captured into 7 dimensions: physical functioning and health, disease related stigma, emotional role and social functioning, concern about ofspring, perceived control over illness, mental health, and treatment difculties. The results are presented here by gender and age ranges for each dimension. Note: no female patients in this cohort fell into the age range 35 - 50 years.
Conclusion(s): High scores across all dimensions (mean and median scores) suggest this group of patients has reasonably good quality of life apart from one outlier, a female aged 50 + . However lower scores for perceived control over illness highlight the unpredictable nature of HAE attacks even if few patients experience treatment difculties. The author intends to repeat this study when new 'pipeline' prophylactic medications become available for UK patients.

51. Evaluating the impact of cycle helmet use on severe traumatic brain injury and death in a national cohort of over 11000 pedal cyclists: a retrospective study from the NHS England Trauma Audit and Research Network dataset

Authors Dodds N.; Johnson R.; Walton B.; Thompson J.; Bouamra O.; Yates D.; Lecky F.E.
Source BMJ open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31519669
Database EMBASE

Abstract OBJECTIVES: In the last 10 years there has been a significant increase in cycle traffic in the UK, with an associated increase in the overall number of cycling injuries. Despite this, and the significant media, political and public health debate into this issue, there remains an absence of studies from the UK assessing the impact of helmet use on rates of serious injury presenting to the National Health Service (NHS) in cyclists. SETTING: The NHS England Trauma Audit and Research Network (TARN) Database was interrogated to identify all adult (>=16 years) patients presenting to hospital with cycling-related major injuries, during a period from 14 March 2012 to 30 September 2017 (the last date for which a validated dataset was available). PARTICIPANTS: 11 patients met inclusion criteria. Data on the use of cycling helmets were available in 6621 patients. OUTCOME MEASURES: TARN injury descriptors were used to compare patterns of injury, care and mortality in helmeted versus non-helmeted cohorts.
RESULT(S): Data on cycle helmet use were available for 6621 of the 11192 cycle-related injuries entered onto the TARN Database in the 66 months of this study (93 excluded as not pedal cyclists). There was a significantly higher crude 30-day mortality in un-helmeted cyclists 5.6% (4.8%-6.6%) versus helmeted cyclists 1.8% (1.4%-2.2%) (p<0.001). Cycle helmet use was also associated with a reduction in severe traumatic brain injury (TBI) 19.1% (780, 18.0%-20.4%) versus 47.6% (1211, 45.6%-49.5%) (p<0.001), intensive care unit requirement 19.6% (797, 18.4%-20.8%) versus 27.1% (691, 25.4%-28.9%) (p<0.001) and neurosurgical intervention 2.5% (103, 2.1%-3.1%) versus 8.5% (217, 7.5%-9.7%) (p<0.001). There was a statistically significant increase in chest, spinal, upper and lower limb injury in the helmeted group in comparison to the un-helmeted group (all p<0.001), though in a subsequent analysis of these anatomical injury patterns, those cyclists wearing helmets were still found to have lower rates of TBI. In reviewing TARN injury codes for specific TBI and facial injuries, there was a highly significant decrease in rates of impact injury between cyclists wearing helmets and those not.
CONCLUSION(S): This study suggests that there is a significant correlation between use of cycle helmets and reduction in adjusted mortality and morbidity associated with TBI and facial injury.

52. Stage III Non-small Cell Lung Cancer Management in England

Authors Adizie J.B.; Woolhouse I.; Khakwani A.; Beckett P.; Navani N.; West D.; Harden S.V.
Source Clinical Oncology; Oct 2019; vol. 31 (no. 10); p. 688-696
Publication Date Oct 2019
Publication Type(s) Article
PubMedID 31514942
Database EMBASE
Abstract Aims: We present the first analysis of the management and outcomes of stage III non-small cell lung cancer (NSCLC) conducted in England using National Lung Cancer Audit data.
Material(s) and Method(s): Patients diagnosed with stage III NSCLC in 2016 were identified. Linked datasets (including Hospital Episode Statistics, the National Radiotherapy Dataset, the Systemic Anti-Cancer Dataset, pathology reports and death certificate data) were used to categorise the treatment received. Kaplan-Meier survival curves were obtained, with survival defined from the date of diagnosis to the date of death.
Result(s): In total, 6276 cases of stage III NSCLC were analysed: 3827 stage IIIA and 2449 stage IIIB; 1047 (17%) patients were treated with radical radiotherapy with 676 (11%) of these also receiving chemotherapy. Twenty per cent of patients with stage IIIA disease underwent surgery, with half of these also receiving chemotherapy, predominantly delivered in the adjuvant setting. Of note, 2148 (34%) patients received palliative-intent treatment and 2265 (36%) received no active anti-cancer treatment. The 1-year survival was 32.9% (37.4% for stage IIIA), with the highest survival seen for those patients receiving chemotherapy and surgery.
Conclusion(s): We highlight important gaps in the optimal care of patients with stage III NSCLC in England. Multimodality treatment with either surgery or radical radiotherapy combined with chemotherapy was delivered to less than one-fifth of patients, even though these regimens are considered optimal. Timely access to specialist resources and staff, the practice of effective shared decision making and challenging preconceptions have the potential to optimise management.

53. Oncoplastic breast conservation occupies a niche between standard breast conservation and mastectomy - A population-based prospective audit in Scotland

Authors Morrow E.S.; Romics L.; Stallard S.; Doughty J.; Malyon A.; Barber M.; Dixon J.M.
Source European Journal of Surgical Oncology; Oct 2019; vol. 45 (no. 10); p. 1806-1811
Publication Date Oct 2019
Publication Type(s) Conference Paper
PubMedID 30902354
Database EMBASE

Abstract Introduction: The role of oncoplastic breast conservation (OBC) surgery is not fully defined in terms of whether it is equivalent to standard breast conservation (SBC), or more an alternative to mastectomy, or whether it occupies its own niche somewhere between the two. Therefore, we have carried out a population-based prospective audit of the current OBC practice in Scotland.
Method(s): All patients diagnosed with breast cancer in the whole of Scotland between 01/01/2014 and 31/12/2015 were prospectively recorded within the National Managed Clinical Networks databases. Patients treated with OBC were compared to patients who had SBC, mastectomy and mastectomy with immediate reconstruction (MIR).
Result(s): 8075 patients were included (OBC:217(2.7%); SBC:5241(64.9%); mastectomy:1907(23.6%); MIR:710(8.8%)). OBC patients were younger than SBC or mastectomy, but older than MIR (p < 0.0001). OBC patients were between SBC and mastectomy patients in terms of clinical and pathological tumour size (all p < 0.001), rates of lobular cancers (v.SBC:p = 0.015 and v.mastectomy:p < 0.001), high-grade tumours (v.SBC:p = 0.030 and v.mastectomy:p = 0.008), ER negative (v.SBC: p = 0.042) and HER-2 positive (v.SBC: p = 0.003) tumours, and nodal metastasis (v.mastectomy: p < 0.001). More OBC patients received (neo)adjuvant chemo- and hormonal therapy (p <= 0.001), adjuvant radiotherapy (p = 0.005), trastuzumab (p < 0.001) than SBC. More OBC patients presented through screening (v.mastectomy/MIR: p < 0.0001). Time to surgery from diagnosis was longer for OBC than SBC/mastectomy (p < 0.0001), but shorter than MIR (p = 0.007).
Conclusion(s): This national audit demonstrates that OBC occupies its own niche between SBC, mastectomy and MIR in the surgical treatment of breast cancer in Scotland. We recommend that OBC should be recorded separately in other national breast cancer registries.

54. Role of Emergency Laparoscopic Colectomy for Colorectal Cancer: A Population-based Study in England

Authors Vallance A.E.; Kuryba A.; Van Der Meulen J.; Walker K.; Keller D.S.; Chand M.; Hill J.; Braun M.
Source Annals of Surgery; Jul 2018; vol. 270 (no. 1); p. 172-179
Publication Date Jul 2018
Publication Type(s) Article
PubMedID 29621034
Database EMBASE
Abstract Objective:To evaluate factors associated with the use of laparoscopic surgery and the associated postoperative outcomes for urgent or emergency resection of colorectal cancer in the English National Health Service.Summary of Background Data:Laparoscopy is increasingly used for elective colorectal cancer surgery, but uptake has been limited in the emergency setting.
Method(s):Patients recorded in the National Bowel Cancer Audit who underwent urgent or emergency colorectal cancer resection between April 2010 and March 2016 were included. A multivariable multilevel logistic regression model was used to estimate odds ratios (ORs) of undergoing laparoscopic resection and postoperative outcome according to approach.
Result(s):There were 15,516 patients included. Laparoscopy use doubled from 15.1% in 2010 to 30.2% in 2016. Laparoscopy was less common in patients with poorer physical status [American Society of Anaesthesiologists (ASA) 4/5 vs 1, OR 0.29 (95% confidence interval, 95% CI 0.23-0.37), P < 0.001] and more advanced T-stage [T4 vs T0-T2, OR 0.28 (0.23-0.34), P < 0.001] and M-stage [M1 vs M0, OR 0.85 (0.75-0.96), P < 0.001]. Age, socioeconomic deprivation, nodal stage, hospital volume, and a dedicated colorectal emergency service were not associated with laparoscopy. Laparoscopic patients had a shorter length of stay [median 8 days (interquartile range (IQR) 5 to 15) vs 12 (IQR 8 to 21), adjusted mean difference -3.67 (-4.60 to 2.74), P < 0.001], and lower 90-day mortality [8.1% vs 13.0%; adjusted OR 0.78 (0.66-0.91), P = 0.004] than patients undergoing open resection. There was no significant difference in rates of readmission or reoperation by approach.
Conclusion(s):The use of laparoscopic approach in the emergency resection of colorectal cancer is linked to a shorter length of hospital stay and reduced postoperative mortality.

55. Incidence and risk factors for important early morbidities associated with pediatric cardiac surgery in a UK population

Authors Brown K.L.; Wray J.; Tsang V.T.; Ridout D.; Pagel C.; Utley M.; Anderson D.; Tibby S.; Barron D.J.; Cassidy J.; Davis P.J.; Stoica S.; Rodrigues W.
Source Journal of Thoracic and Cardiovascular Surgery; Oct 2019; vol. 158 (no. 4); p. 1185
Publication Date Oct 2019
Publication Type(s) Conference Paper
PubMedID 31353100
Database EMBASE

Abstract Objective: Given excellent 30-day survival for pediatric cardiac surgery, other outcome measures are important. We aimed to study important early postoperative morbidities selected by stakeholders following a rigorous and evidenced-based process, with a view to identifying potential risk factors.
Method(s): The incidence of selected morbidities was prospectively measured for 3090 consecutive pediatric cardiac surgical admissions in 5 UK centers between October 2015 and June 2017. The relationship between the candidate risk factors and the incidence of morbidities was explored using multiple regressions. Patient survival, a secondary outcome, was checked at 6 months.
Result(s): A total of 675 (21.8%) procedure episodes led to at least 1 of the following: acute neurologic event, unplanned reoperation, feeding problems, renal replacement therapy, major adverse events, extracorporeal life support, necrotizing enterocolitis, surgical infection, or prolonged pleural effusion. The highest adjusted odds ratio of morbidity was in neonates compared with children, 5.26 (95% confidence interval, 3.90-7.06), and complex heart diseases (eg, hypoplastic left heart), 2.14 (95% confidence interval, 1.41-3.24) compared with low complexity (eg, atrial septal defect, P < .001 for all). Patients with any selected morbidity had a 6-month survival of 88.2% (95% confidence interval, 85.4-90.6) compared with 99.3% (95% confidence interval, 98.9-99.6) with no defined morbidity (P < .001).
Conclusion(s): Evaluation of postoperative morbidity provides important information over and above 30-day survival and should become a focus for audit and quality improvement. Our results have been used to initiate UK-based audit for 5 of these 9 morbidities, co-develop software for local monitoring of these morbidities, and parent information about these morbidities.

56. Long-term antithrombotic therapy and risk of intracranial haemorrhage from cerebral cavernous malformations: a population-based cohort study, systematic review, and meta-analysis

Authors Zuurbier S.M.; Hickman C.R.; Tolias C.S.; Al-Shahi Salman R.; Rinkel L.A.; Leyrer R.; Sure U.; Flemming K.D.; Lanzino G.; Bervini D.; Wityk R.J.; Schneble H.-M.
Source The Lancet Neurology; Oct 2019; vol. 18 (no. 10); p. 935-941
Publication Date Oct 2019
Publication Type(s) Article
PubMedID 31401075
Database EMBASE
Abstract Background: Antithrombotic (anticoagulant or antiplatelet) therapy is withheld from some patients with cerebral cavernous malformations, because of uncertainty around the safety of these drugs in such patients. We aimed to establish whether antithrombotic therapy is associated with an increased risk of intracranial haemorrhage in adults with cerebral cavernous malformations.
Method(s): In this population-based, cohort study, we used data from the Scottish Audit of Intracranial Vascular Malformations, which prospectively identified individuals aged 16 years and older living in Scotland who were first diagnosed with a cerebral cavernous malformation during 1999-2003 or 2006-10. We compared the association between use of antithrombotic therapy after first presentation and the occurrence of intracranial haemorrhage or persistent or progressive focal neurological deficit due to the cerebral cavernous malformations during up to 15 years of prospective follow-up with multivariable Cox proportional hazards regression assessed in all individuals identified in the database. We also did a systematic review and meta-analysis, in which we searched Ovid MEDLINE and Embase from database inception to Feb 1, 2019, to identify comparative studies to calculate the intracranial haemorrhage incidence rate ratio according to antithrombotic therapy use. We then generated a pooled estimate using the inverse variance method and a random effects model.
Finding(s): We assessed 300 of 306 individuals with a cerebral cavernous malformation who were eligible for study. 61 used antithrombotic therapy (ten [16%] of 61 used anticoagulation) for a mean duration of 7.4 years (SD 5.4) during follow-up. Antithrombotic therapy use was associated with a lower risk of subsequent intracranial haemorrhage or focal neurological deficit (one [2%] of 61 vs 29 [12%] of 239, adjusted hazard ratio [HR] 0.12, 95% CI 0.02-0.88; p=0.037). In a meta-analysis of six cohort studies including 1342 patients, antithrombotic therapy use was associated with a lower risk of intracranial haemorrhage (eight [3%] of 253 vs 152 [14%] of 1089; incidence rate ratio 0.25, 95% CI 0.13-0.51; p<0.0001; I^2=0%).
Interpretation(s): Antithrombotic therapy use is associated with a lower risk of intracranial haemorrhage or focal neurological deficit from cerebral cavernous malformations than avoidance of antithrombotic therapy. These findings provide reassurance about safety for clinical practice and require further investigation in a randomised controlled trial.
Funding(s): UK Medical Research Council, Chief Scientist Office of the Scottish Government, The Stroke Association, Cavernoma Alliance UK, and the Remmert Adriaan Laan Foundation.

57. Strategies to alleviate shortages of nurses in adult social care

Authors Glasper A.

Source British journal of nursing (Mark Allen Publishing); Mar 2018; vol. 27 (no. 6); p. 334-335
Publication Date Mar 2018
Publication Type(s) Article
PubMedID 29561676
Database EMBASE
Abstract A lack of investment in adult social care has led to major staffing problems in care homes, according to a new report from the National Audit Office, as Emeritus Professor Alan Glasper, University of Southampton, explains.

58. Sharing the results of a patient satisfaction audit

Authors Walker K.; Osborne D.; Milton S.; Watkins R.; Newman S.; Pullen J.; Davies T.
Source British journal of nursing (Mark Allen Publishing); Mar 2018; vol. 27 (no. 5)
Publication Date Mar 2018
Publication Type(s) Article
PubMedID 29517332
Database EMBASE
Abstract Regular service audits since 2008 gave a stoma care department confidence in the service it provides. In 2016 the department undertook a new audit to benchmark its services, using the Association of Stoma Care Nurses (ASCN) UK Revised Stoma Care Nursing Standards and Audit Tool (2015) . Of the 60 questionnaires given out, 43 were returned (71%). The results highlighted areas of good practice with positive patient feedback. However, it also identified that the team needed to improve documentation when offering patients the opportunity to meet a former patient with a stoma preoperatively and when discussing lifestyle issues. The results demonstrated poor preoperative compliance; this was lower than expected and did not concur with department statistics. The audit highlights the importance of clarity when developing a questionnaire to ensure all respondents not only interpret its meaning in the same way, but also only answer the questions specific to them.

59. The use of acuity and frailty measures for district nursing workforce plans

Authors David A.; Saunders M.
Source British journal of community nursing; Feb 2018; vol. 23 (no. 2); p. 86-92
Publication Date Feb 2018
Publication Type(s) Article
PubMedID 29384714
Database EMBASE
Abstract This article discusses the use of Quest acuity and frailty measures for community nursing interventions to quantify and qualify the contributions of district nursing teams. It describes the use of a suite of acuity and frailty tools tested in 8 UK community service trusts over the past 5years. In addition, a competency assessment tool was used to gauge both capacity and capability of individual nurses. The consistency of the results obtained from the Quest audits offer significant evidence and potential for realigning community nursing services to offer improvements in efficiency and cost-effectiveness. The National Quality Board (NQB) improvement resource for the district nursing services (NQB, 2017) recommends a robust method for classifying patient acuity/frailty/dependency. It is contended the Quest tools and their usage articulated here offer a suitable methodology.

60. The accreditation system of Italian medical residency programs: fostering quality and sustainability of the National Health Service

Authors Mazzucco W.; Silenzi A.; Gray M.; Vettor R.
Source Acta bio-medica : Atenei Parmensis; Sep 2019; vol. 90 (no. 9); p. 15-20
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31517885
Database EMBASE

Abstract BACKGROUND AND AIM: In June 2017, University and Health Ministries jointly enacted a decree implementing a new accreditation system for the Italian post-graduate medical schools (residency programs). We report the innovations introduced through the reform.
METHOD(S): Universities were called to submit post-graduate medical school projects to the National Observatory on medical residency programs, the inter-institutional committee responsible for the entire accreditation process, through an interactive web platform. The adherence to minimum standards, requirements and the performances were measured. After this first assessment, universities were asked to provide programs of improvement for critical schools. At the end of the evaluation, residency schools were proposed for a full or a partial accreditation.
RESULT(S): Of the 1,431 post-graduate medical school projects submitted to the National Observatory by 37 public and 4 private Universities, 672 (47.0%) obtained a full accreditation, 629 (43.9%) a partial accreditation, with a gap to be filled within a two-year period according to a specific improvement programme, while 130 (9.1%) were not accredited. Further, 1,254 out of the 1,301 schools with a full or partial accreditation were activated according to the available public financial resources, excluding those performing the lowest. Annual surveys were in place to investigate the residents' level of satisfaction concerning the quality of the training programs. The National Observatory further developed an experimental methodology to conduct on-site visits to support quality improvement.
CONCLUSION(S): This reform can be considered an important initiative to guarantee high standards in the quality of care and to face the challenge of sustainability for the National Health System.

61. Identifying Disparities in the Management of Hip Fractures Within Europe: A Comparison of 3 Health-Care Systems

Authors Murray C.E.; Fuchs A.; Grunewald H.; Sudkamp N.P.; Konstantinidis L.; Godkin O.
Source Geriatric Orthopaedic Surgery and Rehabilitation; 2019; vol. 10
Publication Date 2019
Publication Type(s) Article
Database EMBASE

Abstract Introduction: This study investigates the management of hip fractures in a German maximum care hospital and compares these data to evidence-based standard and practice in 180 hospitals participating in the UK National Hip Fracture Database (NHFD) and 16 hospitals participating in the Irish Hip Fracture Database (IHFD). This is the first study directly comparing the management of hip fractures between 3 separate health-care systems within Europe.
Method(s): Electronic medical data were collected retrospectively describing the care pathway of elderly patients with a hip fracture admitted to a large trauma unit in the south of Germany "University Hospital Freiburg" (UHF). The audit evaluated demographics, postoperative outcome, and the adherence to the 6 "Blue Book" standards of care. These data were directly compared with the data from the UK NHFD and the IHFD acquired from 180 and 16 hospitals, respectively.
Result(s): At 36 hours, 95.8% of patients had received surgery in UHF, compared to 71.5% in the NHFD and 58% of patients in the IHFD. The rate of in-hospital mortality was 4.7% compared to 7.1% in the NHFD and 5% in the IHFD. The mean average acute length of stay was 13.4 days compared to 16.4 days in the NHFD and 20 days in the IHFD. Reoperation rates are 3.3% compared to 1% in the NHFD and 1.1% in the IHFD; 50.5% of patients were discharged on bone protection medication, compared to 47% in the IHFD and 79.3% in the UK NHFD.
Discussion(s): Despite uniformly acknowledged evidence-based treatment guidelines, the management of hip fractures remains heterogeneous within Europe.
Conclusion(s): These data show that different areas of the hip fracture care pathway in Germany, England, and Ireland, respectively, show room for improvement in light of the growing socioeconomic burden these countries are expected to face.

62. Factors influencing use of community treatment orders and quality of care that people receive: Results of a national survey in England and Wales

Authors Lei H.; Barnicot K.; Sanatinia R.; Maynard E.; Etherington A.; Zalewska K.; Quirk A.; Cooper S.J.; Crawford M.J.
Source BJPsych Bulletin; Oct 2019; vol. 43 (no. 5); p. 227-235
Publication Date Oct 2019
Publication Type(s) Article
Database EMBASE

Abstract Aims and method We conducted a secondary analysis of data from the National Audit of Psychosis to identify factors associated with use of community treatment orders (CTOs) and assess the quality of care that people on CTOs receive.Results Between 1.1 and 20.2% of patients in each trust were being treated on a CTO. Male gender, younger age, greater use of in-patient services, coexisting substance misuse and problems with cognition predicted use of CTOs. Patients on CTOs were more likely to be screened for physical health, have a current care plan, be given contact details for crisis support, and be offered cognitive-behavioural therapy.Clinical implications CTOs appear to be used as a framework for delivering higher-quality care to people with more complex needs. High levels of variation in the use of CTOs indicate a need for better evidence about the effects of this approach to patient care.

63. The London memory service audit and quality improvement programme

Authors Cook L.D.; Nichol K.E.; Isaacs J.D.
Source BJPsych Bulletin; Oct 2019; vol. 43 (no. 5); p. 215-220
Publication Date Oct 2019
Publication Type(s) Article
Database EMBASE
Abstract Aims and method Memory services have expanded significantly in the UK, but limited performance data have been published. The aim of this programme was to determine variation in London memory services and address this through service improvement projects. In 2016 London memory services were invited to participate in an audit consisting of case note reviews of at least 50 consecutively seen patients.Results Ten services participated in the audit, totalling 590 patients. Variation was noted in neuroimaging practice, neuropsychology referrals, diagnosis subtype, non-dementia diagnoses, waiting times and post-diagnostic support. Findings from the audit were used to initiate four service improvement projects.Clinical Implications Memory services should consider streamlining pathways to reduce waiting times, implementing pathways for patients who do not have dementia, monitoring appropriateness of neuroimaging, and working with commissioners and primary care to ensure that access to post-diagnostic interventions is consistent with the updated National Institute for Health and Care Excellence (NICE) dementia guideline.Declaration of interest J.D.I. received an honorarium from Biogen for an advisory board. He has been Principal Investigator in clinical trials sponsored by Roche, Merck and Lupin pharmaceuticals. He was a member of the 2018 NICE dementia clinical guideline committee.

64. 'Mind the gaps': The accessibility and implementation of an effective depression relapse prevention programme in UK NHS services: Learning from mindfulness-based cognitive therapy through a mixedmethods study

Authors Rycroft-Malone J.; Owen Griffiths H.; Gradinger F.; Anderson R.; Crane R.S.; Gibson A.; Mercer S.W.; Kuyken W.
Source BMJ Open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31501097
Database EMBASE
Abstract Mindfulness-based cognitive therapy (MBCT) is an evidence-based approach for people at risk of depressive relapse to support their long-term recovery. However, despite its inclusion in guidelines, there is an a implementation cliff'. The study objective was to develop a better explanation of what facilitates MBCT implementation. Setting UK primary and secondary care mental health services. Design, participants and methods A national two-phase, multi-method qualitative study was conducted, which was conceptually underpinned by the Promoting Action on Research Implementation in Health Services framework. Phase I involved interviews with stakeholders from 40 service providers about current provision of MBCT. Phase II involved 10 purposively sampled case studies to obtain a more detailed understanding of MBCT implementation. Data were analysed using adapted framework analysis, refined through stakeholder consultation. Results Access to MBCT is variable across the UK services. Where available, services have adapted MBCT to fit their context by integrating it into their care pathways. Evidence was often important to implementation but took different forms: the NICE depression guideline, audits, evaluations, first person accounts, experiential taster sessions and pilots. These were used to build a platform from which to develop MBCT services. The most important aspect of facilitation was the central role of the MBCT implementers. These were generally self-designated individuals who a championed' grass-roots implementation. Our explanatory framework mapped out a prototypical implementation journey, often over many years with a balance of bottom-up and top-down factors influencing the fit of MBCT into service pathways. a Pivot points' in the implementation journey provided windows of either challenge or opportunity. Conclusions This is one of the largest systematic studies of the implementation of a psychological therapy. While access to MBCT across the UK is improving, it remains patchy. The resultant explanatory framework about MBCT implementation provides a heuristic that informed an implementation resource.

65. Analysis of English general practice level data linking medication levels, service activity and demography to levels of glycaemic control being achieved in type 2 diabetes to improve clinical practice and patient outcomes

Authors Heald A.; Lunt M.; Davies M.; Stedman M.; Livingston M.; Fryer A.; Gadsby R.
Source BMJ Open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31494602
Database EMBASE
Abstract Objective Evaluate relative clinical effectiveness of treatment options for type 2 diabetes mellitus (T2DM) using a statistical model of real-world evidence within UK general practitioner practices (GPP), to quantify the opportunities for diabetes care performance improvement. Method From the National Diabetes Audit in 2015-2016 and 2016-2017, GPP target glycaemic control (TGC-%HbA1c <=58 mmol/mol) and higher glycaemic risk (HGR-%HbA1c results >86 mmol/mol) outcomes were linked using multivariate linear regression to prescribing, demographics and practice service indicators. This was carried out both cross-sectionally (XS) (within year) and longitudinally (Lo) (across years) on 35 indicators. Standardised beta coefficients were used to show relative level of impact of each factor. Improvement opportunity was calculated as impact on TGC & HGR numbers. Results Values from 6525 GPP with 2.7 million T2DM individuals were included. The cross-sectional model accounted for up to 28% TGC variance and 35% HGR variance, and the longitudinal model accounted for up to 9% TGC and 17% HGR variance. Practice service indicators including % achieving routine checks/blood pressure/cholesterol control targets were positively correlated, while demographic indicators including % younger age/social deprivation/white ethnicity were negatively correlated. The beta values for selected molecules are shown as (increased TGC; decreased HGR), canagliflozin (XS 0.07;0.145/Lo 0.04;0.07), metformin (XS 0.12;0.04/Lo-;-), sitagliptin (XS 0.06;0.02/Lo 0.10;0.06), empagliflozin (XS-;0.07/Lo 0.09;0.07), dapagliflozin (XS-;0.04/Lo-;0.4), sulphonylurea (XS-0.18;-0.12/Lo-;-) and insulin (XS-0.14;0.02/Lo-0.09;-). Moving all GPP prescribing and interventions to the equivalent of the top performing decile of GPP could result in total patients in TGC increasing from 1.90 million to 2.14 million, and total HGR falling from 191 000 to 123 000. Conclusions GPP using more legacy therapies such as sulphonylurea/insulin demonstrate poorer outcomes, while those applying holistic patient management/use of newer molecules demonstrate improved glycaemic outcomes. If all GPP moved service levels/prescribing to those of the top decile, both TGC/HGR could be substantially improved.

66. What are the important morbidities associated with paediatric cardiac surgery? A mixed methods study

Authors Brown K.L.; Wray J.; Tsang V.T.; Pagel C.; Ridout D.; Anderson D.; Witter T.; Barron D.J.; Cassidy J.; Jones A.; Davis P.; Hudson E.; McLean A.; Morris S.; Rodrigues W.; Sheehan K.; Stoica S.; Tibby S.M.
Source BMJ Open; Sep 2019; vol. 9 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31501104
Database EMBASE
Abstract Given the current excellent early mortality rates for paediatric cardiac surgery, stakeholders believe that this important safety outcome should be supplemented by a wider range of measures. Our objectives were to prospectively measure the incidence of morbidities following paediatric cardiac surgery and to evaluate their clinical and health-economic impact over 6 months. Design The design was a prospective, multicentre, multidisciplinary mixed methods study. Setting The setting was 5 of the 10 paediatric cardiac surgery centres in the UK with 21 months recruitment. Participants Included were 3090 paediatric cardiac surgeries, of which 666 patients were recruited to an impact substudy. Results Families and clinicians prioritised: Acute neurological event, unplanned re-intervention, feeding problems, renal replacement therapy, major adverse events, extracorporeal life support, necrotising enterocolitis, postsurgical infection and prolonged pleural effusion or chylothorax. Among 3090 consecutive surgeries, there were 675 (21.8%) with at least one of these morbidities. Independent risk factors for morbidity included neonatal age, complex heart disease and prolonged cardiopulmonary bypass (p<0.001). Among patients with morbidity, 6-month survival was 88.2% (95% CI 85.4 to 90.6) compared with 99.3% (95% CI 98.9 to 99.6) with none of the morbidities (p<0.001). The impact substudy in 340 children with morbidity and 326 control children with no morbidity indicated that morbidity-related impairment in quality of life improved between 6 weeks and 6 months. When compared with children with no morbidities, those with morbidity experienced a median of 13 (95% CI 10.2 to 15.8, p<0.001) fewer days at home by 6 months, and an adjusted incremental cost of 21 292 (95% CI 17 694 to 32 423, p<0.001). Conclusions Evaluation of postoperative morbidity is more complicated than measuring early mortality. However, tracking morbidity after paediatric cardiac surgery over 6 months offers stakeholders important data that are of value to parents and will be useful in driving future quality improvement.

67. Hospital-level evaluation of the effect of a national quality improvement programme: time-series analysis of registry data

Authors Stephens T.J.; Haines R.; Pearse R.M.; Peden C.J.; Grocott M.P.W.; Murray D.; Cromwell D.; Johnston C.; Hare S.; Lourtie J.; Drake S.; Martin G.P.
Source BMJ quality & safety; Sep 2019
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31515437
Database EMBASE
Abstract BACKGROUND AND OBJECTIVES: A clinical trial in 93 National Health Service hospitals evaluated a quality improvement programme for emergency abdominal surgery, designed to improve mortality by improving the patient care pathway. Large variation was observed in implementation approaches, and the main trial result showed no mortality reduction. Our objective therefore was to evaluate whether trial participation led to care pathway implementation and to study the relationship between care pathway implementation and use of six recommended implementation strategies.
METHOD(S): We performed a hospital-level time-series analysis using data from the Enhanced Peri-Operative Care for High-risk patients trial. Care pathway implementation was defined as achievement of >80% median reliability in 10 measured care processes. Mean monthly process performance was plotted on run charts. Process improvement was defined as an observed run chart signal, using probability-based 'shift' and 'runs' rules. A new median performance level was calculated after an observed signal.
RESULT(S): Of 93 participating hospitals, 80 provided sufficient data for analysis, generating 800 process measure charts from 20 305 patient admissions over 27 months. No hospital reliably implemented all 10 processes. Overall, only 279 of the 800 processes were improved (3 (2-5) per hospital) and 14/80 hospitals improved more than six processes. Mortality risk documented (57/80 (71%)), lactate measurement (42/80 (53%)) and cardiac output guided fluid therapy (32/80 (40%)) were most frequently improved. Consultant-led decision making (14/80 (18%)), consultant review before surgery (17/80 (21%)) and time to surgery (14/80 (18%)) were least frequently improved. In hospitals using >=5 implementation strategies, 9/30 (30%) hospitals improved >=6 care processes compared with 0/11 hospitals using <=2 implementation strategies.
CONCLUSION(S): Only a small number of hospitals improved more than half of the measured care processes, more often when at least five of six implementation strategies were used. In a longer term project, this understanding may have allowed us to adapt the intervention to be effective in more hospitals.

68. Taking a seat at the table: an educational model for nursing empowerment

Authors Lamb D.; Hofman A.; Clark J.; Hughes A.; Sukhera A.M.
Source International nursing review; Sep 2019
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31513292
Database EMBASE
Abstract BACKGROUND: The human resources for health crisis has generated much debate as to the radical changes necessary to mitigate the risks to universal health coverage. Nurses can make a significant impact on global health, if only they feel empowered to take their seat at the political table. AIM: The aim of this paper was to outline nurse-led initiatives to enhance organizational culture and clinical processes at the Combined Military Hospital in Rawalpindi, Pakistan. These have been designed and implemented by the United Kingdom (UK) Defence Medical Services to empower the nursing workforce in Pakistan.
OUTCOME(S): An educational model has been developed that will build capacity, within a workforce constrained by numbers, by bridging the gap between nursing theory and practice. It is geared to actively engage Pakistani nurses in quality improvement to ensure care is based on best evidence that will enhance patient outcomes. CONCLUSION AND IMPLICATIONS FOR NURSING & HEALTH POLICY: The wider impact of the model has already been evidenced by nurses, country-wide, who are gaining the necessary skills and confidence to realize their true potential in influencing the patient care pathway and future policy. This is crucial to the recruitment and retention of nurses who might otherwise seek alternative career paths if they lack a sense of value within the profession. Their renewed sense of value will enable them to find their voice and ability to contribute to the sustainable development goals adopted by the United Nations General Assembly in 2015.

69. IMRiS phase II study of IMRT in limb sarcomas: Results of the pre-trial QA facility questionnaire and workshop

Authors Simoes R.; Miles E.; Yang H.; Le Grange F.; Seddon B.; Bhat R.; Forsyth S.
Source Radiography; 2019
Publication Date 2019
Publication Type(s) Conference Paper
Database EMBASE

Abstract Introduction: Soft tissue sarcomas of the extremities (STSE) are rare malignancies. We report current UK practice for immobilisation of soft tissue sarcoma of STSE, as part of the initial study set-up within the IMRiS trial, a phase II study of intensity modulated radiotherapy (IMRT) in primary bone and soft tissue sarcoma.
Method(s): A facility questionnaire (FQ) was circulated to 29 IMRiS centres investigating the variation in immobilisation devices, planning techniques, and imaging protocols. A workshop was held to address concerns raised by centres. It focused on STSE immobilisation and patient set-up. Robustness of patient set-up at each centre was evaluated based on the following criteria: evidence of local set-up audit, calculation of margins based on set-up audit results, imaging frequency, and number of patients treated per centre per annum.
Result(s): Twenty-seven (93%) questionnaires were returned. 30% (8/27) of responders routinely treated STSE with IMRT. The remaining 70% (19/27) had little or no experience with IMRT for STSE. Vacuum bags were the most frequent immobilisation device (9/27), followed by thermoplastic shells (7/27). Nine centres had audited their local set-up; however, only 4 had calculated margins in response to the results. Ten centres were classified as having high level of robustness.
Conclusion(s): Immobilisation devices and planning techniques for STSE are inconsistent across centres. Robustness of set-up is an important tool to ensure quality of results in a multicentre trial setting with such different levels of experience. The IMRiS trial Quality Assurance programme encourages centres to assess robustness of set-up through local audit and subsequent calculation of treatment margins. Implications for practice: This is the first study that used robustness criteria to tailor QA support to individual centres.
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70. Nurse-led renal cancer follow-up is safe and associated with high patient satisfaction-an audit from the East of England

Authors Sibbons A.; Pillai R.; Corr J.; Persaud S.
Source ecancermedicalscience; Jul 2019; vol. 13
Publication Date Jul 2019
Publication Type(s) Article
Database EMBASE

Abstract Background: With more people diagnosed and dying from renal cancers in England than ever before, treatment and follow-up post-surgery is of paramount importance. We have instituted a nurse-led follow-up service for renal cancers as a way to improve efficiency and make better use of clinic time. This is our first attempt to audit our service.
Objective(s): One of the main objectives of this project was to measure compliance of a nurse-led renal surveillance clinic against an established institutional follow-up protocol which was based on current European Association of Urology guidelines. We also aimed to assess patient satisfaction with nurse-led care.
Patients and Methods: A total of 89 patients with low/intermediate-risk kidney cancers who were on the nurse-led renal surveillance database following nephrectomy or partial nephrectomy were placed on a database. This was then audited for adherence to the clinic protocol. These same patients were subsequently sent patient satisfaction questionnaires.
Result(s): The audit revealed high levels of compliance against the renal clinic protocol as well as positive feedback from the patient satisfaction questionnaire. Ninety-five percent said they felt either at ease or very at ease speaking to the nurse specialist. No one was dissatisfied with their consultations with 86% being very satisfied and 14% fairly satisfied. This was reinforced further by 100% of patients feeling that they could discuss all aspects of their condition with the Uro-oncology Clinical Nurse Specialist (UOCNS). Ninety-seven percent felt that they had adequate time with the nurse.
Conclusion(s): Nurse-led follow-up, in our setting, was noted to be safe and effective and was associated with high levels of patient satisfaction. This study adds to the growing body of work on the efficacy of nurse-led care.
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71. Patient preferences in tinnitus outcomes and treatments: a qualitative study

Authors Pryce H.; Hall A.; Culhane B.-A.; Swift S.; Claesen B.; Shaw R.; Straus J.
Source International journal of audiology; Oct 2018; vol. 57 (no. 10); p. 784-790
Publication Date Oct 2018
Publication Type(s) Article
PubMedID 30388941
Database EMBASE

Abstract In order to identify patient preferences in care for tinnitus an in depth grounded theory study was conducted. This consisted of interviews with 41 patients who had sought help for tinnitus across a range of locations and tinnitus services in England. Preferences for outcomes were for both the removal of the tinnitus and for improved coping and management of the tinnitus. Preferences for treatment were for individualized care, tailored information and for treatment to assist with psychological adjustment and auditory distraction. Adoption of treatments to manage tinnitus were based on a trial and error approach. Patients? preferences for individual treatments varied but were informed by the information they received. Information plays an important role in care for people with tinnitus. Patients hold individual preferences and require engagement in shared decision making.

72. The record and delivery of caries prevention for children in a primary care setting: a multi-practice collaborative clinical audit

Authors Zebic L.; Ezzeldin M.; Patel V.S.; Chhina A.; Nijran E.; Cheung V.; Banerjee A.
Source British dental journal; May 2018; vol. 224 (no. 10); p. 809-814
Publication Date May 2018
Publication Type(s) Article
PubMedID 29795500
Database EMBASE

73. Cohort profile: The Myocardial Ischaemia National Audit Project (MINAP)

Authors Wilkinson C.; Gale C.P.; Weston C.; Timmis A.; Quinn T.; Keys A.
Source European heart journal. Quality of care & clinical outcomes; Sep 2019
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31511861
Database EMBASE
Abstract AIMS: The Myocardial Ischaemia National Audit Project (MINAP) collects data from admissions in England, Wales and Northern Ireland with type 1 myocardial infarction. The project aims to improve clinical care through the audit process and to provide powerful high-resolution data for research. METHODS AND RESULTS: MINAP collects data spanning 130 data fields covering the course of patient care, from the moment the patient calls for professional help through to hospital discharge and rehabilitation.Data are entered by clinicians and clerical staff within hospitals, and pseudonymised records are uploaded centrally to the National Institute for Cardiovascular Outcomes Research (NICOR), hosted by Barts Health NHS Trust, London, UK. 206 hospitals submit over 92,000 new cases to MINAP annually. Approximately 1.5 million patient records are currently held in the database.Patient demographics, medical history, clinical assessment, investigations, treatments, drug therapy prior to admission, during hospital stay and at discharge are collected. Data completeness of three key data fields (age, admission blood pressure, and heart rate) is over 91%. Vital status following hospital discharge is obtained via linkage to data from the United Kingdom Office for National Statistics.An annual report is compiled using these data, with individual hospital summary data included. Datasets are available to researchers by application to NICOR.
CONCLUSION(S): MINAP is the largest single-healthcare-system heart attack registry, and includes data from hospitalisations with type 1 myocardial infarction in England, Wales and Northern Ireland. It includes high-resolution data across the patient pathway, and is a powerful tool for quality improvement and research.

74. Improving epilepsy management with EpSMon: A Templar to highlight the multifaceted challenges of incorporating digital technologies into routine clinical practice

Authors Newman C.; Ashby S.; McLean B.; Shankar R.
Source Epilepsy and Behavior; 2019
Publication Date 2019
Publication Type(s) Article
Database EMBASE
Abstract The digital epilepsy self-monitor (EpSMon) app was developed to address the challenge of improving risk education and management in the UK. The tool, which has emerged out of quality improvement methodology, demonstrates efficacy and has been met with peer-reviewed support and international awards. The focus of this paper is about the development and integration into care of a digital self-assessment epilepsy risk empowerment tool into the UK health system. This paper provides detail into the specific challenges of incorporating a digital epilepsy intervention into routine clinical practice. Despite a strong narrative and evidence, the engagement of commissioners, clinicians, and people with epilepsy is slow. A breakdown of the strategies used, the current governance landscape, and emerging opportunities to develop an informed implementation strategy is provided to support others who seek to create impact with digital solutions for people with epilepsy. This paper is for the Special Issue: Prevent 21: SUDEP Summit - Time to Listen".

75. Safety of direct oral anticoagulants in patients with hereditary hemorrhagic telangiectasia

Authors Shovlin C.L.; Coote N.; Millar C.M.; Droege F.; Geisthoff U.; Sure U.; Kjeldsen A.; Fialla A.D.; Torring P.M.; Manfredi G.; Buscarini E.; Suppressa P.; Lenato G.M.; Sabba C.; Ugolini S.; Pagella F.; Mager H.J.; Post M.C.; Dupuis-Girod S.
Source Orphanet Journal of Rare Diseases; Aug 2019; vol. 14 (no. 1)
Publication Date Aug 2019
Publication Type(s) Article

PubMedID 31462308
Database EMBASE
Abstract Background: Hereditary hemorrhagic telangiectasia (HHT) is a rare vascular dysplasia resulting in visceral arteriovenous malformations and smaller mucocutaneous telangiectasia. Most patients experience recurrent nosebleeds and become anemic without iron supplementation. However, thousands may require anticoagulation for conditions such as venous thromboembolism and/or atrial fibrillation. Over decades, tolerance data has been published for almost 200 HHT-affected users of warfarin and heparins, but there are no published data for the newer direct oral anticoagulants (DOACs) in HHT.
Method(s): To provide such data, a retrospective audit was conducted across the eight HHT centres of the European Reference Network for Rare Multisystemic Vascular Diseases (VASCERN), in Denmark, France, Germany, Italy, the Netherlands and the UK.
Result(s): Although HHT Centres had not specifically recommended the use of DOACs, 32 treatment episodes had been initiated by other clinicians in 28 patients reviewed at the Centres, at median age 65 years (range 30-84). Indications were for atrial fibrillation (16 treatment episodes) and venous thromboembolism (16 episodes). The 32 treatment episodes used Apixaban (n = 15), Rivaroxaban (n = 14), and Dabigatran (n = 3). HHT nosebleeds increased in severity in 24/32 treatment episodes (75%), leading to treatment discontinuation in 11 (34.4%). Treatment discontinuation was required for 4/15 (26.7%) Apixaban episodes and 7/14 (50%) Rivaroxaban episodes. By a 4 point scale of increasing severity, there was a trend for Rivaroxaban to be associated with a greater bleeding risk both including and excluding patients who had used more than one agent (age-adjusted coefficients 0.61 (95% confidence intervals 0.11, 1.20) and 0.74 (95% confidence intervals 0.12, 1.36) respectively. Associations were maintained after adjustment for gender and treatment indication. Extreme hemorrhagic responses, worse than anything experienced previously, with individual nosebleeds lasting hours requiring hospital admissions, blood transfusions and in all cases treatment discontinuation, occurred in 5/14 (35.7%) Rivaroxaban episodes compared to 3/15 (20%) Apixaban episodes and published rates of ~ 5% for warfarin and heparin.
Conclusion(s): Currently, conventional heparin and warfarin remain first choice anticoagulants in HHT. If newer anticoagulants are considered, although study numbers are small, at this stage Apixaban appears to be associated with lesser bleeding risk than Rivaroxaban.

76. Evaluation of cancer-based criteria for use in mainstream BRCA1 and BRCA2 genetic testing in patients with breast cancer

Authors Kemp Z.; Turner N.; George A.; Rahman N.; Turnbull A.; Yost S.; Seal S.; Mahamdallie S.; Poyastro-Pearson E.; Warren-Perry M.; Strydom A.; Eccleston A.; Tan M.-M.; Teo S.H.
Source JAMA Network Open; May 2019; vol. 2 (no. 5)
Publication Date May 2019
Publication Type(s) Review
PubMedID 31125106
Database EMBASE

Abstract IMPORTANCE Increasing BRCA1 and BRCA2 (collectively termed herein as BRCA) gene testing is required to improve cancer management and prevent BRCA-related cancers. OBJECTIVE To evaluate mainstream genetic testing using cancer-based criteria in patients with cancer. DESIGN, SETTING, AND PARTICIPANTS A quality improvement study and cost-effectiveness analysis of different BRCA testing selection criteria and access procedures to evaluate feasibility, acceptability, and mutation detection performance was conducted at the Royal Marsden National Health Service Foundation Trust as part of the Mainstreaming Cancer Genetics (MCG) Programme. Participants included 1184 patients with cancer who were undergoing genetic testing between September 1, 2013, and February 28, 2017. MAIN OUTCOMES AND MEASURES Mutation rates, quality-adjusted life-years (QALYs), and incremental cost-effectiveness ratios were the primary outcomes. RESULTS Of the 1184 patients (1158 women [97.8%]) meeting simple cancer-based criteria, 117 had a BRCA mutation (9.9%). The mutation ratewas similar in retrospective United Kingdom (10.2%[235 of 2294]) and prospective Malaysian (9.7%[103 of 1061]) breast cancer studies. If traditional family history criteria had been used, more than 50% of the mutation-positive individuals would have been missed. Of the 117 mutation-positive individuals, 115 people (98.3%) attended their genetics appointment and cascade to relatives is underway in all appropriate families (85 of 85). Combining with the equivalent ovarian cancer study provides 5 simple cancer-based criteria for BRCA testing with a 10% mutation rate: (1) ovarian cancer; (2) breast cancer diagnosed when patients are 45 years or younger; (3) 2 primary breast cancers, both diagnosed when patients are 60 years or younger; (4) triple-negative breast cancer; and (5) male breast cancer. A sixth criterion-breast cancer plus a parent, sibling, or child with any of the other criteria-can be added to address family history. Criteria 1 through 5 are considered the MCG criteria, and criteria 1 through 6 are considered the MCGplus criteria. Testing using MCG or MCGplus criteria is cost-effective with cost-effectiveness ratios of $1330 per discounted QALYs and $1225 per discounted QALYs, respectively, and appears to lead to cancer and mortality reductions (MCG: 804 cancers, 161 deaths; MCGplus: 1020 cancers, 204 deaths per year over 50 years). Use of MCG or MCGplus criteria might allowdetection of all BRCA mutations in patients with breast cancer in the United Kingdom through testing one-third of patients. Feedback questionnaires from 259 patients and 23 cancer team members (12 oncologists, 8 surgeons, and 3 nurse specialists) showed acceptability of the process with 100% of patients pleased they had genetic testing and 100% of cancer team members confident to approve patients for genetic testing. Use of MCGplus criteria also appeared to be time and resource efficient, requiring 95%fewer genetic consultations than the traditional process. CONCLUSIONS AND RELEVANCE This study suggests that mainstream testing using simple, cancer-based criteria might be able to efficiently deliver consistent, cost-effective, patient-centered BRCA testing.

77. Prospective Audit to Study urokinaSe use to restore Patency in Occluded centRal venous caTheters (PASSPORT 1)

Authors Kumwenda M.J.; Mitra S.; Khawaja A.; Inston N.; Nightingale P.
Source Journal of Vascular Access; 2019
Publication Date 2019
Publication Type(s) Article
PubMedID 31466489
Database EMBASE
Abstract Objectives: Tunnelled central venous catheters dysfunction can be defined as failure to provide blood flow above 200 mL/min during dialysis often caused by thrombosis. Although urokinase is used routinely for thrombolysis, there is wide variation in dose regimens. A multidisciplinary group was formed to address this issue and offer guidance.
Method(s): Dialysis centres that used urokinase in the United Kingdom took part in a prospective study to determine the safety and outcomes of thrombolysis using agreed protocols. Data were collected anonymously from September 2017 until February 2018. Catheter blood flow was measured before and after the following interventions: catheter dwell or push locks with 12,500-50,000 IU or catheter infusion with 100,000-250,000 IU of urokinase. Interventions were repeated if the blood flow remained below 200 mL/min.
Result(s): 10 centres took part and recruited 200 patients; 45.5% were female and 54.5% were male with mean age of 63.6 (+/-15.2) years. The cumulative success rate for thrombolysis was 90.5% after first intervention, 97% after second intervention, and 99% after more than 2 interventions. Although there was trend towards benefit with dose increments, the success rate between push/dwell locks and high-dose infusion of urokinase was not significantly different (p = 0.069). Seventeen (8.5%) tunnelled central venous catheters were removed due to failure of treatment. No urokinase-related adverse events were reported.
Conclusion(s): In this study, urokinase was safe and efficacious; there was no difference between dwell and push locks. There was some benefit with high-dose infusion of urokinase compared to the dwell and push lock.

78. Trauma radiology in the UK: an overview

Authors Chance T.; Haines I.; Graham R.
Source British journal of hospital medicine (London, England : 2005); Oct 2018; vol. 79 (no. 10); p. 567-570
Publication Date Oct 2018

Publication Type(s) Review
PubMedID 30290753
Database EMBASE
Abstract NHS Choices defines 'major trauma' as multiple, serious injuries that could result in disability or death. Worldwide, trauma is the leading cause of death and disability in people under 40 years of age. The National Audit Office estimates that there are at least 20 000 major trauma cases in England every year, resulting in 5400 deaths and leaving many others with serious permanent disability. Because the incidence of trauma is particularly high in younger patients, an average of 36 life years is lost for every trauma death (Chaira and Cimbanassi, 2003). The landscape in major trauma imaging has evolved over the last 30 years, and this review chronicles these changes and the reasons for them, and looks at how the current guidelines have been formulated.

79. Children and young people with chronic neurodisability: reviewing quality of care

Authors anonymous
Source British journal of hospital medicine (London, England : 2005); Jul 2018; vol. 79 (no. 7); p. 366-367
Publication Date Jul 2018
Publication Type(s) Article
PubMedID 29995541
Database EMBASE

80. Annual intravenous iron infusions at a tertiary cancer hospital

Authors Evans M.; Black E.; Baikady R.R.; Hegarty A.
Source Anesthesia and Analgesia; Sep 2019; vol. 129 (no. 3); p. 2-3
Publication Date Sep 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Introduction The Royal Marsden National Health Service Trust has developed an intravenous iron infusion service to treat iron deficiency anaemia in a complex cancer population. Following the 2017 International consensus statement on the perioperative management of anaemia and iron deficiency, greater efforts were made to analyse our practice to promote quality improvement and staff education. Method All patients receiving intravenous iron infusions (Monofer20mg.kg-1) during 2017 were analysed. Patient demographics, baseline iron studies, haemoglobin trends, operative data and blood transfusions were recorded. Patients were divided into surgical and non-surgical cohorts, with the surgical cohort being subdivided into those receiving iron pre-operatively and those receiving iron post-operatively. Results During 2017, 198 iron infusions were administered across a range of clinical specialties, as shown in Table 1. The mean patient age was 63.3 years. 47% of patients were male, and 53% were female. The mean number of units of red blood cells transfused in the surgical population was 0.71 units per patient. Surgical patients receiving preoperative iron infusions did so on average 11 days pre-operatively, and those receiving post-operative iron infusions did so on average 29 days post-operatively. The mean iron study data and resultant haemoglobin trends can be seen in Table 2. Notably 82% of recorded transferrin saturations were below 16%, in line with the World Health Organization definition of iron deficiency anaemia. Figures 1 - 3 demonstrate the trends in haemoglobin following intravenous iron infusion in specific patient subgroups, with a positive trend noted in all groups. No significant adverse effects were recorded. Discussion This report documents the annual intravenous iron infusion practice at a Tertiary Cancer Hospital to treat iron deficiency anaemia in a complex cancer population. Our data suggests that we should aim to improve our preoperative iron infusion rate in this cohort. Delayed investigation reporting may hinder iron administration in this historical group. This results from the fact that the trust is geographically split across two sites, yet only one site has the capability to analyse iron studies. We propose that to further develop our service, we should strive towards same day reporting of iron studies irrespective of geographical location. Additionally we propose taking baseline iron studies in non-anaemic patients, to allow identification of those patients who would benefit from post-operative intravenous iron after surgery. We are in the process of establishing a dedicated Anaemia Clinic with an Anaemia Nurse Specialist. We foresee that this would not only help streamline the service, but also play a crucial role in staff education, which we believe is key for ongoing service quality improvement. (Table Presented).

81. Effect of a Standard vs Enhanced Implementation Strategy to Improve Antibiotic Prescribing in Nursing Homes: A Trial Protocol of the Improving Management of Urinary Tract Infections in Nursing Institutions Through Facilitated Implementation (IMUNIFI) Study

Authors Ford J.H.; Vranas L.; Selle K.M.; Ewers T.; Crnich C.J.; Coughlin D.; Nordman-Oliveira S.; Ryther B.; Griffin V.L.; Eslinger A.; Boero J.; Hardgrove P.
Source JAMA network open; Sep 2019; vol. 2 (no. 9)
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31509204

Database EMBASE
Abstract Importance: Suspicion of urinary tract infection (UTI) is the major driver of overuse and misuse of antibiotics in nursing homes (NHs). Effects of interventions to improve the recognition and management of UTI in NHs have been mixed, potentially owing to differences in how interventions were implemented in different studies. An improved understanding of how implementation approach influences intervention adoption is needed to achieve wider dissemination of antibiotic stewardship interventions in NHs.
Objective(s): To compare the effects of 2 implementation strategies on the adoption and effects of a quality improvement toolkit to enhance recognition and management of UTIs in NHs.
Design, Setting, and Participant(s): This cluster-randomized hybrid type 2 effectiveness-implementation clinical trial will be performed over a 6-month baseline (January to June 2019) and 12-month postimplementation period (July 2019 to June 2020). A minimum of 20 Wisconsin NHs with 50 or more beds will be recruited and randomized in block sizes of 2 stratified by rurality (rural vs urban). All residents who are tested and/or treated for UTI in study NHs will be included in the analysis. All study NHs will implement a quality improvement toolkit focused on enhancing the recognition and management of UTIs. Facilities will be randomized to either a usual or enhanced implementation approach based on external facilitation (coaching), collaborative peer learning, and peer comparison feedback. Enhanced implementation is hypothesized to be associated with improvements in adoption of the quality improvement toolkit and clinical outcomes. Primary outcomes of the study will include number of (1) urine cultures per 1000 resident days and (2) antibiotic prescriptions for treatment of suspected UTI per 1000 resident-days. Secondary outcomes of the study will include appropriateness of UTI treatments, treatment length, use of fluoroquinolones, and resident transfers and mortality. A mixed-methods evaluation approach will be used to assess extent and determinants of adoption of the UTI quality improvement toolkit in study NHs.
Discussion(s): Knowledge gained during this study could help inform future efforts to implement antibiotic stewardship and quality improvement interventions in NHs. Trial Registration: ClinicalTrials.gov identifier: NCT03520010.

82. Automated Metrics in a Virtual-Reality Myringotomy Simulator: Development and Construct Validity

Authors Huang C.; Ladak H.M.; Agrawal S.K.; Cheng H.; Bureau Y.
Source Otology & neurotology : official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology; Aug 2018; vol. 39 (no. 7)
Publication Date Aug 2018
Publication Type(s) Article
PubMedID 29912829
Database EMBASE
Abstract OBJECTIVES: The objectives of this study were: 1) to develop and implement a set of automated performance metrics into the Western myringotomy simulator, and 2) to establish construct validity. STUDY DESIGN: Prospective simulator-based assessment study. SETTING: The Auditory Biophysics Laboratory at Western University, London, Ontario, Canada. PARTICIPANTS: Eleven participants were recruited from the Department of Otolaryngology-Head & Neck Surgery at Western University: four senior otolaryngology consultants and seven junior otolaryngology residents. INTERVENTIONS: Educational simulation. MAIN OUTCOME MEASURE: Discrimination between expert and novice participants on five primary automated performance metrics: 1) time to completion, 2) surgical errors, 3) incision angle, 4) incision length, and 5) the magnification of the microscope.
METHOD(S): Automated performance metrics were developed, programmed, and implemented into the simulator. Participants were given a standardized simulator orientation and instructions on myringotomy and tube placement. Each participant then performed 10 procedures and automated metrics were collected. The metrics were analyzed using the Mann-Whitney U test with Bonferroni correction.
RESULT(S): All metrics discriminated senior otolaryngologists from junior residents with a significance of $p < 0.002$. Junior residents had 2.8 times more errors compared with the senior otolaryngologists. Senior otolaryngologists took significantly less time to completion compared with junior residents. The senior group also had significantly longer incision lengths, more accurate incision angles, and lower magnification keeping both the umbo and annulus in view.
CONCLUSION(S): Automated quantitative performance metrics were successfully developed and implemented, and construct validity was established by discriminating between expert and novice participants.

83. Quality improvement of neuro-oncology services: Integrating the routine collection of patient-reported, health-related quality-of-life measures

Authors Oberg I.; Bullen G.; Charge A.L.; Santarius T.; Watts C.; Price S.J.; Joannides A.J.; Crofton A.; Brodbelt A.; Rastall R.J.; Sage W.A.; Fernandez-Mendez R.
Source Neuro-Oncology Practice; Jun 2019; vol. 6 (no. 3); p. 226-236
Publication Date Jun 2019
Publication Type(s) Review
Database EMBASE

Abstract Background. Brain cancer has a strong impact on health-related quality of life (HRQoL), and its evaluation in clinical practice can improve the quality of care provided. The aim of this project was to integrate routine collection of HRQoL information from patients with brain tumor or metastasis in 2 specialized United Kingdom tertiary centers, and to evaluate the implementation process. Methods. Since October 2016, routine collection of electronic self-reported HRQoL information has been progressively embedded in the participating centers using standard questionnaires. During the first year, the project was implemented, and the process evaluated, through regular cycles of process evaluation followed by an action plan, monitoring of questionnaire completion rates, and assessment of patient views. Results. Main challenges encountered included reluctance to change usual practice and limited resources. Key measures for success included strong leadership of senior staff, involvement of stakeholders in project design and evaluation, and continuous strategic support to professionals. Final project workflow included 6 process steps, 1 decision step, and 4 outputs. Questionnaires were mostly self-completed (75.1%), and completion took 6-9 minutes. Most patients agreed that the questionnaire items were easy to understand (97.0%), important for them (93.0%), and helped them think what they wanted to discuss in their clinical consultation (75.4%). Conclusions. Integrating HRQoL information as a routine part of clinical assessments has the potential to enhance individually tailored patient care in our institutions. Challenges involved in innovations of this nature can be overcome through a systematic approach involving strong leadership, wide stakeholder engagement, and strategic planning.

84. Impact of achieving primary care targets in type 2 diabetes on health outcomes and healthcare costs

Authors Keng M.J.; Tsiachristas A.; Leal J.; Gray A.; Mihaylova B.
Source Diabetes, Obesity and Metabolism; 2019
Publication Date 2019
Publication Type(s) Article
PubMedID 31264761
Database EMBASE
Abstract Aims: In England and Wales, the National Diabetes Audit (NDA) assesses the quality of management of type 2 diabetes (T2D) in primary care using treatment targets for HbA1c <=58 mmol/mol, total cholesterol <5 mmol/L and blood pressure <=140/80 mm Hg. We quantified the impact of variation in achieving these targets on health outcomes and healthcare costs across general practitioners' (GP) practices.
Method(s): Summary of characteristics of T2D patients from the 2015-2016 NDA were used to generate representative populations of T2D patients. The UKPDS Outcomes Model 2 was used to estimate long-term health outcomes and healthcare costs. The effects of achieving treatment targets on these outcomes were evaluated using regression models.
Result(s): Achieving more of the HbA1c, cholesterol and blood pressure targets led to a lower incidence of diabetes-related complications. Approximately 0.5 (95% CI, 0.4-0.6) quality-adjusted life years (QALYs) and 0.6 (95% CI, 0.4-0.7) years of life (LYs) were gained by T2D patients over a lifetime for each additional target met. The projected healthcare cost savings arising from fewer diabetes-related complications as the result of achieving one, two or three targets compared to none were 859 (95% CI, 553-1165), 940 (95% CI, 485-1395) and 1037 (95% CI, 414-1660) over a patient's lifetime. A typical GP practice in the lowest performing decile (average, 371 T2D patients per practice, with 27% achieving all targets) is projected to gain 201 (95% CI, 123-279) QALYs and 231 (95% CI, 133-329) LYs, if all T2D patients achieved all three targets.
Conclusion(s): Substantial gains in health outcomes and reductions in healthcare costs could be achieved with further improvements in attainment of HbA1c, cholesterol and blood pressure targets for T2D patients.

85. Writing for publication: Sharing your clinical knowledge and skills

Authors Wood C.
Source British journal of community nursing; Jan 2018; vol. 23 (no. 1); p. 20-23
Publication Date Jan 2018
Publication Type(s) Article
PubMedID 29281916
Database EMBASE

Abstract Clinical nurses are ideally placed to write for publication in addition to those who work in academia who have this as an accepted part of their role. Nurses generate new evidence from their work in practice by carrying out research and audits and being involved in practice development projects, for example. This resource of knowledge needs to be shared with others, ideally in an international arena so that nurses can learn from each other. Nursing in the United Kingdom is now an all graduate profession and many nurses go on to study at both Masters and PhD level, providing writing from all levels of academic study that can be adapted for publication. It seems wrong to undertake a study and obtain findings and then choose not share this widely. Both a lack of confidence and time are cited as reasons why nurses do not write; however, to share knowledge with others is a duty as part of any nursing role for the improvement of staff working practices and patient care. All nurses need knowledge that is practical, experiential, and scientific; clinical nurses who write for publication can provide this.

86. Improving consent in patients undergoing surgery for fractured neck of femur

Authors Thiruchandran G.; McKean A.R.; Rudran B.; Imam M.A.; Yeong K.; Hassan A.
Source British journal of hospital medicine (London, England : 2005); May 2018; vol. 79 (no. 5); p. 284-287
Publication Date May 2018
Publication Type(s) Article
PubMedID 29727232
Database EMBASE
Abstract Background Neck of femur fractures and their subsequent operative fixation are associated with high rates of perioperative morbidity and mortality. Consenting in this setting is suboptimal with the Montgomery court ruling changing the perspective of consent. This quality improvement project assessed the adequacy of consenting against British Orthopaedic Association-endorsed guidance and implemented a series of changes to improve the documentation of risks associated with surgery for fractured neck of femur. Methods Seventy consecutive patients who underwent any operative fixation of a neck of femur fracture were included over a 6-month period at a single centre. Patients unable to consent or without electronic notes were excluded. Consent forms were analysed and the documented potential risks or complications associated with surgery were compared to British Orthopaedic Association-endorsed guidance. A series of changes (using the plan, do study, act (PDSA) approach) was implemented to improve the adequacy of consent. Results Documentation of four out of 12 potential risks or complications was recorded in <50% of cases for patients with intracapsular fractures (n=35), and documentation of seven out of 12 potential risks or complications was recorded in <50% of cases for patients with extracapsular fractures (n=35). Re-audit following raising awareness and attaching consent guidance showed 100% documentation of potential risks or complications in patients with intracapsular and extracapsular fractures (n=70). A neck of femur fracture-specific consent form has been implemented which will hopefully lead to sustained improvement. Conclusions Consenting patients with fractured neck of femur for surgery in the authors' unit was suboptimal when compared to British Orthopaedic Association-endorsed consent guidance. This project has shown that ensuring such guidance is readily available has improved the adequacy of consent. The authors hope that introduction of a neck of femur fracture-specific consent form within their unit will lead to sustained adequate documentation of risks associated with surgery.

87. SCREENING FOR MALNUTRITION IN RENAL WARDS: AN AUDIT COMPARING THREE MALNUTRITION SCREENING TOOLS TO INFORM SERVICE QUALITY IMPROVEMENT

Authors Tsompanaki E.; Hayes S.; Dassanayake T.
Source Clinical Nutrition; Sep 2019; vol. 38
Publication Date Sep 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Rationale: People with chronic conditions like renal disease are more likely to be malnourished, due to the impact of uraemia, inflammation, comorbidities, metabolic changes and dialysis. It is estimated that around half of the patients admitted to a renal ward are malnourished (1). Malnutrition screening tools are essential in identifying patients who require further dietetic input (2). This audit was conducted to help establish an appropriate malnutrition screening tool for patients with CKD at Imperial College Healthcare Trust.
Method(s): This pre-implementation audit compared the Renal iNUT (renal specific, validated) (3), MUST (used widely in UK hospitals) and ESPEN (currently used across all wards in the Trust) tools (2) against individualised dietetic screening, on all tertiary renal wards of Hammersmith Hospital. 43 patients out of 72 inpatient beds (60%) from 4 renal wards were screened using all three tools by student dietitians. Each tool was then compared against dietetic screening and assessment. The audit was registered with the Quality and Safety Therapies team.
Result(s): Dietetic screening identified 25 patients at risk of malnutrition plus 8 patients for diet education only. ESPEN identified 12 patients at risk of malnutrition and had the lowest sensitivity (23.3%) and specificity of 34.4%, MUST identified 16 patients and had 32.6% sensitivity and 34.9% specificity and iNUT identified 34 patients at risk and had the highest sensitivity of 55.8% and lowest specificity of 16.3%.
Conclusion(s): This audit demonstrated that iNUT was more sensitive than the other tools and is more likely to trigger the most referrals to dietitians. Changing to iNUT from ESPEN in our wards would be beneficial in reserving dietetic time from screening, however may trigger some referrals for patients who do not require dietetic input.

88. Temporal trends in the dispensation of systemic antifungal therapy in hospitals in England: An analysis of the health treatment insights database

Authors Tham R.L.; Bray B.D.; Dattani H.; Layton D.; Kim J.; Carroll O.U.
Source Pharmacoepidemiology and Drug Safety; Aug 2019; vol. 28 ; p. 509-510
Publication Date Aug 2019
Publication Type(s) Conference Abstract
Database EMBASE
Abstract Background: Systemic fungal infections are a leading cause of mortality and morbidity in hospitalisations and are increasingly recognized as an important cause of healthcare associated infection. As resistance is a growing concern, it is of interest to understand trends of antifungal use over time.
Objective(s): The study aims to describe the trends of antifungal (Intravenous (IV) or oral) exposure in the Hospital Treatment Insights (HTI) database from 2011 to 2016. HTI is a linked database of pharmacy (Hospital Pharmacy Audit (HPA)) and hospital (Hospital Episode Statistics (HES)) data which covers = 28% of English trusts.
Method(s): A retrospective cohort study of hospitalized patients dispensed antifungal treatments in HTI between 2011 to 2016. Antifungal drugs included: Amphotericin B, Anidulafungin, Caspofungin, Fluconazole, Flucytosine, Griseofulvin, Isavuconazole, Itraconazole, Ketoconazole, Micafungin, Miconazole, Posaconazole, Voriconazole. Exposure was defined as the first antifungal dispensed during a hospitalization. Exposure over time was described and stratified by patient demographics and analyzed with Chi-Squared tests for trend.
Result(s): A cohort of 139,203 antifungal dispenses during a hospitalization were analyzed; the median duration of hospitalization was 11 (IQR: 3 to 28) days. IV's made up 16.6% (n = 22,647) of the cohort while 83.7% (n = 116,556) of the cohort was dispensed oral medications. There was no difference in the number of dispensations by sex: males (n = 69,466, 49.9%), females (n = 69,737, 50.1%); and the mean age was 61.1 (SD: 20.1) years. Within 1 year of antifungal treatment exposure from 2011 to 2015, 27,477 (23.9%) patients died in hospital with the median time to death of 42 (IQR: 11 to 141) days. In-hospital antifungal dispensation increased year on year from 21,203 in 2011 to 24,139 in 2016. There was a larger (50.3%) increase in IV antifungal dispenses from 2011 (n = 3,065) to 2016 (n = 4,607) (p for trend <0.01). While death in hospital within one year of antifungal exposure remained stable from 2011 to 2015 (23.9% to 24.7%, p = 0.22).
Conclusion(s): Our study shows increasing annual antifungal use in English hospitals from 2011 to 2016. Planned analyses will include stratification by drug class and proportion of all hospitalisations resulting in systemic antifungal dispensation. Overall, HTI can provide insights into the trends of antifungal use over time and monitor treatment patterns for this important cause of healthcare associated infections.

89. Data-driven identification of indication for treatment in electronic medical records using cluster analysis in combination with a self-controlled cohort analysis

Authors Bergvall T.; Grundmark B.; Noren N.; Bourke A.
Source Pharmacoepidemiology and Drug Safety; Aug 2019; vol. 28 ; p. 202
Publication Date Aug 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Background: When analyzing drug utilization or drug safety in electronic medical records, it is valuable to be able to separate different treatment indications. These may not be explicitly recorded.
Objective(s): Develop and evaluate a methodology that identifies patients with similar indication for treatment based on medical events recorded prior to treatment initiation.
Method(s): Analyses were performed for a range of drugs in The Health Improvement Network (THIN). We focus here on etoricoxib. THIN contains primary health care data from the UK, and in this study we used data for 10 million patients available in May 2015. Non-administrative Read codes within 30 days before a first-in-patient prescription of etoricoxib were included. Latent class cluster analysis was performed using a probabilistic mixture model for the registration of medical events in the 30-day period. A hundred such analyses were then combined through consensus clustering which grouped together any two patients that were co-clustered in at least 80 of the 100 individual analyses. For each consensus cluster, a calibrated self-controlled cohort analysis (ICDELTA) was used to highlight medical events occurring more often in the 30-day period than expected based on the relative frequency of that medical event within the same patients in two separate control periods: 6-12 months and 1-3 years before the first prescription.
Result(s): Our analysis identified 41 clusters from the 25,000 patients prescribed etoricoxib. Among the ten largest, three were dominated by single medical event terms: Pain in joint, Gout and Knee pain; while seven clustered patients with a variety of terms, e.g. a back-pain cluster of 1800 records gathering Pain in lumbar spine (in 33% of the patients), C/O - low back pain (27%), Back pain without radiation NOS (23%), Sciatica (22%) and Backache (7%). As an illustration of the impact of the self-controlled cohort analysis, it kept e.g. Osteoarthritis and allied disorders (22%) and Enthesopathy of the ankle and tarsus (16%) while eliminating e.g. Clearance of external auditory canal (22%) and Otalgia (10%) for a cluster of 470 records relating to osteoarthritis.
Conclusion(s): Data-driven identification of treatment indication in electronic medical records is feasible. Cluster analysis gathered medical events into clinically coherent indication groups and the calibrated self-controlled cohort analysis successfully eliminated medical events with high background rates, which are less likely to reflect treatment indications. Combining the two methods gave added value.

90. Improving confounder adjustment: Translating high-dimensional propensity score principles to United Kingdom electronic health records

Authors Tazare J.; Smeeth L.; Evans S.J.W.; Williamson E.; Douglas I.J.
Source Pharmacoepidemiology and Drug Safety; Aug 2019; vol. 28 ; p. 584-585
Publication Date Aug 2019
Publication Type(s) Conference Abstract
Database EMBASE

Abstract Background: A recent United Kingdom (UK) electronic health record (EHR) study found that among clopidogrel users, co-use of a proton pump inhibitor (PPI) was associated with an increased risk of myocar-dial infarction (MI). However, the study authors highlighted evidence suggesting that this finding was driven by unmeasured confounding. In situations like this, use of the highdimensional propensity score (hd-PS) algorithm has become increasingly popular amid evidence in US claims data suggesting it improves adjustment for confounding. Despite this enthusiasm, it is unclear how best to adapt hd-PS principles outside its original setting, especially given the potential disparity between databases.
Objective(s): To adapt the hd-PS algorithm in the setting of UK EHRs.
Method(s): A cohort of clopidogrel users was derived from the UK Clinical Practice Research Datalink linked with the Myocardial Ischaemia National Audit Project. All analyses estimated the hazard ratio of MI comparing PPI users with non-users using a Cox model adjusting for confounders via propensity scores. We conducted hd-PS analyses incrementally applying modifications that included varying the coding system and adapting the existing assessment of code recurrence to reflect recording practice in UK EHRs. Results were compared to an analysis incorporating only the original confounders. Sensitivity analyses investigated the impact of varying the number of covariates selected for inclusion in our adapted hd- PS model.
Result(s): 24471 patients took clopidogrel, of whom 9111 were prescribed a PPI. Of PPI users, 313 (3.4%) had an incident MI versus 421 (2.7%) in non-users. Including the original confounders via propensity scores obtained a HR for the association between PPI use and MI of 1.17 (95% CI: 1.01-1.36). Standard implementation of the hd-PS algorithm obtained a HR of 1.10 (95% CI: 0.88- 1.36), while applying our modifications resulted in effect estimates closer to the expected null result (HR 0.99; 95% CI: 0.79-1.24). Sensitivity analyses found that selecting fewer than 500 variables improved the precision of effect estimates (HR 1.00; 95% CI: 0.86-1.18).
Conclusion(s): Use of hd-PS provided improved adjustment for confounding compared with non-hd approaches, suggesting hd-PS methods can be usefully applied in UK EHR data.

91. Olfactory Hallucinations as a Non-motor sign of Parkinson's disease - A Single Center Experience

Authors Chandra S.; Schiess M.; Mehanna R.
Source Neurology; Apr 2019; vol. 92 (no. 15)
Publication Date Apr 2019

Publication Type(s) Conference Abstract
Database EMBASE
Abstract Objective: To assess the prevalence of Olfactory Hallucinations (OlfH) in patients presenting to a tertiary movement disorders outpatient clinic.
Background(s): Hallucinations are a non-motor feature of alpha synucleinopathies and occur in 20- 50% of patients with PD. Due to a lack of awareness as well as paucity of structured questionnaires/tests that target psychosis assessment with an emphasis on olfactory hallucinations (OlfH), these are often missed during clinical consultations. Design/Methods: Singe site, cross-sectional (ongoing, total n = 200), IRB approved study. Patients diagnosed with Parkinson's disease per UK brain bank criteria by a movement disorder specialist were consecutively enrolled with their informed consent and completed a questionnaire and self-administered a University of Pennsylvania Smell Identification Test (UPSIT). Inability to understand the instructions due to language barrier or severe underlying pathology were exclusion criteria.
Result(s): Of the 130 patients who completed the study so far, 36% were women and 64% men. Mean age was 66.3 +/- 9.6 year. Approximately 18% of the patients (28) had a prior olfactory assessment. 23 (17.7%) patients endorsed olfactory hallucinations, of which 15 (65%) were men. Hallucinations in other sensory modalities were also reported: Visual (15.3%), Auditory (8.46%) and Tactile (6.9%). In the patients with OlfH (n=23); concurrent sensory hallucinations included visual (30.4%), auditory (17.3%) and tactile (13%). 2 patients reported hallucinations in all four modalities. 43% of patients with OlfH had a poor sense of smell objectively (UPSIT showed severe microsmia or anosmia). The most commonly described hallucinations were smoke/ cigarette smoke. While most reported that OlfH were infrequent, 18% (n=2) reported hallucinations lasting >1 hour and found them unpleasant and upsetting.
Conclusion(s): Non-motor symptoms of PD are often missed in routine clinical practice and have far-reaching implications in patient care. OlfH tend to be underreported with prevalence ranging from 2.1% to 10% in prior studies compared to 17.7% in our cohort.

92. Quality improvement of prescribing safety: A pilot study in primary care using UK electronic health records

Authors Booth H.P.; Gallagher A.M.; Carty L.; Padmanabhan S.; Myles P.R.; Welburn S.J.; Valentine J.; Mullett D.; Hoghton M.; Rafi I.
Source British Journal of General Practice; 2019; vol. 69 (no. 686)
Publication Date 2019
Publication Type(s) Article
PubMedID 31262845
Database EMBASE
Abstract Background Quality improvement (QI) is a priority for general practice, and GPs are expected to participate in and provide evidence of QI activity. There is growing interest in harnessing the potential of electronic health records (EHR) to improve patient care by supporting practices to find cases that could benefit from a medicines review. Aim To develop scalable and reproducible prescribing safety reports using patient-level EHR data. Design and setting UK general practices that contribute de-identified patient data to the Clinical Practice Research Datalink (CPRD). Method A scoping phase used stakeholder consultations to identify primary care QI needs and potential indicators. QI reports containing real data were sent to 12 pilot practices that used Vision GP software and had expressed interest. The scale-up phase involved automating production and distribution of reports to all contributing practices that used both Vision and EMIS software systems. Benchmarking reports with patient-level case review lists for two prescribing safety indicators were sent to 457 practices in December 2017 following the initial scale-up (Figure 2). Results Two indicators were selected from the Royal College of General Practitioners Patient Safety Toolkit following stakeholder consultations for the pilot phase involving 12 GP practices. Pilot phase interviews showed that reports were used to review individual patient care, implement wider QI actions in the practice, and for appraisal and revalidation. Conclusion Electronic health record data can be used to provide standardised, reproducible reports that can be delivered at scale with minimal resource requirements. These can be used in a national QI initiative that impacts directly on patient care.

93. Quality criteria for Core Medical Training: a resume of their development, impact and future plans

Authors Armstrong M.; Black D.; Miller A.
Source The journal of the Royal College of Physicians of Edinburgh; Sep 2019; vol. 49 (no. 3); p. 230-236
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Abstract BACKGROUND: In 2015 the Joint Royal Colleges of Physicians Training Board (JRCPTB), acting on behalf of the three UK Royal Colleges of Physicians, launched a set of quality criteria designed to improve the educational experience of Core Medical Trainees.
METHOD(S): The criteria were developed with key stakeholders from Core Medical Training (CMT) and monitored via the General Medical Council's annual National Training Survey. This paper describes the development, implementation and impact of these criteria, which have been implemented by UK postgraduate schools of medicine since 2015.
RESULT(S): There were trainee-reported improvements from baseline (2015-18) in at least eight out of the 13 core criteria measured.
CONCLUSION(S): The results demonstrate that a coordinated UK-wide approach to quality improvement, focused on a specific set of clearly defined and measurable outcomes that galvanise trainer engagement, can lead to greater trainee satisfaction in a demanding area of medicine without significant additional resources.

94. Trust compliance with best practice tariff criteria for total hip and knee replacement

Authors Vanhegan I.; Sankey A.; Radford W.; Ball S.; Gibbons C.
Source British journal of hospital medicine (London, England : 2005); Sep 2019; vol. 80 (no. 9); p. 537-540
Publication Date Sep 2019
Publication Type(s) Article
PubMedID 31498659
Database EMBASE

Abstract BACKGROUND: Satisfaction of the best practice tariff criteria for primary hip and knee replacement enables on average an additional 560 of reimbursement per case. The Getting it Right First Time report highlighted poor awareness of these criteria among orthopaedic departments.
METHOD(S): The authors investigated the reasons for non-compliance with the best practice tariff criteria at their trust and implemented a quality improvement approach to ensure successful adherence to the standards (a minimum National Joint Registry compliance rate of 85%, a National Joint Registry unknown consent rate below 15%, a patient-reported outcome measure participation rate of >=50%, and an average health gain not significantly below the national average). This was investigated using quarterly online reports from the National Joint Registry and NHS Digital.
RESULT(S): Initially, the trust had a 31% patient-reported outcome measures participation rate arising from a systematic error in the submission of preoperative patient-reported outcome measure scores. Re-audit following the resubmission of patient-reported outcome measure data under the trust's correct organization data service code confirmed an improvement in patient-reported outcome measure compliance to 90% and satisfaction of all criteria resulting in over 450 000 of additional reimbursement to the trust.
CONCLUSION(S): The authors would urge others to review their compliance with these four best practice tariff criteria to ensure that they too are not missing out on this significant reimbursement sum.

95. 'Caveat emptor': The cautionary tale of endocarditis and the potential pitfalls of clinical coding data - An electronic health records study

Authors Fawcett N.; Peto L.; Quan T.P.; Crook D.W.; Peto T.E.A.; Johnson A.P.; Walker A.S.; Young B.; Middlemass C.; Weston S.; Gillott R.; Wu J.; Muller-Pebody B.; Sandoe J.A.T.
Source BMC Medicine; Sep 2019; vol. 17 (no. 1)
Publication Date Sep 2019
Publication Type(s) Article
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Database EMBASE

Abstract Background: Diagnostic codes from electronic health records are widely used to assess patterns of disease. Infective endocarditis is an uncommon but serious infection, with objective diagnostic criteria. Electronic health records have been used to explore the impact of changing guidance on antibiotic prophylaxis for dental procedures on incidence, but limited data on the accuracy of the diagnostic codes exists. Endocarditis was used as a clinically relevant case study to investigate the relationship between clinical cases and diagnostic codes, to understand discrepancies and to improve design of future studies.
Method(s): Electronic health record data from two UK tertiary care centres were linked with data from a prospectively collected clinical endocarditis service database (Leeds Teaching Hospital) or retrospective clinical audit and microbiology laboratory blood culture results (Oxford University Hospitals Trust). The relationship between diagnostic codes for endocarditis and confirmed clinical cases according to the objective Duke criteria was assessed, and impact on estimations of disease incidence and trends.
Result(s): In Leeds 2006-2016, 738/1681(44%) admissions containing any endocarditis code represented a definite/possible case, whilst 263/1001(24%) definite/possible endocarditis cases had no endocarditis code assigned. In Oxford 2010-2016, 307/552(56%) reviewed endocarditis-coded admissions represented a clinical case. Diagnostic codes used by most endocarditis studies had good positive predictive value (PPV) but low sensitivity (e.g. I33-primary 82% and 43% respectively); one (I38-secondary) had PPV under 6%. Estimating endocarditis incidence using raw admission data overestimated incidence trends twofold. Removing records with non-specific codes, very short stays and readmissions improved predictive ability. Estimating incidence of streptococcal endocarditis using secondary codes also overestimated increases in incidence over time. Reasons for discrepancies included changes in coding behaviour over time, and coding guidance allowing assignment of a code mentioning 'endocarditis' where endocarditis was never mentioned in the clinical notes.
Conclusion(s): Commonly used diagnostic codes in studies of endocarditis had good predictive ability. Other apparently plausible codes were poorly predictive. Use of diagnostic codes without examining sensitivity and predictive ability can give inaccurate estimations of incidence and trends. Similar considerations may apply to other diseases. Health record studies require validation of diagnostic codes and careful data curation to minimise risk of serious errors.

96. Endocrine disorders in pregnancy

Authors Chong H.P.; Alazzani H.; Boelaert K.
Source Obstetrics, Gynaecology and Reproductive Medicine; 2019
Publication Date 2019
Publication Type(s) Review
Database EMBASE
Abstract Endocrine disorders in pregnancy are common. Good outcomes can be achieved with multi-disciplinary care in pregnancy. The primary objective of this review is to provide the reader with an overview of national guidelines and where applicable, recent advances with regard to care of women with endocrine disorders in pregnancy. We have outlined care for a broad range of conditions ranging from diabetes and thyroid disorders, to the rarer conditions such as phaeochromocytoma. In addition to the reading list below, we would encourage the reader to keep up to date with reports from the United Kingdom Obstetric Surveillance Service (UKOSS) which studies a range of uncommon conditions in pregnancy as well as the confidential enquiry into maternal and child death [Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE-UK)]. The latter is especially useful for lessons learnt from past maternal deaths, the most common cause of which were indirect maternal deaths from pre-existing medical conditions.

97. The health behaviour status of teenage and young adult cancer patients and survivors in the United Kingdom

Authors Pugh G.; Fisher A.; Hough R.; Gravestock H.
Source Supportive Care in Cancer; 2019
Publication Date 2019
Publication Type(s) Article
PubMedID 31144171
Database EMBASE

Abstract Purpose: The primary aim of this study was to investigate the health behaviour status of teenage and young adult (TYA) cancer patients and survivors; the secondary aim was to determine if TYA cancer patients and survivors health behaviour differs to general population controls.
Method(s): Two hundred sixty-seven young people with cancer (n =83 cancer patients receiving active treatment: n =174 cancer survivors, 57.1% >1 year since treatment completion) and 321 controls completed a health and lifestyle questionnaire which included validated measures of physical activity (PA) (Godin Leisure Time Exercise Questionnaire), diet (Dietary Instrument for Nutrition Education, DINE), smoking status, and alcohol consumption (AUDIT-C).
Result(s): General population controls and cancer survivors were more likely to meet current (PA) recommendations (p <0.001) than TYA cancer patients undergoing treatment (54.8% vs 52.3% vs 30.1%, respectively). Less than 40% of young people with cancer and controls met fat intake, sugar intake, fibre intake or current fruit and vegetable recommendations. TYA cancer survivors were more likely to report binge drinking than controls (OR=3.26, 95% CI 2.12-5.02, p <0.001). Very few young people with in the study were current smokers. The majority of TYA cancer patients and survivors reported a desire to make positive changes to their health behaviour.
Conclusion(s): Consideration should be given to whether existing health behaviour change interventions which have demonstrated positive effects among the general TYA population could be adapted for young people with cancer.

98. British Association of Dermatologists (BAD) National Audit on Non-Melanoma Skin Cancer Excision 2016 in collaboration with the Royal College of Pathologists

Authors Keith D.J.; Bray A.P.; Brain A.; Mohd Mustapa M.F.; Barrett H.E.; Lane S.; Emmerich M.; Jakes A.; Barrett P.D.; de Berker D.A.R.
Source Clinical and Experimental Dermatology; 2019
Publication Date 2019
Publication Type(s) Article
PubMedID 31265150
Database EMBASE
Abstract Background: We conducted a re-audit of the surgical practice of UK dermatologists for the treatment of nonmelanoma skin cancer and examined changes with reference to our previous audit in 2014. The audit was supplemented by a detailed assessment of completeness of the histopathology reports for each tumour.
Method(s): UK dermatologists collected data on 10 consecutive nonmicrographic excisions for basal cell carcinoma (BCC) and 5 for squamous cell carcinoma (SCC). Data were collected on site, preoperative diagnosis, histological diagnosis, proximity to previous scars, and histological deep and peripheral margins.
Result(s): In total, 222 responses were received from 135 centres, reporting on 3290 excisions. Excisions from the head and neck accounted for 56.7% of cases. Tumour diameter (mean +/- SD) was 11.4 +/- SD 7.1 mm (maximum size 100 mm) and 97% of cases were primary excisions. BCCs and SCCs respectively accounted for 65.7% and 26.8% of total cases. Of the suspected BCCs and SCCs, 95.8% and 80.4%, respectively, were confirmed histologically. All margins for any tumour were clear in 97.0% of cases, and complication rate in the audit was < 1%. Of the 2864 histology reports evaluated, only 706 (24.6%) contained all core data items; 95% of these were structure (synoptic) reports. Commonly omitted items were level of invasion, risk and T stage, which were absent from 35.7%, 64.2% and 44.1% of reports, respectively.
Conclusion(s): Diagnostic accuracy and complete excision rates remain high. Complication rates may be under-reported owing to lack of follow-up. Histopathology reporting has a greater chance of being complete if reports are generated on a field-based platform (synoptic reporting).

99. Alternative Fistula Risk Score for Pancreatoduodenectomy (a-FRS): Design and International External Validation

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Source Annals of Surgery; May 2019; vol. 269 (no. 5); p. 937-943
Publication Date May 2019
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Abstract The aim of this study was to develop an alternative fistula risk score (a-FRS) for postoperative pancreatic fistula (POPF) after pancreatoduodenectomy, without blood loss as a predictor.
Background(s):Blood loss, one of the predictors of the original-FRS, was not a significant factor during 2 recent external validations.
Method(s):The a-FRS was developed in 2 databases: the Dutch Pancreatic Cancer Audit (18 centers) and the University Hospital Southampton NHS. Primary outcome was grade B/C POPF according to the 2005 International Study Group on Pancreatic Surgery (ISGPS) definition. The score was externally validated in 2 independent databases (University Hospital of Verona and University Hospital of Pennsylvania), using both 2005 and 2016 ISGPS definitions. The a-FRS was also compared with the original-FRS.
Result(s):For model design, 1924 patients were included of whom 12% developed POPF. Three predictors were strongly associated with POPF: soft pancreatic texture [odds ratio (OR) 2.58, 95% confidence interval (95% CI) 1.80-3.69], small pancreatic duct diameter (per mm increase, OR: 0.68, 95% CI: 0.61-0.76), and high body mass index (BMI) (per kg/m^2 increase, OR: 1.07, 95% CI: 1.04-1.11). Discrimination was adequate with an area under curve (AUC) of 0.75 (95% CI: 0.71-0.78) after internal validation, and 0.78 (0.74-0.82) after external validation. The predictive capacity of a-FRS was comparable with the original-FRS, both for the 2005 definition (AUC 0.78 vs 0.75, P = 0.03), and 2016 definition (AUC 0.72 vs 0.70, P = 0.05).
Conclusion(s):The a-FRS predicts POPF after pancreatoduodenectomy based on 3 easily available variables (pancreatic texture, duct diameter, BMI) without blood loss and pathology, and was successfully validated for both the 2005 and 2016 POPF definition. The online calculator is available at www.pancreascalculator.com.

100. Do infants with transposition of the great arteries born outside a specialist centre have different outcomes?

Authors Veal C.; Hunt R.; Tume L.N.
Source Cardiology in the Young; Aug 2019; vol. 29 (no. 8); p. 1030-1035
Publication Date Aug 2019
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PubMedID 31272514
Database EMBASE
Abstract Background: Infants born with undiagnosed transposition of the great arteries continue to be born in district general hospitals despite the improvements made in antenatal scanning. Evidence indicates improved outcomes with early definitive treatment after birth, hence the recommendation of delivery in a tertiary centre. The role of specialist paediatric and neonatal transport teams, to advise, stabilise, and transport the infants to a tertiary centre in a timely manner, is critical for those infants born in a district general hospital. This pilot study aims to compare outcomes between infants born in district general hospitals and those who were born in a tertiary maternity unit in South West England and South Wales.
Method(s): This was a secondary data analysis of data collected from the local Paediatric Intensive Care Audit Network and the local transport database. Infants born with a confirmed diagnosis of transposition of the great arteries, that required an arterial switch operation as the definitive procedure between April, 2012 and March 2018 were included.
Result(s): Forty-five infants with a confirmed diagnosis of transposition of the great arteries were included. Statistical analysis demonstrated there were no significant differences in the time to balloon atrial septostomy (p = 0.095), time to arterial switch operation (p = 0.461), length of paediatric ICU stay (p = 0.353), and hospital stay (p = 0.095) or mortality between the two groups.
Conclusion(s): We found no significant differences in outcomes between infants delivered outside the specialist centre, who were transferred in by a specialist team.