BASO~ACS

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Abstracts for the BASO Trainees Audit / QiP Poster Prize Presentation

at the 2020 BASO Annual (virtual) Scientific Meeting
21st – 23rd November 2020

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Poster 1: Four-monthly Foundation doctor rotations affect compliance with colorectal cancer surgery-related extended VTE prophylaxis prescriptions at discharge: a closed-loop audit

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Introduction / Background

Colorectal cancer and major abdominopelvic surgery are venous thromboembolism (VTE) risk factors. Prophylaxis at discharge mitigates VTE events. Four-monthly Foundation doctor (FY) rotations rely on departmental induction and/or handing down of knowledge to prescribe extended VTE prophylaxis upon discharge.

Objectives

This audit aimed to assess departmental compliance with VTE prophylaxis prescribing after elective and emergency colorectal cancer surgery.
Standard: NICE Guideline NG89 To identify, address and rectify variations with compliance.

Methods and Materials

A retrospective audit of all colorectal cancer surgery between 1/8/2018 to 29/2/2020. Data obtained from electronic patient records and NELA database. All discharge summary prescriptions, correspondence and imaging records analysed to identify VTE events. Patients taking oral anticoagulation preoperatively were excluded. The authors decided to stop audit in February as the COVID-19pandemic was beginning to affect elective surgical services across the UK and locally.

Results

Compliance was higher in the elective cases compared to emergency. Compliance remained highest in the first two months of each FY1 rotation, but declined towards the end, with similar four-monthly cyclical trend noted for each rotating cohort.
Six key educational and operational interventions incorporating a multi-disciplinary approach were made in January 2020. Re-audit demonstrated 100% compliance in the three months following intervention. No VTE events were noted from missed prescriptions.

1. Documentation of clear post-operative instructions by the operating surgeon in their operation note.
2. Documentation of duration of VTE prophylaxis duration on the drug kardex if the patient was not already on anticoagulation medication prior to surgery.
3. Hospital pharmacist engagement and involvement in monitoring the medical records and drug kardex to increase compliance with extended prophylaxis prescribing at discharge.
4. Modification of the electronic discharge summary by inserting prompts - Where a diagnosis of 'cancer' was entered or a colorectal surgical procedure was entered, a reminder to the discharging clinician would appear.
5. Education of ward nursing, pharmacy and medical teams.
6. Patient education to increase awareness.

Box 1 :List of the six innervations performed as part of action plan following initial audit

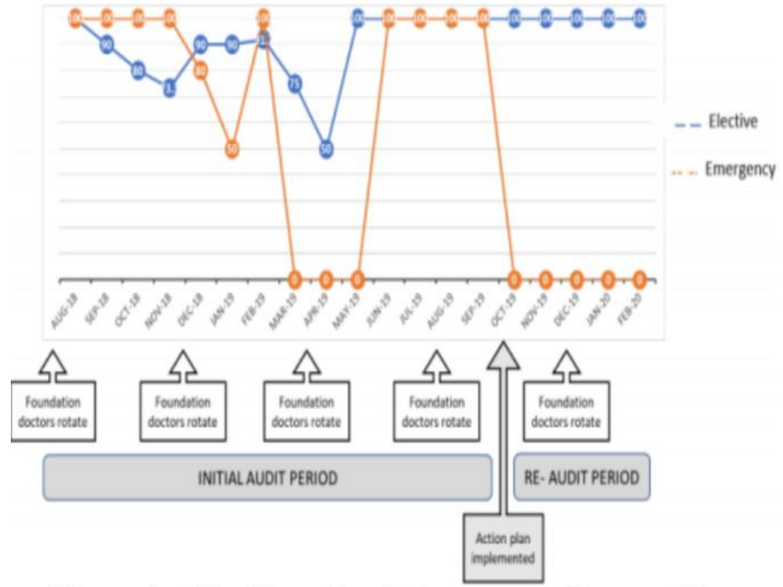

Figure 1 : Timeline of variation in compliance with extended VTE prophylaxis prescribing at discharge before and after implementation of action plan

Discussion

At our rural English hospital, the rotation of Foundation Doctors is the most frequent movement of healthcare professionals forming the extended colorectal surgery team. Foundation doctor rotation has not been attributed as a factor in decreased compliance with extended VTE prophylaxis prescribing at discharge.

Conclusions

Our audit demonstrated foundation doctor education, amongst other institutional changes, can improve extended VTE prophylaxis prescribing in colorectal cancer surgery.

Contact
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References

1. 1. https://www.nice.org.uk/guidance/ng89/chapter/Recommendations#interventions-for-people-with-cancer
2. 2. https://bestpractice.bmj.com/topics/en-gb/1087

Poster 10: Accuracy in Completing theatre listing forms

Adlene Adnan [1], *Bismark Adjei* [1], *Deniz Hassan* [2], *Hazem Alfeky, Ashraf Mostafa* [2], *Sami Ramadan* [2], *Alex Benson* [2]

2020 BASO Annual (virtual) Meeting
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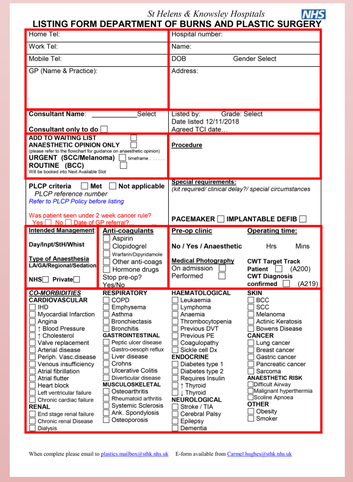
Introduction:

The numbers of cancer-related cases are increasing every day. There is a high turnover of patients on the elective lists. The theatre listing form is an important document to complete as it entails details of the procedure, type of anaesthesia, type of skin cancer patient has and many more. Patients with skin cancer need accurate listing because they are often old with multiple co-morbidities. They have multiple skin lesions which need to be clear of which specific site to be operated on.

Therefore, the lists need to be planned efficiently from admissions, to ensure a full list can be completed in a timely manner. This, in turn would allow the staff members to anticipate and plan for problems, provide efficient and safe use of theatre list, avoid cancellations and delays, avoid near events and also act as a source of income for the department.

Theatre Listing Form of Burns and Plastic Surgery Department



St Helens & Knowsley Hospitals NHS

LISTING FORM DEPARTMENT OF BURNS AND PLASTIC SURGERY

Home Tel:	Hospital number:
Work Tel:	Name:
Mobile Tel:	DOB Gender Select
GP (Name & Practice):	Address:
Consultant Name: _____Select **Consultant only to do** ☐	Listed by: Grade: Select Date listed 12/11/2018 Agreed TCI date
ADD TO WAITING LIST ☐ **ANAESTHETIC OPINION ONLY** ☐ (please refer to the flowchart for guidance on anaesthetic opinion) **URGENT (SCC/Melanoma)** ☐ timeframe . . **ROUTINE (BCC)** ☐ Will be booked into Next Available Slot	**Procedure**
PLCP criteria ☐ **Met** ☐ **Not applicable** *PLCP reference number* *Refer to PLCP Policy before listing* Was patient seen under 2 week cancer rule? Yes ☐ No ☐ Date of GP referral?	**Special requirements:** *(kit required/ clinical delay?/ special circumstances* **PACEMAKER** ☐ **IMPLANTABLE DEFIB** ☐
Intended Management **Day/Inpt/SDU/Whist** **Type of Anaesthesia** **LA/GA/Regional/Sedation** **NHS**☐ **Private**☐	**Anti-coagulants** ☐ Aspirin ☐ Clopidogrel ☐ Warfarin/Dipyridamole ☐ Other anti-coags ☐ Hormone drugs Stop pre-op? Yes/No	**Pre-op clinic** **Operating time:** **No / Yes / Anaesthetic** Hrs Mins **Medical Photography** On admission ☐ Performed ☐ **CWT Target Track** **Patient** ☐ (A200) **CWT Diagnosis confirmed** ☐ (A219)
CO-MORBIDITIES **CARDIOVASCULAR** ☐ IHD ☐ Myocardial Infarction ☐ Angina ☐ ↑ Blood Pressure ☐ ↑ Cholesterol ☐ Valve replacement ☐ Arterial disease ☐ Periph. Vasc.disease ☐ Venous insufficiency ☐ Atrial fibrillation ☐ Atrial flutter ☐ Heart block ☐ Left ventricular failure ☐ Chronic cardiac failure **RENAL** ☐ End stage renal failure ☐ Chronic renal Disease ☐ Dialysis	**RESPIRATORY** ☐ COPD ☐ Emphysema ☐ Asthma ☐ Bronchiectasis ☐ Bronchitis **GASTROINTESTINAL** ☐ Peptic ulcer disease ☐ Gastro-oesoph reflux ☐ Liver disease ☐ Crohns ☐ Ulcerative Colitis ☐ Diverticular disease **MUSCULOSKELETAL** ☐ Osteoarthritis ☐ Rheumatoid arthritis ☐ Systemic Sclerosis ☐ Ank. Spondylosis ☐ Osteoporosis	**HAEMATOLOGICAL** ☐ Leukaemia ☐ Lymphoma ☐ Anaemia ☐ Thrombocytopenia ☐ Previous DVT ☐ Previous PE ☐ Coagulopathy ☐ Sickle cell Dx **ENDOCRINE** ☐ Diabetes type 1 ☐ Diabetes type 2 ☐ Requires Insulin ☐ ↑ Thyroid ☐ ↓ Thyroid **NEUROLOGICAL** ☐ Stroke / TIA ☐ Cerebral Palsy ☐ Epilepsy ☐ Dementia	**SKIN** ☐ BCC ☐ SCC ☐ Melanoma ☐ Actinic Keratosis ☐ Bowens Disease **CANCER** ☐ Lung cancer ☐ Breast cancer ☐ Gastric cancer ☐ Pancreatic cancer ☐ Sarcoma **ANAESTHETIC RISK** ☐ Difficult Airway ☐ Malignant hyperthermia ☐ Sickle Apnoea **OTHER** ☐ Obesity ☐ Smoker

When complete please email to plastics.mailbox@sthk.nhs.uk E-forms available from Carmel.hughes@sthk.nhs.uk

Aim:

We reviewed the accuracy and completion of current listing forms. Improvements to the form were considered along the way.

Method:

Theatre listing forms for elective surgeries from Burns and Plastic Surgical Department at St. Helens and Knowsley Teaching Hospital were reviewed. 267 forms were analysed under two months period, to review if it is completed and if so, whether the forms were completed correctly. Several information such as demographics of patients, surgeons or registrars completing the form, legibility and patients' comorbidities were taken into account.

Results:

- 90% of patients had skin cancer-related condition.
- Median age of patients were 76 (Range 25-96).

Description	Percentage Completed
Patient Details	87.6
Consultant Details	98.5
Listing Surgeon	84.6
Diagnosis	4.9
Procedure	99.6
Operating time	92.9
Urgency of Surgery	88.8
Use of Anti-Coagulant	99.6
Pre-Operative Assessment Clinic	70.8
Pacemaker Check	99.2
Legibility	88.4
Completed List of Comorbidities	41.1

- **Only 19.9% had accurate completion of theatre listing forms.**

Discussion:

There were several cancellations and delays in the surgical procedure due patient becoming temporarily unfit for the procedure or had a pacemaker. However since the forms were not filled properly, it was only known on the day of the procedure. This delay reduced the efficiency of the theatre list and patients' surgical procedure had to be rescheduled. This indirectly causes dissatisfaction in patients' care and a waste of NHS resources as the surgical slot could be given to another patient on the waiting list.

There was lack of information of patients' co-morbidities. This caused the department to lose money when not all co-morbidities are ticked.

Conclusion:

Improvement is needed as over 80% of the forms were incompletely filled. An online listing form would increase the accuracy of completing these theatre forms. This will improve legibility and increase the completion of all criteria to avoid unnecessary cancellations and ensure excellent patient care.

A re-audit in six months will be performed after the implementation of the online listing forms.

References:

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3. NHS. *The NHS Long Term Plan. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/01/nhs-long-term-plan-june-2019.pdf (accessed 3 July 2020).*

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Poster 24: Management of Incidental Pancreatic Cysts - Are we adhering to guidelines?

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NHS King's College Hospital NHS Foundation Trust

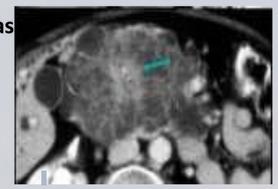
Introduction

The prevalence of asymptomatic pancreatic cyst ranges from 2.2% - 13.5%. The majority of these are incidentally diagnosed. Only 31% of these cysts were documented in radiology reports. Neoplasia was increasingly identified in them. Most NHS Trusts do not have robust pathways to manage incidental pancreatic cysts. We reviewed management of incidental pancreatic cysts and adherence to guidelines.

Types of Pancreatic Cysts

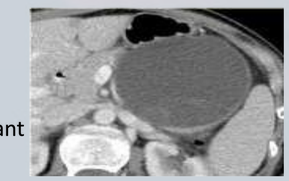
Pseudocysts
- Seen in pancreatitis.
- Benign in nature with no malignant transformation.

Serous Cystadenomas
- Usually women in 50s.
- Mostly asymptomatic.
- Benign in nature.



Intraductal Papillary Mucinous Neoplasms
- Most common neoplastic cyst in pancreas.
- Produces mucin and Has risk of malignant transformation.

Mucinous Cystic Neoplasms
- Typically found in women.
- They have malignant potentials



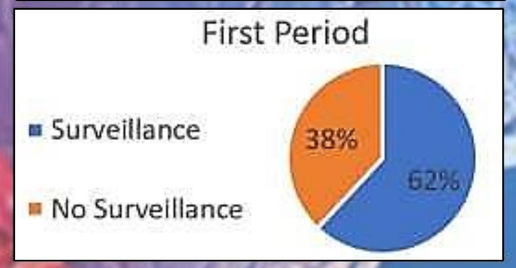
Methodology

Retrospective data was collected across three hospital sites in our Trust between January 2018 to January 2019 when there were no trust guidelines. Reaudit was performed between July 2019 to February 2020 following the introduction of local guidelines which recommend **all pancreatic cysts to be discussed in specialist multi-disciplinary team (MDT) meetings.**

Results

Table 1:

Periods	N	MDT Referrals	No MDT Referral
First	79	42 (53%)	37 (47%)
Second	28	18 (64%)	10 (36%)



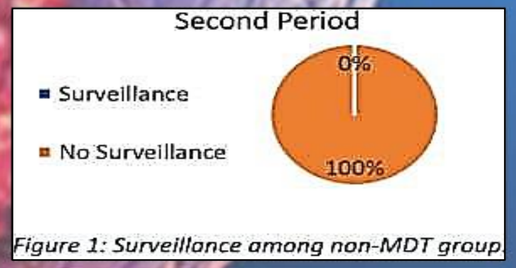


Figure 1: Surveillance among non-MDT group

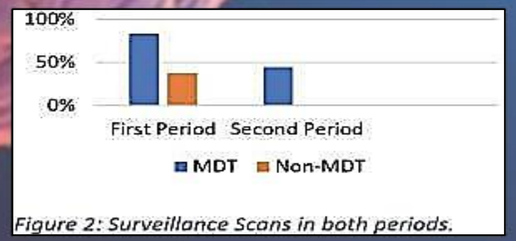


Figure 2: Surveillance Scans in both periods.

Discussion

Implication of COVID-19: 12 months data could not be collected in the second phase due to disruptions in the local services caused by COVID-19. The resulting sample size over nine months is therefore smaller in comparison to the first audit cycle.

A trend of **increased MDT referral was observed in the second period by 11%** *(p=0.3 with Chi square test).*

36% of patients were still not referred (Table 1)

During the initial audit, 62 % (23/37) of patients in the Non-MDT group had no surveillance scans, potentially missing high-risk patients and 38% of patients (14/37) still underwent surveillance scans from non-GI specialists which could be unnecessary. (Fig.1)

44% of patients underwent surveillance following MDT in the second period as compared to 83% prior to guidelines (p= 0.002) (Fig.2)

Conclusion

-Robust guidelines in place for incidental pancreatic cysts helps identify high risk cysts which warrant future surveillance and appropriate treatment, avoid unnecessary imaging, thereby releasing radiology capacity.

-MDT referral ensures malignant transformations are identified early and reduce morbidity and mortality.

Recommendation

Discussion and dissemination of the new trust guidelines with other relevant non-GI teams will help in the adherence to this pathway and avoid losing high-risk patients in the community.

-Re-audit cycle to be performed over 12 months period after one year of implication of the guidelines for more updated and comparable results.

King's Guidelines: Snapshot

Clinical features that warrant urgent referral to King's HPB MDT regardless of size & morphology:
- Obstructive jaundice, weight loss.
- Elevated serum 19-9 or CEA.
- Strong family history of pancreatic cancer
- New onset or worsening diabetes.
- Repeated attacks of pancreatitis.

References

(1)Karen S L, Aarti S, Nell M R, *et al*. Prevalence of Incidental Pancreatic Cysts in the Adult Population on MR Imaging (2) Ye R C, Joo K P, Jin-Young J, et al. Incidental pancreatic cystic neoplasms in an asymptomatic healthy population of 21,745 individuals (3) James M S, Joo H H, Paul M. American Gastroenterological Association Technical Review on the Diagnosis and Management of Asymptomatic Neoplastic Pancreatic Cysts. Grace H E, Brintha K E, Bryan G S, *et al.* American College of Gastroenterology Clinical Guideline: Diagnosis and Management of pancreatic cysts

Poster 25: Audit of Patient Outcomes after Free Flap Breast Reconstruction following Mastect

Lessons Learned in Improving Quality of Service Provision.

Vi Vien Toh; John Kiely; William Holmes
Mid Yorkshire Hospitals NHS Trust

2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

Introduction / Background

In 2011 the National Mastectomy and Breast Reconstruction Audit (NMRBA) found clear variations in the delivery of information, services and patient outcomes nationally in 18,000 women.

This lead to the development the 2012 Oncoplastic Breast Reconstruction Guidelines for Best Practice (OBPS)[1]. The OBPS provide a range of quality criteria (QC) and associated targets, which define a framework that should be used to assess current practice and deliver high quality care in every stage of the patient's clinical pathway.

A new autologous breast reconstruction service was established in our unit on July 2018. This audit was developed to assess the new service against quality criterias (OBPS) related to patient outcomes, complications and satisfaction with information; as well as areas for service improvement.

Objectives

1. Identify the rate of post-operative complications following free flap breast reconstruction; and the incidence of return to theatre and length of hospital stays related to this.
2. Determine number of unplanned readmissions after free flap breast reconstruction within 3 months following discharge from initial surgery. ***QC17 of OBPS targets unplanned readmissions should occur in less than 5% of cases within 3 months.***
3. Determine if all patients with postoperative complications following free flap breast reconstruction are reported (audited) and discussed in the departmental clinical governance; CG (morbidity and mortality; M&M) meetings; ***as targeted in QC18 of OBPS.***
4. Determine the number of patients who were satisfied with their information provision at 3 months; based on their BREAST-Q survey tool[2,3] results. ***QC19 of OBPS states that satisfaction with information provision should be reported by 80% of patients at 3 months.***

Methods and Materials

- **Sample:** All patients who have had free flap reconstruction following mastectomy since service inception (July 2018) up to March 2020 were identified using the UK National Flap Registry.
- **Sample size:** 32 patients; 33 flaps.
- **Audit process:** Prospective data collection using the UK National Flap registry; patient electronic medical records, patient survey (Breast-Q) and Plastic Surgery department M&M archives (electronic) by Plastic Surgery trainees in the Breast Microsurgery firm. 100% of data obtained was validated through an independent review by a Consultant and results were compared at completion of data collection.

Results

1. 3% (1/33) of free flaps failed. The average length of stay of readmissions is 3 days (0-15) . Common complications (Chart 1) include mastectomy flap infections (23%) or fat necrosis (15%)
2. 33% (11) of patients were readmitted to hospital. The average time of admission was on post-op Day 25 (7-82). 73% (8/11) of readmitted patients returned to theatre;
3. Patients who were classified as Grade II and above in the Clavien-Dindo Classification for Surgical Complications[4] were deemed significant enough to be reviewed at CG. 11 patients were identified; only 73% (8) of cases were formally discussed at M&M.
4. 59% (19) of patients returned their post-operative Breast-Q's despite a 100% return rate of pre-operative questionnaires. 58% (11/19) of patients scored an overall above 80% for satisfaction with information provision (Chart 2); although results were skewed by a poor response rate.

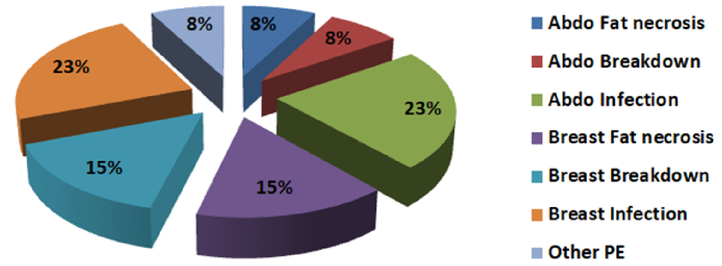
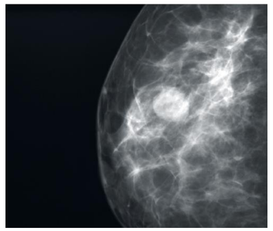


Chart 1. Frequency of complication types as causes for readmission.

Discussion & Plans for Service Improvement

1. Majority of reoperations were debridement of mastectomy flap necrosis. This was presented at Breast CG. To reduce mastectomy flap necrosis rates; intraoperative assessment and aggressive debridement of mastectomy skin flaps is performed.
2. All readmissions were reviewed; 27% (3/11) were inappropriate. To reduce unnecessary readmission, follow-up appointments are streamlined to help early identification and management of complications with support of the use of telemedicine.
3. Although 100% of postoperative complications were audited in the local Breast Reconstruction database; some significant complications were not highlighted for CG. A named representative (trainee) was tasked to monitor and log future cases for CG.
4. Poor postoperative response rates were related to difficulties with postal returns and inconsistencies with timing of follow-ups. To improve return rates; an online form was enabled and follow-up appointments were streamlined to allow surveys at 3 months post-op.

National Mastectomy and Breast Reconstruction Audit 2011



ONCOPLASTIC BREAST RECONSTRUCTION
Guidelines for Best Practice

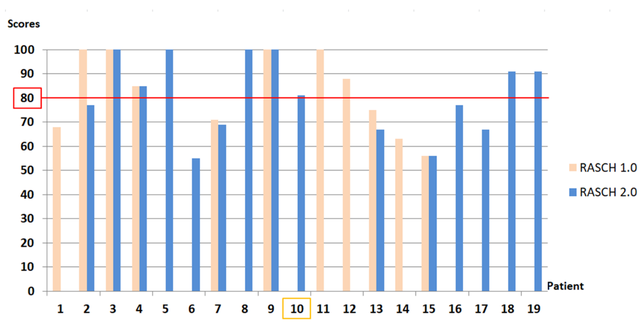
Editors: Dick Rainsbury and Alexis Willett
November 2012

BREAST-Q™ - RECONSTRUCTION MODULE (POSTOPERATIVE) VERSION 2.0: PATIENT EXPERIENCE: SATISFACTION WITH INFORMATION

How satisfied or dissatisfied were you with the information you received from your surgeon about:

	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
a. How the breast reconstruction surgery was to be done?	1	2	3	4
b. Healing and recovery time?	1	2	3	4
c. Possible complications?	1	2	3	4
d. The options you were given regarding types of breast reconstruction?	1	2	3	4
e. The options you were given regarding timing of your breast reconstruction (i.e., same time as your mastectomy versus later)?	1	2	3	4
f. The pros and cons of the timing of your breast reconstruction?	1	2	3	4
g. How long the process of breast reconstruction would take from start to finish?	1	2	3	4
h. What size you could expect your breasts to be after reconstructive surgery?	1	2	3	4
i. How much pain to expect during recovery?	1	2	3	4
j. What you could expect your breasts to look like after surgery?	1	2	3	4
k. How long after reconstruction surgery it would take to feel like yourself/feel normal again?	1	2	3	4
l. How the surgery could affect future breast cancer screening (e.g., mammogram, self-examinations)?	1	2	3	4
m. Lack of sensation in your reconstructed breast(s) and nipple(s)?	1	2	3	4
n. What other women experience with their breast reconstruction surgery?	1	2	3	4
o. What the scars would look like?	1	2	3	4

Chart 2. Overall Breast-Q scores for satisfaction with information provision



Conclusions

Prospective audits using objective and nationally recognised tools can help surgeons to identify areas for development earlier in order to build a strong service. The lessons learned include:

- Aggressive intraoperative assessment of mastectomy skin flaps by Breast and Plastic surgeons;
- Need for earlier recognition and senior review of patients at higher risk of reoperation.
- Regular follow-up appointment to enable postoperative Patient Reported Outcome Measures (PROMS) questionnaire completion.

Contact

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Mid Yorkshire Hospitals NHS Foundation Trust
Email: vivien.toh@nhs.net, willholmes@nhs.net

References

1. Oncoplastic Breast Reconstruction: Guidelines for Best Practice. November 2012. Source: http://www.bapras.org.uk/docs/default-source/commissioning-and-policy/final-oncoplastic-guidelines---healthcare-professionals.pdf?sfvrsn=0
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4. Dindo D, Demartines N, Clavien PA. Classification of surgical complications: a new proposal with evaluation in a cohort of 6336 patients and results of a survey. *Ann Surg*. 2004;240(2):205-213. doi:10.1097/01.sla.0000133083.54934.ae

Poster 31: Achieving 62-day targets in the management of skin cancer – lessons learned and future directions

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2. Department of Plastic and Reconstructive Surgery, Royal Stoke University Hospital

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Background

The 62-day target requires all fast-track suspected cancers to be treated within 62-days of referral.

This objective was set out by the Department of Health in the National Health Service (NHS) Cancer Plan 2000[1] and adjusted in the 2007 Cancer Reform Strategy[2] to include an expected compliance of 85%.

Objectives

The objective of this audit was to established the cause of delay for patients exceeding the 62-day wait target for skin cancer excisions at University Hospitals of North Midlands.

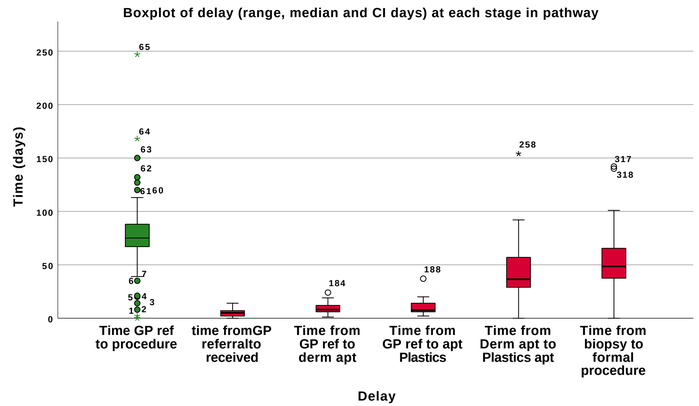
This was measured against the NHS Cancer reform strategy standard.

Methods

A thorough analysis of the timeline from GP referral to treatment was undertaken for all patients who breached the 62-day treatment target for cutaneous squamous cell carcinoma (SCC) and melanoma between Oct 2017 – Sep 2019.
Factors involved in the breach of these patients were identified and explored. These included:

- Patient co-morbidities
- Time between GP referral sent and received
- Initial specialty and action taken
- Time to biopsy
- Time from biopsy to formal procedure
- MDT and histology wait times

Statistical analysis was undertaken using SPSS.



A chart to show delays (days) at each stage in the pathway using boxplots

	Mean/*median	SD/ *IQR
Total number of days from GP referral to formal procedure	70.5	6.24
Days taken for GP referral to be received	*5	*5.5
Days from GP referral to Dermatology appointment	9.34	4.552
Days from GP referral to Plastic surgery (1st) appointment	9.86	8.03
Days from Dermatology appointment to Plastic Surgery appointment	41.71	25.23
Days taken to biopsy in Dermatology	25.07	16.06
Days taken to biopsy in Plastic Surgery	26.38	10.56
Days from biopsy to formal procedure	49.6	29.9

Table demonstrating delays at various stages of the skin cancer referral pathway

Results

- Seventy-two patients (mean age 79 years) breached the 62-day target, making up 10.1% of the skin cancers treated for the time period
- There were 65 SCCs and 7 melanomas
- The median time from referral to procedure in patients who breached was 75 days (IQR 68-90)
- The longest delays in the pathway occurred in those who had an initial diagnostic biopsy (mean 54.0 days) or an initial appointment with dermatology that were subsequently referred to plastic surgery (mean 42.7 days)
- Delays were most commonly due to inadequate operating capacity (29%), followed by delays due to patient fitness for surgery (26%)
- In accordance with Summer being the busiest time for referrals in our centre, the peak of breaches occurred in November and in February, following a decrease in service provision over the Christmas period

Suggestions for future directions and Conclusions

- Appropriate triaging of patients to either plastic surgery or dermatology in order to reduce delays caused by inter-specialty referrals e.g. for complex lesions
- “Parallel” clinics where dermatologists and plastic surgeons are consulting in adjacent rooms
- Consider some form of mini pre-assessment for patients so that unexpected co-morbidities don’t lead to cancellations
- Fast Track histology pathways for those undergoing incision biopsy

With the above efforts, the number of patient encounters with the healthcare service and the length of time they spend waiting for diagnosis and treatment of skin cancer could potentially be reduced.

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Poster 60: Intradural Tumour Resections at The Royal Orthopaedic Hospital NHS Foundation Trust: Service Evaluation

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2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

BACKGROUND

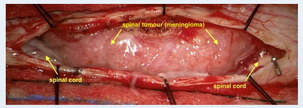

Fig 1 – Intra-operative photograph showing the resection of an intradural tumour (meningioma)

Intradural tumours can be intramedullary or extramedullary. The vast majority are benign, and are treated with surgical resection if they become symptomatic. [1, 2]

OBJECTIVE

To provide a service evaluation of all intradural spinal tumour resections conducted at the Royal Orthopaedic NHS Foundation Trust (ROH) from January 2017 to December 2018

METHODS

All patients who underwent intradural tumour resections at the ROH between January 2017 and December 2018 were reviewed.

Pre-operative, intra-operative and post-operative outcomes were obtained from patient case notes, the online clinical portal, theatre books and the PICS software system.

Inclusion Criteria	Exclusion Criteria
Intradural spinal tumour resection	Insufficient follow-up data (under 6 weeks)
Treated at ROH	Extradural pathology
January 2017 – December 2018	

Table 1 – Inclusion and exclusion criteria for cases in this service evaluation

18 patients were identified. One patient was excluded (extradural pathology), leaving 17 patients for review.

Mean Age at Surgery (Years)	**60.9 (Range: 29-82)**
Sex (M:F)	3:14

Table 2 – Summary of patient characteristics (n=17)

The following NICE guidelines, applicable to the excision of extramedullary intradural tumours, were used as a guide for generating outcomes. [3] These served as a benchmark to which the ROH intradural resection service was compared.

- Specialist MDT discussion and management plan formulation is beneficial for all patients following presentation.
- Investigation with MRI.
- Aim of treatment for patients with low-grade tumours is to prevent further neurological deterioration.
- Monitoring and early resection of enlarging or symptomatic lesions in high-risk patient groups, for example those with neurofibromatosis types 1 & 2.
- Regular follow-up with MRI and clinical examination to identify and treat postoperative complications or tumour recurrence.

All pre-operative, intra-operative and post-operative outcomes investigated are outlined in the 'Results' section.

RESULTS

The following four tables show the results for each outcome.

Pre-Operative Outcome	Overall Result (n=17)
PMH requiring HDU admission (Y/N)	8
Significant FH (Y/N)	1
ASA	ASA 3: 2 patients ASA 2: 12 patients ASA 1: 3 patients
Smoking status (Y/N)	3
Pre-operative imaging: Whole spine MRI (Y/N), brain MRI (Y/N), gadolinium MRI (Y/N)	16 patients had a full-spine MRI. Of these, 3 also had a brain MRI and 5 had a gadolinium-enhanced MRI. 1 patient had a cervical spine MRI only
Mean time from diagnosis* to operation (weeks)	7.6. (Range: 1 day-16 weeks)
MDT review (Y/N)	15 patients were reviewed at MDT pre-operatively 1 patient had symptomatic spinal cord compression and underwent urgent resection 1 patient was added onto operating list following diagnosis, without MDT review
Pre-operative Treatment	Opioids: 7 NSAIDS: 3 Physiotherapy: 4 Steroid Injections : None
Oswestry Disability Index (ODI)	Not reported
EQ-5D	Not reported

Table 3: Results of pre-operative outcomes. *diagnosis taken as date of MDT.

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Intra-operative Outcome	Overall Result (n=17)
'Skin-to-skin' mean time (hours)	2.8 (based on data from 13 cases)
'In-out' mean time (hours)	3.3 (based on data from 15 cases)
Mean estimated blood loss (ml)	280 (based on data from 6 patients)
Use of instrumentation (Y/N)	1 (hemilaminectomy performed for L5 neuroma)
Valsava Manoevre Performed (Y/N)	4
Use of staples for closure (Y/N)	3
Tethering of tumour to cord or rootlets (Y/N)	12
Rootlets excised (Y/N)	9
Dural Tear (Y/N)	1
Local Anaesthetic Infiltration (Y/N)	17
Enoxaparin use	Prescribed at 24 hours post-operatively in all cases. Patients then received a mean of 1.5 additional doses on subsequent days. (Range: 0-6)
Dexamethasone use	Over 1 day (9); over 2 days (4)
Mean bedrest duration (hours)	29.5 (based on data from 13 patients)
Antibiotic cover	9 patients received 24 hour cover. 8 patients received a single dose. NB: the North American Spine Society recommend a 'single dose of preoperative prophylactic antibiotics' for typical cases, whilst 'prolonged postoperative regimens may be considered in complex situations'. [4]

Table 4 – Results of intra-operative outcomes

Short-term* Post-operative Outcome	Overall Result (n=17)
Infection (Y/N)	None
Neurological Deficit (Y/N)	4
CSF Leak (Y/N)	None
Return to theatre (Y/N)	None
Post-operative headache (Y/N)	4. Mean duration: 3.5 days.
Mean time of bed-rest (days)	2.4
Maximum post-operative pain score (VAS)	5.9 (Range: 1 to 10)
Post-operative Opioids (Y/N)	8
Post-operative NSAIDS (Y/N)	4
Mean time to TWOC (days)	4.7 (Range: 1-14)
Mean length of stay (days)	7.7 (Range: 2-18)

Table 5 – Results of short-term post-operative outcomes. ***Short-term was defined as within two weeks post-operatively.**

Long-term Post-operative Outcome	Overall Result (n=17)
Clinical examination at follow-up	17
Post-operative imaging	Post-operative MRI in 13 XR only in 1 patient No post-operative imaging in 3 patients
Post-operative symptoms	14 patients experienced improvement, 11 of which experienced complete resolution of symptoms. No change form presentation was seen in 3 patients. 16 patients out of 17 did not suffer from new deficits. 1 patient awaiting MRI for a suspected new lesion; suffered proprioceptive loss.
Return to theatre (Y/N)	None
Post-operative headache (Y/N)	4. Mean duration: 3.5 days.
Mean time of bed-rest (days)	2.4
Post-operative treatment	1 patient received steroid injections (suffered from degenerative changes in lumbar spine; not to do with resection)
Re-admission (Y/N)	1 patient was re-admitted (following a fall unrelated to the resection)
Recurrence (Y/N)	0 patients (minimum 5-month follow-up period)
Time for histological diagnosis (days)*	12.5 (Range: 5-20).
Oswestry Disability Index (ODI)	Not reported
EQ-5D	Not reported

Table 6 – Results of long-term post-operative outcomes. * Specimen taken during surgery, then sent for histological analysis.

DISCUSSION

The results of this audit suggest that the ROH provided a safe and effective intradural resection service from January 2017 to December 2018. All patients received pre-operative MRI scans , 16/17 patients did not suffer from further neurological deterioration, and all patients underwent post-operative clinical examination. No recurrences were reported over a minimum 5-month follow-up period. However, one patient was **not reviewed at MDT** pre-operatively and four patients did **not undergo post-operative MRI** scanning.

CONCLUSION

The intradural resection service in January 2017– December 2018 largely adhered to NICE guidelines. **The following changes will be made to improve the service:**

1. Review all patients by the spinal oncology MDT pre-operatively and neuro-oncology MDT following histopathology results
2. Calculate and record pre-operative and post-operative ODI and EQ-5D scores for all patients undergoing intradural tumour resections.
3. Upload outcomes to British Spine Registry

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Poster 61: 'Fast track' Pathway for Resectable Pancreatic Cancer: a Mixed-Methods Service Evaluation

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2020 BASO Annual (virtual) Meeting
21st – 23rd Nov

BACKGROUND

- Pancreatic cancer mortality closely matches incidence(1).
- Surgical resection via pancreaticoduodenectomy (PD) offers a potentially curative solution for cases that have not metastasised beyond the pancreatic tissue(2).
- Preoperative biliary drainage (PBD) became standard practice to minimise the risk of operating on jaundiced patients, but has been shown to increase the risk of complications(3).
- A 'fast track' pathway for resectable pancreatic cancer which avoids PBD was introduced in University Hospitals Birmingham NHS Foundation Trust (UHB) and referring centres in 2015(4).
- The pathway has been shown to increase the number of patients undergoing PD, decrease the time taken to receive PD, and save around £3200 per patient(4).

WHAT DOES THIS STUDY ADD?

This study is the first to incorporate both quantitative and qualitative techniques to evaluate the fast track pathway for resectable pancreatic cancer in UHB and referring centres

AIM & OBJECTIVES

Aim: To provide an up-to-date evaluation of the fast track pathway for resectable pancreatic cancer, by exploring views of clinicians involved in its delivery.

Objectives:

I. To assess awareness of the fast track pathway among clinicians in UHB and referring centres
II. To assess barriers in implementing the pathway in UHB and referring centres
III. To assess facilitators in implementing the pathway in UHB and referring centres
IV. To explore clinicians' views of reasons behind successful, partially successful and

ay

METHODS

- **Study Design:** service evaluation with a sequential explanatory design. Online questionnaires sent to members of the hepatobiliary MDT in UHB, and separate questionnaires to members of the hepatobiliary MDT in referring centres. Questionnaire results used to inform development of a topic guide for one-to-one, semi-structured interviews.
- **Inclusion criteria:** member of MDT involved in treating pancreatic cancer in UHB or a referring centre and able to communicate in English
- **Exclusion criteria:** any patient treated for pancreatic cancer via the fast track pathway
- **Ethics:** ethical approval obtained from University of Birmingham IREC
- **Sampling and recruitment:** purposive sampling for questionnaire respondents. Interviewees recruited using snowball method from established contacts, and from questionnaire follow-up
- **Data collection:** questionnaires designed to take less than 5 minutes to complete. Interviews recorded and transcribed verbatim.
- **Data analysis:** questionnaire analysis auto-generated by Qualtrics XM® software. Braun and Clarke's thematic analysis used to analyse interview transcripts. One transcript was independently coded by project supervisor for investigator triangulation.

Sample	
UHB Questionnaire	3 respondents: consultant hepatologist, consultant gastroenterologist and consultant surgeon.
Referring Centre Questionnaire	11 respondents (8 respondents provided occupation information): 3 consultant gastroenterologists, 2 consultant surgeons, 2 clinical nurse specialists and 1 consultant hepatologist.
Interviews	11 clinicians interviewed (5 face-to-face, 6 by telephone), comprising: ✓ 6 clinicians from UHB, 5 clinicians from referring centres. ✓ 4 surgeons, 5 clinical nurse specialists, 1 gastroenterologist, 1 medical oncologist

RESULTS

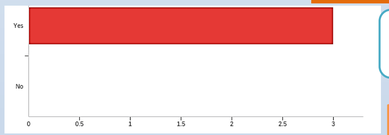

Figure 1: Awareness of fast track pathway among respondents from UHB. Questionnaire included an item asking if respondents were aware of the fast track pathway for resectable pancreatic cancer in UHB and referring centres; all 3 respondents indicated awareness. *Horizontal x-axis represents the number of respondents, and vertical y-axis indicates the Yes/No options available.*

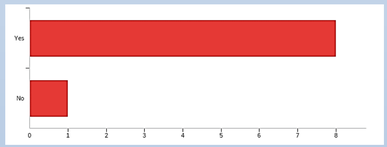

Figure 2: Awareness of fast track pathway among respondents from referring centres. *Horizontal x-axis represents the number of respondents, and vertical y-axis indicates the Yes/No options available.*

"We went to the local teams and we started with a fairly soft launch: I think Heartlands and New Cross first."

"They have made a real effort to visit, give feedback on cases, tell us how things are going, suggest improvements, ask what we think."

"We just went round all the referring trusts. I think within three or six months we'd been to all the referring trusts."

Theme: **Evolution**

- Phased implementation
- Introduction of template documents to guide referrers
- Increasing bilirubin (marker of jaundice) threshold for eligible patie

Theme: **Collaboration**

- UHB team willing to provide regular feedback to referring teams
- Discussions at professional meetings
- Culture of open

Theme: **Leadership**

- Securing funding
- Visits to referring centres to engage stakeholders and manage opposition
- Engaging and educating clinical nurse specialists
- udy days

Theme: **Coordination**

- Flexible theatre space
- Dedicated pathway coordinator
- Necessity to continually educate referring teams to ensure corre use of

"We've found it quite easy to do the operating theatres because of the way we work because we're a big team and we don't have named lists."

Theme: **Clinical benefit**

- Pathway guided by the benefits of avoiding PBD
- Emotional impact on patients of rapid diagnosis and progression to surgery
- Further e dence required to ne ch resectable pancreatic cancer

"The main reason to do it was just to avoid the biliary drainage and improve the care for the patients."

CONCLUSION

- Pathway depends on extensive collaboration between stakeholders in UHB and referring centres
- Clinical nurse specialists vital in managing the communication triangle between the referring unit, UHB and patients.
- Pathway relies on clinical leaders in UHB to 'sell' benefits of pathway, provide feedback, manage opposition and ensure ongoing stakeholder engagement
- Phased implementation of the pathway may have aided in managing clinician opposition as it arose, providing more time to build acceptance and enable centres to learn from one another.
- Culture of continuous improvement, such as through introduction of template documents and dedicated pathway coordinator.
- Pathway follows NICE guidance to provide upfront surgery for resectable pancreatic cancer, but more evidence needed to ascertain effects of NAC(5).
- Interviewees noted emotional impact on patients of early diagnosis and surgery
- Practical factors such as flexible theatre space ensured sustainability of the pathway in UHB and referring centres.

STRENGTHS & LIMITATIONS

Strengths	Limitations
✓ Clinicians from both UHB and referring centres included	✕ Limited questionnaire respondents
✓ Clinicians from a range of specialties and professions included	✕ Patients not included
✓ Independent coding of transcript for triangulation	✕ Underrepresentation of gastroenterologists, medical oncologists and radiologists
✓ Questionnaires provided general understanding of the topic whereas interviews explored clinicians' views in depth	✕ Potential for gatekeeper bias due to snowball sampling of interviewees

FUTURE RESEARCH

- A definitive randomised controlled trial comparing NAC to a control group in which fast track surgery is carried out, such that the patients in the control group can have the advantage of avoiding PBD.
- To assist in wider uptake of the pathway, future research may focus on gaining an understanding of contextual factors in other tertiary centres and their referrers.
- Qualitative work to assess emotional impact of early versus delayed PD for pancreatic cancer patients

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5. NICE Guideline 85: Pancreatic cancer in adults: diagnosis and management. 2018

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Poster number 92: A Retrospective Study Comparing Histopathology Proformas For Anterior Resections Against The RCPath Guidelines

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Acknowledgements: Dr R Rao (Consultant Histopathologist). Hereford County Hospital, Wye Valley NHS Trust.

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Introduction / Background

The Royal College of Pathologists (RCPath) [1] have published guidelines on the clinical information required on histopathology request forms for colorectal cancers. Specific information such as the nature of resection and site of tumour, histological type of tumour, preoperative tumour staging (along with details of preoperative therapy if given) should be specified on the request forms. A background of the patient's family history (specifically familial cancers or IBD), if the tumour was detected as part of a screening programme and the type of surgery performed [1] are also information that the RCPath has identified as being a requirement on histopathology forms.

Objectives

1. To audit the compliance of the clinical information provided by surgeons in our local trust in relation to the RCPath guidelines.
2. To suggest ways in which the current practices can be improved to ensure greater adherence to guidelines.
3. To encourage collaborative work between surgeons and histopathologists with an aim to implement changes to further improve clinical practice

Methods and Materials

Data was initially gathered from the histopathology secretaries who provided a list of 150 patients who have had anterior resections between the years 2014-2019. The request forms were manually checked for the clinical information provided on each paper form against the RCPath guidelines and data recorded on a proforma. A total of 50 paper request forms were reviewed and audited (see figure 1).

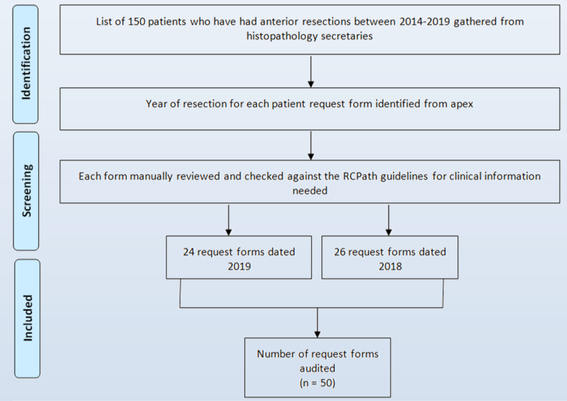

Figure 1. Flow diagram illustrating the method and process of data collection. N = 50 (total number of request forms audited).

Results

94% (47/50) of the request forms mentioned the site of tumour resection; 56% (28/50) specified the nature of resection and 48% (24/50) had mentioned the type of surgery performed, (i.e. whether open or laparoscopic, see figure 2). Out of the 50 request forms reviewed, 10% mentioned whether pre-operative therapy was given and specified the nature of therapy. Only 4% recorded the preoperative tumour staging and whether the cancer was detected from a screening programme (see figure 3). Information such as family history, histological type of tumour on diagnostic biopsy, duration of pre-op therapy, the type and dissection plane of operation were not recorded on none of the request forms.

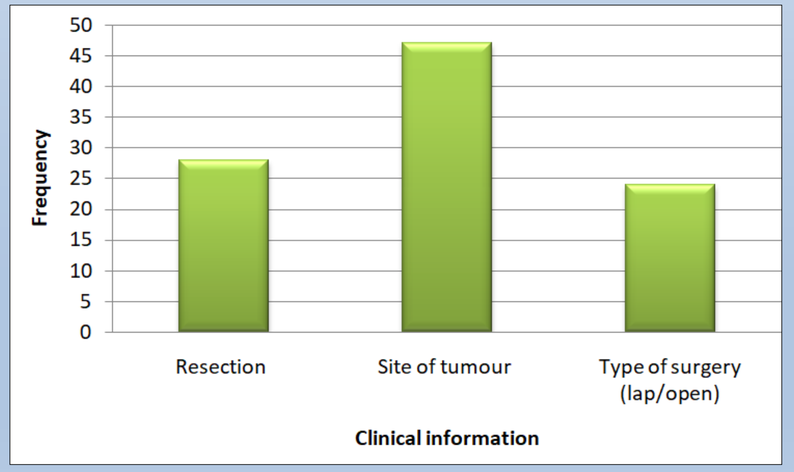

Figure 2. Bar graph showing the frequency of reporting for resection, site of tumour and type of surgery on request forms (n=50).

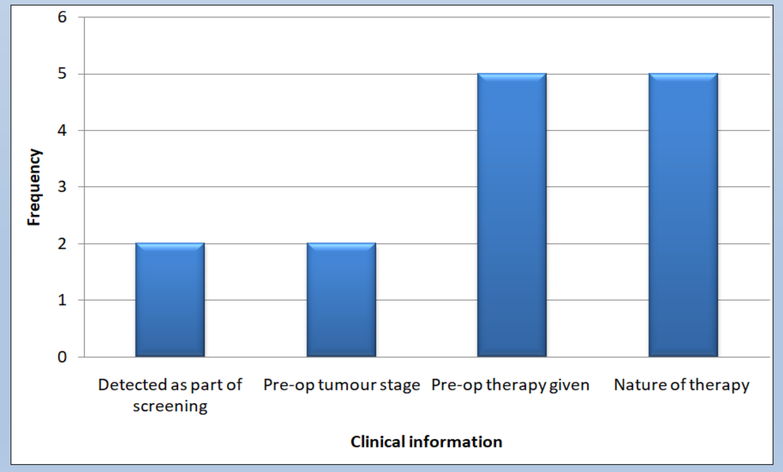

Figure 3. Bar graph showing the frequency of reporting of clinical information on the request forms provided to histopathologists. (n=50).

Discussion

A study carried out in Scunthorpe General Hospital, UK [2] assessed 500 clinical request forms of patients with large bowel cancer resections and found that the clinical information was inadequate in relation to the RCPath guidelines. It was noted that the pre-operative stage of the tumour was recorded in 5.4% of cases, and 0.6% of request forms mentioned whether the tumour was detected as part of a screening programme [2]. In comparison, to our audit which was 4% for both parameters. The lack of adequate information on clinical request forms could be due to several reasons, one important aspect we considered was the lack of space on the paper request forms. To improve this, we have suggested an electronic form with mandatory fields to be completed .

Conclusions

To conclude, reporting of clinical information provided on request forms is substandard and needs improvement. The nature of the resection and site of tumour are being well recorded. However, significant information such as pre-op therapy, type and dissection plane of operation attempted and family history are absent in the majority of request forms audited. We believe that the implementation of an electronic form would help improve the information histopathologists receive and plan a reaudit to assess whether our suggested change was significant in improving outcomes.

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2. Ntala C, Gumber A, et al. How adequate is the information provided on histopathology request forms for colorectal cancer resection? Gut 2015

Poster 95: Audit on Oncoplastic/Reconstructive Breast Surgery Operative Notes According to the Royal College of Surgeons and Association of breast surgeons Guidelines before and after the introduction of standard templates at Glenfield Hospital Leicester.

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Introduction:

The Association of breast surgeons(ABS) and the Royal College of Surgeons (RCS) have standard guidelines for operative notes as lack of proper documentation can lead to

Issues with Patient safety

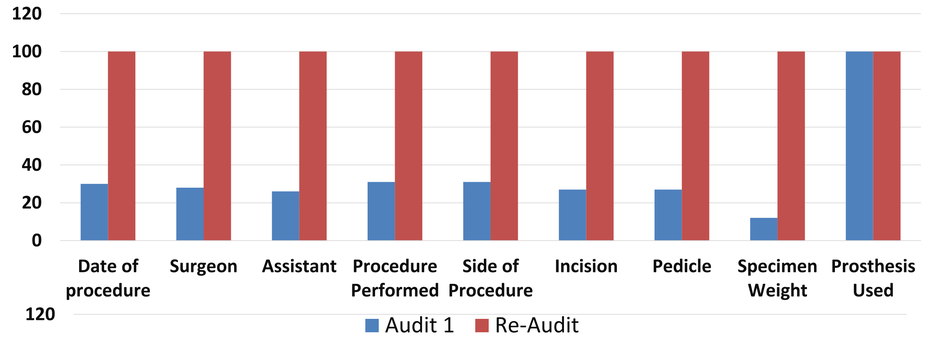
- Difficult for on call team to look after patient without all appropriate information
- Nursing staff may not be able to read note or post op instructions

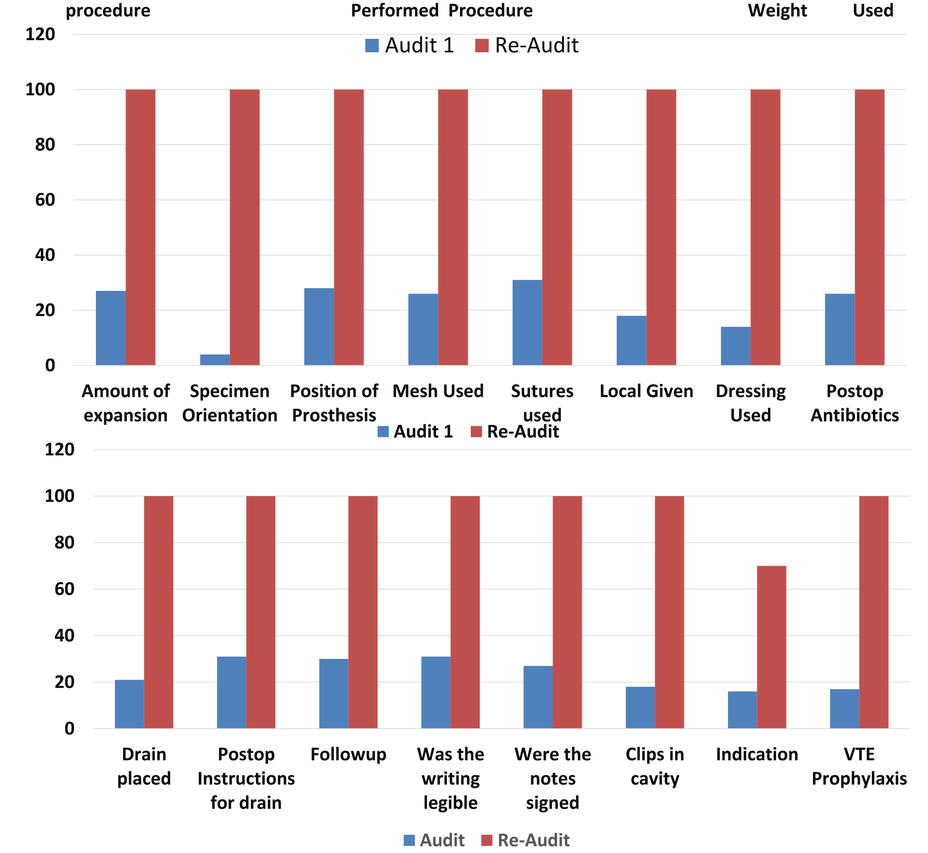
Medico legal issues

- Is procedure being described in adequate detail?
- Would they stand up to scrutiny in a coroners court if needed

Methods:

First Audit: A Retrospective review of 31 operative notes of oncoplastic/reconstruction procedures from August-October 2019. Review of operative notes of oncoplastic/reconstruction procedures
Intervention : Standard Operative note templates introduced.
Re-Audit: Total 31 operative notes reviewed from July-September 2019 (delay due to Covid:19).

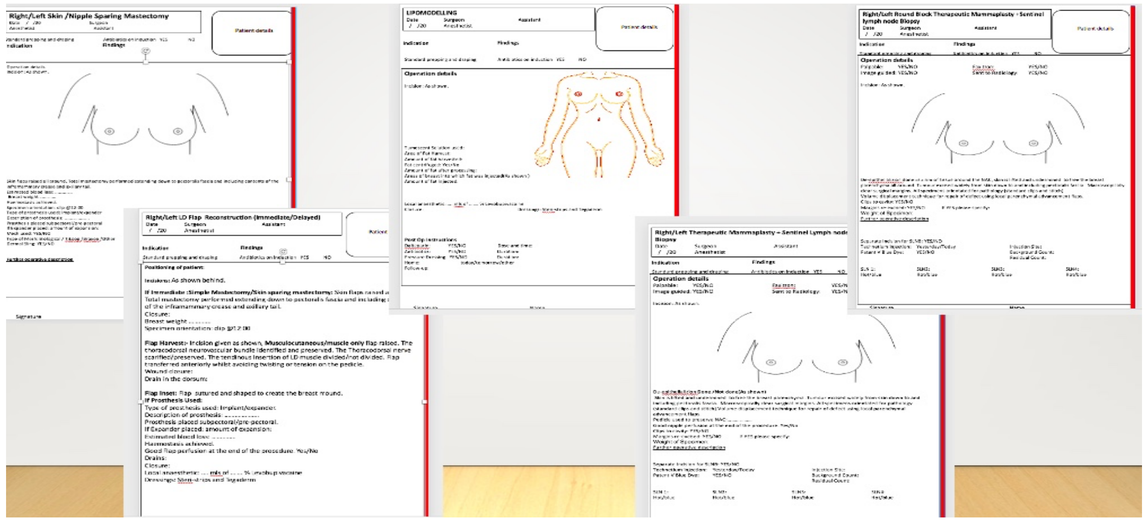




Results:

All the notes reviewed before introducing the templates had information on the procedure performed, side of the performed procedure, the type of prosthesis used and instructions for the drains. Date was missing in 2% of notes, surgeons name in 10%, Name of assistant in 15% and specimen weight in 60% of the notes. Similarly, 50% of the notes missed out the indication for surgery, the VTE prophylaxis and the type of dressings used. Specimen orientation was only mentioned in 5% of the notes. Similarly, other standards like position of prosthesis (subpectoral/pre- pectoral), amount of expansion, postoperative antibiotics, use of mesh, use of local anaesthesia were missing. None of the notes reviewed were 100% compliant with the standards.

Re-audit after the introduction of the templates showed 100% information on all the standards except for indication of surgery which was missing in 9(30%)) of the operative notes.70% of the notes were 100% compliant.



Conclusion:

The introduction of preformed standard operative notes for complex Oncoplastic and reconstructive procedures improved the compliance rate from 0% to 70%.

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Poster 111: How Well Do We Optimise Patients Prior To Lung Resection?

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Introduction & Objectives

- The thoracic patient undergoing lung resection often has modifiable risk factors.
- We set out to examine our current practice in optimising key variables from referral to anatomical lung resection for cancer.
- Our key variables were chosen pragmatically as both optimisable and with evidence base of importance in lung cancer resection

Evidence Based Optimisation Criteria

1) ANAEMIA[1]

- Associated with increased morbidity and mortality of thoracic surgery
- Should be identified, investigated and corrected pre-operatively
- Iron therapy preferred 1st line treatment for iron deficiency anaemia

2) BMI[2]

- Mulnutrition is a risk factor for complications after thoracic surgery
- BMI<18.5 / weight loss >10-15% / 6 months recommended to delay surgery to allow for enteral nutrition
- Initiate oral nutritional supplements for 5-7days before surgery

3) SMOKING[1,3]

- Associated with increased risk postoperative morbidity and mortality (pulmonary complications)
- Should be stopped at least 4 weeks before surgery
- A delay of 4 weeks to allow smoking cessation appears reasonable
- Both behavioral support and pharmacotherapy are effective

4) COPD[4]

- Use short-acting bronchodilators, as necessary, as the initial empirical treatment of COPD to relieve breathlessness and exercise limitation.
- Offer LAMA+LABA+/-ICS to people who have spirometrically confirmed COPD and do not have asthmatic or steroid responsive features and remain breathless or have exacerbations

Methods and Materials

- Retrospective analysis of 101 consecutive cases undergoing anatomical lung resections in 2018 was performed.
- Pre-operative anaemia, BMI, smoking status and COPD were studied
- The actual management was then compared to evidence based optimisation strategies.

Results

- 32% of the patients were current smokers.
  - Of these smokers, 43% were advised to stop smoking pre-operatively, 39% offered nicotine replacement therapy and 28% referred to a smoking cessation service.
  - Referral rates by registrars were higher than by consultants.
- 43% of patients had COPD based on spirometry with all being in either Stage 1 or Stage 2.
  - Only 51% of those with COPD were on appropriate inhaled therapy.
- Only 2% of patients had a haemoglobin <10, with one being investigated for this and one not.
- 3% of this cohort had a BMI < 18.5 yet none were referred to the dietician.

Discussion

KEY FINDINGS:

- Considerable gains could be made in efforts to aid smoking cessation
  - one group demonstrated a paradoxical increase in pulmonary complications post surgery in patients who had recently stopped smoking[5]
  - It is more generally accepted that pre operative smoking cessation is beneficial prior to lung resection[6,7].
- It appears many patients are not on optimal inhaled therapy prior to lung resection and it may be the referring respiratory physician best placed to initiate this.

LIMITATIONS:

- We acknowledge inherent limitations of retrospective case note analysis
- It is possible that measures taken but not documented or performed at referring unit
- A larger cohort is necessary to evaluate anaemia and BMI more fully

FUTURE:

- We aim to introduce changes in practice to improve our optimisation
- In the Covid era with greater use of telephone consultations the optimisation is even more challenging
- Our unit intends to recruit into the Project MURRAY feasibility study

Conclusions

- We identify several areas of potential improvements for our patients undergoing anatomical lung resection.
- Considerable gains could be made with our smoking cessation measures and in the treatment of COPD with appropriate inhaled therapies. These improvements need to be made as a collaborative effort with our respiratory colleagues.
- Our ability to keep patient waiting times short from outpatient review to admission date provides a challenge in providing optimisation pre-operatively.

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