The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 342 BIOC/155**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | CSF samples for xanthochromia pre-analytical requirements audit 2019 | | |
| **Date audit complete** | 08/10/2020 | **Date action plan completed** | 08/10/2020 |
| **Auditor** | | **Name of policy / guideline** | Revised national guidelines for analysis of cerebrospinal fluid for bilirubin in suspected subarachnoid haemorrhage |
| **Division** | The Neuroscience Laboratories, Neurosurgery Division | **Source of policy / guideline** | Ann Clin Biochem 2008; 45: 238-244 |

**Summary of Findings:**

- Data from 36 requests were included during the 6 month period of data collection 18/11/19 to 11/05/20.
- All the requests that were included were referred from external Trusts (AUH, RLUH, South Manchester, Salford, Bolton and Wigan). There were no internal requests from WCFT patients.
- A spreadsheet of all the results is included below for completeness. In summary:

| | Yes | | No | | Not known | |
|---|---|---|---|---|---|---|
| Was the time between onset of symptoms and the LP recorded on the request form? | 23 | (63.8%) | 13 | (36.1%) | 0 | (0.0%) |
| Was the last fraction of CSF taken selected for xanthochromia analysis? | 1 | (2.8%) | 0 | (0.0%) | 35 | (97.2%) |
| Was the specimen centrifuged and transferred to a secondary container? | 18 | (50.0%) | 0 | (0.0%) | 18 | (50.0%) |
| Was the specimen kept at 4°C and in the dark? | 7 | (19.4%) | 1 | (2.8%) | 28 | (77.8%) |
| Were simultaneous serum biochemistry results available on the request form? | 14 | (38.9%) | 22 | (61.1%) | 0 | (0.0%) |

2019 Xanthochromia pre-analytical require

- All referring Trusts performed similarly. There were no referring Trusts that were consistently not meeting the requirements. However, some Trusts referred a lot more samples than others.

**Key success:**

- Referring Trusts seem to be very good at centrifuging the specimen and transferring it to a secondary container. There was 100% compliance with this when the information was available.

**Key concerns:**

- There was low compliance with 2 questions:
- (a) Were simultaneous serum biochemistry results available on the request form? We do not feel that this is a big concern. The proportion of requests where the serum biochemistry results are actually required is very low. Should the serum biochemistry results be required when they are not available on the form, they can usually be obtained by phoning the referring lab.
- (b) Was the time between onset of symptoms and the LP recorded on the request form? Although this information is useful to have for full interpretation, we already have a procedure in place to follow when the information is not given – the results are interpreted as if the LP was timed appropriately and a coded text comment is added to the result "Interpretation assumes the sample was appropriately times >12 hours and <14 days post event. Samples taken outside of these times may cause false negative results". This comment serves as a reminder to the referring Trust that the timing information is very useful for thorough interpretation.

**Recommendations discussed:**

- No internal requests were received from WCFT patients during the period of data collection, all requests were referred to us from external Trusts. This meant that we were unable to answer a number of the audit questions as the information was not available to us. For example, in the majority of cases we were unable to ascertain whether the last fraction of CSF collected was referred for xanthochromia analysis as this would all have been handled by the referring lab. If this audit were to be repeated at a later date, we would recommend that the questions be altered to just focus on the areas where we would definitely be able to answer the questions eg. was the sample received protected from light?

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: Report emailed to all relevant members of Neurobiochemistry staff 08/10/20

Department where discussed or presented: Neurobiochemistry, The Neuroscience Laboratories

**Actions agreed following recommendations discussed:-**

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) If the audit were to be repeated, the questions need to be altered slightly to just focus on the areas we would definitely be able to answer. | No action is currently required. Should a repeat audit be scheduled at any stage, the results of this current audit would be checked and this recommendation would be identified then. | N/A | N/A | N/A | N/A |

**Re-audit date** _____ **If no re-audit planned please give reasons why?** No further useful information to be gained in the short term

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

| | |
|---|---|
| **Name** _____ **Designation** _____ **Date referred** _____<br><br>**Signature:**_____ **Date:**_____ | |
| **Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐<br><br>**Please provide details of issue(s) logged on the risk register:** | |

# Project Prioritisation Assessment Tool

## Audit title: Preanalytical handling of samples for CSF xanthochromia

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **2** | **Level 5 Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Preanalytical handling of samples for CSF xanthochromia**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **The Neuroscience Laboratories - Neurobiochemistry**

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

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## Background / Rationale

A number of local biochemistry laboratories refer requests for CSF xanthochromia to The Neuroscience Laboratories at WCFT. There are National Guidelines available that recommend how CSF samples for xanthochromia analysis should be handled prior to analysis (Revised national guidelines for analysis of cerebrospinal fluid for bilirubin in suspected subarachnoid haemorrhage. Ann Clin Biochem 2008; 45: 238-244). It is important that these guidelines are followed to maintain the integrity of the sample and ensure that the most accurate result is obtained and that the most thorough interpretation can be provided.

## Methodology

As CSF samples with requests for xanthochromia analysis are received in the department, a table will be completed to record whether the correct pre-analytical requirements have been met. See attached data collection template sheet for full details.

## Aims / Objectives

The aim is to establish if CSF samples received in The Neuroscience Laboratories have been handled as recommended by the National Guidelines.

## Standards / Criteria Details (service evaluation N/A)

Revised national guidelines for analysis of cerebrospinal fluid for bilirubin in suspected subarachnoid haemorrhage. Ann Clin Biochem 2008; 45: 238-244. Recommendations: (1) Time between onset of symptoms and LP should be recorded (2) The last fraction of CSF taken should be selected for xanthochromia analysis (3) Within 1 hour of receipt, the sample should be centrifuged and transferred into a secondary container before being referred (4) Specimen should be protected from light and stored at 4oC prior to analysis (5) Simultaneous serum biochemistry results should be available

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:
https://journals.sagepub.com/doi/full/10.1258/acb.2008.007257

**Name of Standard / guideline:**

Revised national guidelines for the analysis of cerebrospinal fluid for bilirubin in suspected subarachnoid haemorrhage. Ann Clin Biochem 2008; 45: 238-244

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☒ State other: Annals of Clinical Biochemistry

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No:** >50 **Procedure codes to identify sample:** N/A

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** N/A

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:** 18/11/2020

**Anticipated project completion date:** 31/10/2020

**Anticipated Action Plan Submission date:** 31/10/20

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _ _____ Date: 17/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

## Audit title: ERBS Protocol Service Evaluation Audit

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | Y | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **6** | **Level 4 Cat B** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☐ Service Evaluation ☒**

**Audit / Service Evaluation Title: ERBS Protocol Service Evaluation Audit**

**Division: Pain Management and Neurosurgery**

**Project Lead:**

**Contact No: Bleep No: N/A**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**Adam Doyle - data administrator**

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## Background / Rationale

Acute sciatica is a common problem affecting over 3% of UK population at any time and is often caused by a prolapsed intervertebral disc. The Expedited Root Block Service is a joint service between the neurosurgical team and the chronic pain team and treats patients with acute sciatica from prolapsed intervertebral discs (PID). Following the ERBS pathway, patients are either referred for dorsal root ganglion block, diagnostic root block or direct for neurosurgical intervention. At the consent clinic with the pain team the patient may be rejected as no longer needing root block, rejected as needing surgical intervention or consented for root block. At the neurosurgical consent clinic, patient may request root block rather than surgery.

## Methodology

The case notes of all patients will be accessed and audited

## Aims / Objectives

We aim to assess the ERBS pathway for service and clinical outcomes and make appropriate improvements to the service.
•How long patients wait from GP/A & E referral to Root block? •How long patients wait from Neurosurgery referral to Root block? •How long patients wait from consent clinic to Root block? •How many patients go on to need surgery (after root block and without root block)? •How many appointments do patients get with each clinical team prior to discharge?•Outcome after root block. (Pain relief/ Complications/discharge) • Number of post-laminectomy patients and reason for referral. •Outcomes in Post laminectomy patients (Pain relief, repeat surgery, conservative, discharge) •Number of patients who had spontaneous recovery •Duration from symptom onset at which spontaneous recovery noted. •How many patients who had injection conversion then needed surgery?

## Standards / Criteria Details (service evaluation N/A)

Click here to enter text.

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**Guideline / Standards available:** Yes ☐ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☒ | No ☐ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date: ASAP**

**Anticipated project completion date: December 2020**

**Anticipated Action Plan Submission date:**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title: One to two level TLIF 2 yrs f/up**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | Y | (x3) |
| High volume | Y | (x2) |
| High risk | Y | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **9** | **Level 4 Cat B** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☒ Service Evaluation ☐**

**Audit / Service Evaluation Title: One to two level TLIF 2 yrs f/up**

**Division:** Neurology ☒ Neurosurgery ☐ Please specify department Click here to enter text.

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**C. Dzapasi and H. Vupputuri for data collection and measurements**

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**Background / Rationale**

Surgical planning of L4/5 and/or L5/S1 transforaminal lumbar interbody fusion (TLIF) has been traditionally lacking with regards to spinal balance. Since inception in 2016, MT team has calculated spinal radiographic parameters on long X rays to predict the amount of sagittal correction required with instrumentation. There was moderate evidence at the time that restoring spinal balance where it is most crucial, i.e. at the lowermost levels, could help reducing the rate of mechanical complications in the middle and long terms as well as improving patient reported outcome measures (PROMs.) routinely collected by the Trust for all spinal operations.

**Methodology**

Retrospective case control analysis of prospectively collected data on a cohort of patients submitted to L4/5 and/or L5/S1 TLIF with preoperative radiographic planning (group 1) versus none (group 2), age, sex and level matched.

**Aims / Objectives**

To highlight any differences in mechanical complications, neurological complications, revision rates and PROMs between groups

**Standards / Criteria Details (service evaluation N/A)**

COMI, VAS and ODI outcome measures and GAP scores

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☒

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☒ | No ☐ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: 55 per group  Procedure codes to identify sample: V386, V386 and V397**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☒

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☒
- Presentation ☐

Collection of case notes ☒ Total number ___25_ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☒ No ☐

**How will the patient be involved?**

Patient Questionnaire ☒ At clinic appointment ☒

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:December 2020**

**Anticipated project completion date: March 2021**

**Anticipated Action Plan Submission date:April 2021**

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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title:** Accountable Items, swab, Instrument and Needle Count

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title:** **The use and handling of surgical instruments in Theatre**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Theatres**

**Project Lead**

**Contact No: Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**Leeja Varughese**

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**Background / Rationale**
Perioperative staff do not handle instruments unless they competent to do so and unless they understand their use in general and specific specialities

**Aims / Objectives**

- Perioperative staff personnel have the required knowledge and skills related to the handling of sterile items, educational and training records exist for this purpose.
- Products are not introduced into the operating department until staff have received training in their use and records exist to support this.
- Loan instruments are appropriately managed and staff ar clear on their use and the support that will be provided.
- Instruments are used only for the purpose for which they were designed .
- User manuals and teaching sets are available for staff to access
- **Methodology**
- A Theatre Practitioner will observe, check records and ask staff about use and handling surgical instruments.

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** The use and Handling of surgical instruments in Theatre

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 349**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Use of Handling of surgical instruments | | |
| **Date audit complete** | 15/06/2021 | **Date action plan completed** | 19/07/2021 |
| **Auditor** | | **Name of policy / guideline** | AfPP Standard/Guideline |
| **Division** | Surgery | **Source of policy / guideline** | Association of Perioperative Practitioners |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- 100% of the theatre staff who participated (80 staff) in the audit were aware there is a system in place that ensures the safe use and handling of surgical instruments

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

All Theatre staff who participated in the Audit had completed the educational competencies and training.

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- Recruitment and retention of theatre staff is still a national issue. Staff recruited may not have any theatre experience.

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- **Staff recruitment is on the risk register.**

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Theatre User Group August 2021

Department where discussed or presented: Theatre Audit Meeting August 2021

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Recruitment of new Theatre staff. | To ensure all new staff have completed the educational packs and competencies | | On going | Completion of competencies. | Theatre User Group. |
| | | | | | |
| | | | | | |

**Re-audit date September 2022**_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☒ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register: Risk 703**

# Project Prioritisation Assessment Tool

**Audit title:** Management of specimens in Theatre

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title:** Management of specimens in Theatre

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

- Laboratory examination of specimens determines subsequent treatment of the patient.
- Every specimen reaches the pathology, microbiology, histology cytology department without undue delay and in optimum condition.
- Specimens are accurately labelled to the patient.
- Blood management and administration is managed safely.

**Aims / Objectives**

- Perioperative staff are aware of the procedures involved in the care of specimens, including correct documentation, safe handling and appropriate dispatch.
- Specimen handling is assessed and planned before the procedure.
- **Safe administrating blood/blood products have received appropriate training**

**Methodology**

A Theatre Practitioner will observe, check records, and ask staff in regard to specimen management

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Management of Specimens in Theatre

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 350**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Specimen Management | | |
| **Date audit complete** | July 2021 | **Date action plan completed** | September 2021 |
| **Auditor** | | **Name of policy / guideline** | AfPP Standard /Guideline |
| **Division** | Surgery | **Source of policy / guideline** | Association of Perioperative Practitioners |

**Summary of Findings**

Staff are aware about the management of specimens ie;

- Identifying the proper transport medium in which the specimens are transported
- Importance of safety
- Record keeping and how to dispatch properly

**Issues identified**

2% of staff had been observed not confirming patient details are attached to pot before placing specimen in container.

**Recommendations discussed**

- Staff education on ensuring patient details are checked prior to placing of specimen in container
- Ensuring Identification stickers are affixed securely to specimen containers prior to placing specimen in.

**Findings presented / disseminated** (please state date findings presented / disseminated and what Group / Department presented / disseminated to)

Report to be discussed at Theatre Audit, Theatre User Group

**Actions agreed following recommendations discussed:-**

| Issue | Action required | Named lead for action | Timescale | Reportable to (group/meeting) |
|---|---|---|---|---|
| 1)<br>Staff not confirming patient details prior to placing specimen in container. | For all Theatre Staff to be aware of importance confirming patient details are correct on specimen container | | October 2021 Been discussed At Staff meeting | Theatre User Group and Theatre Audit. |
| 2)<br>Identification labels not being attached to specimen container prior to specimen placement in container. | The Labels should be affixed properly before placing specimen in container. | | October 2021 Discussed at staff meeting | Theatre User Group and Theatre Audit |

**Re-audit date April 2022_____** **Will this be an on-going audit?** Yes X No ☐
**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No X
**If yes to the above please state who the issues have been referred to:**

**Name____ _____** **Designation_____** **Date referred_____**

**Signature:_____** **Date:___September 2021_____**

**Have any issues been logged on the risk register?** Yes ☐ No X N/A ☐

**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title:** Post Anaesthesia care in Theatres

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Post Anaesthesia care in Theatres**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

- To provide a safe environment for patient care.
- To provide patients with orientation into an environment in which they are emerging from anaesthesia, together with high levels of reassurance.
- To provide patients with skilled and competent individuals to care for them

**Aims / Objectives**

- The care is supervised by an appropriately trained perioperative practitioner (RGN/RODP) with a recognised qualification.
- Post anaesthetic care practitioners are competent to administer one to one patient care until the patient is fully conscious and able to maintain own airway.
- Staff act within the limits of their designated authority.
- The staffing skill mix reflects the nature of the dependency of the patients' expected in this area.
- Staff within the area have appropriate skills and experience to be able to fulfil any defined clinical roles for recovering patients.
- Patient monitoring equipment is available for every patient in this area throughout the duration of their stay.
- The environment provides privacy and dignity, with the consideration of single sex areas if applicable.
- There is adequate equipment available for patients within the environment and a training and management policy for it.
- Patient documentation is accurately and legibly completed to allow for safer transfer and continuity of care.
- There is a process for rapid access to treatment in the event of an emergency.
- Facilities exist to enable carers/parents to be present with a patient at a defined stage whereit has been agreed that attendance in POCU/Recovery area would be beneficial for the patient.
- Specific tools are available to assist in the assessment of a patients pain level, nausea and pressure areas

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

**Methodology**

A recovery Practitioner will follow a patient in the transfer from the intraoperative phase to the immediate postoperative care phase and observe until discharge from POCU.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Anaesthesia in Theatres

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*
- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

---

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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 351**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Clinical Management: Perioperative patient care<br>Post-anaesthetic Care | | |
| **Date audit complete** | August 2021 | **Date action plan completed** | September 2021 |
| **Auditor** | | **Name of policy / guideline** | AfPP Standard/Guideline |
| **Division** | | **Source of policy / guideline** | Association of Perioperative Practitioners |

**Summary of Findings:**

- The Environmental Temperature can vary at times in Recovery.
- Trolleys or beds must tilt two ways and padded cot-sides are available.

**Key success:**

- Funding has been secured and there are now more ALS trained staff in recovery.
- Handover information is fully documented on new Perioperative patient pathway.

**Key concerns:**

- The Environmental temperature of Recovery is not always between 19-22 degrees for adequate ventilation
- No padded cot sides available in Recovery due to different beds within the trust.

**Recommendations discussed:**

- Temperature difference has improved after upgrade works by Estates and heaters available if needed.
- Blankets used to pad cotsides.

**Presentation / Dissemination of Project**

Date findings were presented / disseminated:
Theatre User Group in October 2021.

Department where discussed or presented:

Theatre Audit in November 2021.

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Recovery Temp | Estates and heating system upgrade completed and additional heaters provided if needed. | | Completed | Minutes from Theatre User Group/ Theatre Audit | Theatre User Group/Theatre Audit Day |
| 2) No universal Padded cot sides available. | Blankets used to pad out cotsides. | | Completed | Minutes from Theatre User Group/ Theatre Audit | Theatre User Group/Theatre Audit Day |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** ____April 2022_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** __

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐

| **Please provide details of issue(s) logged on the risk register:** |
| --- |

# Project Prioritisation Assessment Tool

**Audit title:** Managing Perioperative Normothermia

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title:** **Managing Perioperative Normothermia**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

- Hypothermia is defined as a core body temperature of lower than 36C, It is a common problem for patients undergoing surgery (NICE 2008)
- Perioperative hypothermia can have a wide range of detrimental effects to the patient.
- Hypothermia can be deliberate or inadvertent. Deliberate hypothermia may be induced for medical or surgical reasons such as neurosurgery when it is beneficial to reduce metabolic activity. (The reduced metabolic rate prevents organ damage despite reduced perfusion )
- The young and the elderly are at increased risk of hypothermia

**Aims / Objectives**

- Patients at higher risk are identified during the pre-assessment procedure.
- Preventative warming measures are identified if appropriate
- Patient temperatures are measured throughout the procedure.
- There are sufficient warming devices
- **Methodology**
- A ODP will observe patients management of Perioperative Normothermia, also the checking of records and asking staff.

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Managing perioperative Normothermia

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐

**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*
- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*
- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 352**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Managing Perioperative Normothermia | | |
| **Date audit complete** | 19/7/2021 | **Date action plan completed** | March 2021 |
| **Auditor** | | **Name of policy / guideline** | SOP Managing Perioperative Normothermia |
| **Division** | Neurosurgery | **Source of policy / guideline** | Association of Perioperative Practice |

**Summary of Findings:**

- All intravenous fluids/bloods are warmed in either a fluid warming cabinet or fluid warmer.
- All patients have their temperature monitored and recorded throughout the perioperative phase.

**Key success:**

- All patients having a procedure lasting > 20 minutes have their temperature monitored and forced air warmer applied.
- There have been no reported incidents of perioperative hypothermia during the past 12 months.

**Key concerns:**

- Fluid warming cabinets are sometimes set at the wrong temperature.
- Against manufacturer guidance; the department cuts forced air warming blankets to allow for surgical access.

**Recommendations discussed:**

- Audit temperature of fluid warming cabinets.
- Discussion to be had with procurement regarding obtaining surgical access blankets therefore preventing the need for them to be cut.

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: _____

Department where discussed or presented: _____

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Fluid warming cabinet temperatures are occasionally set higher than the recommended temperature | • Audit fluid cabinet temperatures<br>• Discuss at theatre audit meeting<br>• Ensure posters are positioned on fluid cabinet to remind staff of the recommended temperature. | | 2 months | *Audit results, meeting minutes* | Theatre User Group |
| 2) Staff are cutting the forced air warming blankets to allow for surgical access | • Discussion with procurement and theatre management. Waiting pre-cut blanket orders lead time 4 weeks. | | 2 months | Email from Procurement | Theatre User Group |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** _____April 2022_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

Version: 2019
Review: 2020

# Project Prioritisation Assessment Tool

## Audit title: The use of Electrosurgery in Theatre

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐
**The use of Electrosurgery in Theatre**
**Audit / Service Evaluation Title:**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**Jenny Fitzpatrick**

---

**Background / Rationale**

- Risks associated with electrosurgery are identified and minimised to reduce the potential to harm patients and staff.
- All members of the perioperative team have sufficient knowledge and experience of the principles and techniques of electrosurgery.

Risks associated with inhalation of the surgical plume are minimised

**Aims / Objectives**

- There is sufficient diathermy equipment available for use in use in the department
- There are training sessions for diathermy use and the attendance records are maintained.
- There is action on the diathermy incidents that have been reported.
- Staff observe safe diathermy practice.
- There is a surgical plume extraction system in place where appropriate

**Methodology**
**A theatre Practitioner will observe, check records and ask staff with regard to Electrosurgery**
**Standards / Criteria Details (service evaluation N/A)**

Previously sent

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** The use of Electrosurgery in Theatres

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

---

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---

**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 353**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | The Use of Electrosurgery | | |
| **Date audit complete** | 18/4/2020 | **Date action plan completed** | 16/7/2020 |
| **Auditor** | | **Name of policy / guideline** | AfPP Standard/Guideline |
| **Division** | Surgery | **Source of policy / guideline** | Association of Perioperative Practitioners |

**Summary of Findings:**

- Aim – that risks associated with electrosurgery are identified and minimised to reduce the potential to harm patients and staff
- Sample size of 10 patients
- Method of evidence gathered was through observation, checking medical records and asking staff their awareness of electrosurgery.
- Approved smoke evacuator not available trials stopped during COVID pandemic.

**Key success:**

- Staff are aware of the safe use of all electrosurgical equipment within the perioperative setting

**Key concerns:**

- No Smoke evacuators in Trust at present trials have now started back up.

**Recommendations discussed:**

- Smoke Evaluator trial commenced within the Theatre department.

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: _____

Report to be discussed at Theatre User Group in August 2021.

Department where discussed or presented
Theatre Audit August 2021.

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Presently no smoke evacuators in Theatre when using monopolar diathermy | Trial was on hold due to COVID. Trial restarted.<br><br>Update - theatres have acquired filters that project the suction equipment. Conventional suction still used to clear smoke, ideally the device is attached to the diathermy – options being trialled at the moment, surgeons are finding "bulky" – on-going | | 6 months | Theatre User Group minutes | Theatre User Group |
| 2) | | | | | |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date April** 2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

| |
|---|
| **If yes to the above please state who the issues have been referred to:**<br><br>**Name** _____ **Designation** _____ **Date referred** _____<br><br>**Signature:**_____ **Date:**_____ |
| **Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐<br><br>**Please provide details of issue(s) logged on the risk register:** |

# Project Prioritisation Assessment Tool

**Audit title: : Anaesthesia**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Anasethesia**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**
**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**Natalie Pauls**

---

**Background / Rationale**

- A safe environment is maintained where anaesthesia is delivered
- Equipment is maintained and checked before use within a governance framework
- There is a holistic approach to safe practice
- Patients are protected from known clinical lists of anaesthesia
- Patients receive care from appropriately trained persons

Click here to enter text.

**Aims / Objectives**

- Qualified anaesthetic practitioners are educated to support the anaesthetist in all aspects of anaesthetic care and safety
- The anaesthetist is responsible for the drugs which he/she administers
- Drawing up, double checking and administration of anaesthetic drugs is guided by comprehensive local protocols. Equipment is decontaminated to national standards
- Anaesthetic equipment is checked before use and a record maintained
- Emergency equipment is maintained and available at all times
- The five steps to safer surgery are performed by suitably qualified practitioners in a designated area
- Staff are educated to support in emergency situations in anaesthesia
- Emergency protocols and routine guidance are readily available to all staff
- Communication with patients by anaesthetic staff is appropriate to the situation

**Methodology An ODP will Follow patients through start of Anaesthetic journey to Recovery and observe.**

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Anaesthesia in Theatres

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

---

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---

**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

# Project Prioritisation Assessment Tool

## Audit title: The use and handling of surgical instruments in Theatre

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | Y | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **10** | **Level 3 Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title:** Accountable Items, swab, Instrument and Needle Count

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Theatres**

**Project Lead**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

- Retained objects are considered to be preventable occurance, as defined in the 'never events' list (DH 2012)
- The avoidance of non-interventional foreign body retention prevents subsequent injury to the patient.
- Systemised and careful counting and documentation can significantly reduce or eliminate unintended retention of surgical items.

**Aims / Objectives**

- Discussion with Team members.
- Observed interactions with patient as part of the process where appropriate.
- Review of count records and documentation.
- Theatre environment (white board).
- Discussion with perioperative teams on the purpose, evidence and location of relevant policies.
- Theatre induction programme competencies.
- Education records for staff training for accountable items and updates where required.

## Methodology

The suggested method of gathering evidence will be by observation, checking records, and asking staff.

**Standards / Criteria Details (service evaluation N/A)**

Previously sent

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** The use and Handling of surgical instruments in Theatre

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐

**Trust** ☐ **Other** ☒ **State other:** AfPP (Association of Perioperative Practitioners)

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☒ | No ☐ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): ongoing until updated**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*
- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*
- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:11th January** 2021

**Anticipated project completion date: 5th July 2021**

**Anticipated Action Plan Submission date:30th august 2021**

---

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---

**Departmental Clinical Audit Lead** ***(Signature)*** ___ Date: 23/11/2020

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 355**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Accountable Items, Swabs Instruments and needle count | | |
| **Date audit complete** | July 2021 | **Date action plan completed** | September 2021 |
| **Auditor** | | **Name of policy / guideline** | AfPP Standard/Guideline |
| **Division** | Surgery | **Source of policy / guideline** | Association of perioperative Practitioners |

**Summary of Findings:**

- 10 staff (across HCA, ODP and nurses) observed
- When counts are being performed there isn't always reduced noise/distractions which reduce the acknowledgement by the team.
- The Surgeon is not audibly informed that the count is correct which occur before closure of a cavity.

**Key success:**

- Staff are aware about a system which ensures that all swabs, needles and instruments used in clinical interventions or invasive procedures are accounted for at all times, wherever the intervention takes place;

**Key concerns:**

- 10% of the Theatre Team not engaging when counts are being performed. Staff member had not currently worked long in the department; staff member is currently working through competencies with support to improve engagement.
- 10% of the Scrub Staff not informing the Surgeon that count is correct before closure of a cavity.

**Recommendations discussed:**

- Discuss with Staff the importance of the Theatre Team engaging when counts are being performed.
- Discuss with Scrub Staff the importance of informing the Surgeon that count is correct before closure of a cavity
- To note, swab count compliance is documented on the local risk register and highlighted as part of WHO checklist

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: Theatre User Group October 2021

Department where discussed or presented: Theatre Audit November 2021

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) When counts are being performed there is not always a reduced noise and distractions and acknowledgement by the team. | Discuss with Staff the importance of the Theatre Team engaging when counts are being performed. | | November 2021 | Minutes from Theatre Audit meeting | Theatre User Group/ Theatre Audit |
| 2) The Surgeon was not audibly informed that the count is correct which occur before closure of a cavity. | Discuss with Scrub Staff the importance of informing the Surgeon that count is correct before closure of a cavity | | November 2021 | Minutes from Theatre Audit meeting | Theatre User Group/ Theatre Audit |
| | | | | | |

**Re-audit date** Sept 2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☒ (already on risk register) No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

Version: 2019
Review: 2020

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 356**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Patient Safety Audit | | |
| **Date audit complete** | December 21 | **Date action plan completed** | Yes |
| **Auditor** | | **Name of policy / guideline** | ARHQ (Attached) |
| **Division** | Surgery | **Source of policy / guideline** | https://www.ahrq.gov/patient-safety/settings/esrd/resource/checklist.html & AQUA |

**Audit Rationale:**
The Audit used was the ARHQ audit tool which is designed to look at the Safety culture within a department.

30 staff across all disciplines replied to the audit (See attached Results Paper)


Results.pdf

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *Overall the results showed a "Very Good" safety culture within the department*
- *The vast majority of questions asked were answered positively across all staff groups (See attached Results Paper)*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- **"Very Good" safety Culture in department**
- **A strong reporting culture exists within the department**
- **The teams work well with one another**
- **The staff surveyed felt the department was a pleasant place to work (Section F)**
- **Cooperation between departments was positive (Section F)**
- **The connection between shop floor and management was strong (Section B)**
- **The staff surveyed felt that department actively looked to constantly improve patient safety**

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Section C showed an issue with staff "speaking Up"*
- *A small number of staff (4) felt the Safety Culture was "acceptable"*
- *Staff were unaware of the Number of NE in the department, however due this only being 1 NE this is understandable*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Development of MDT teaching plan utilising audit days. The teaching will involve MDT simulation and session designed to develop staff resilience and a Just and Open Culture.
- Continue to utilise Trust Human Factors training and bring in-house on Audit days. Increase level of simulation teaching outside of Audit days

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: 11/1/22 (Attached: 2021 Audit Plan)
Department where discussed or presented: Theatre User Group

**Actions agreed following recommendations discussed:-**
*****Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1)Speaking up | Utilise Audit days to build staff resilience | | Complete | *Attached Yearly teaching Plan* | TUG, CAG |
| 2)Increase use of simulation to maintain/ improve on "Very good" safety culture | Create MDT training on Audit days | | Complete | As Above | TUG, CAG |
| 3)Increase Risk and Governance reporting to staff via Audit days and Staff R&G board | Utilise Staff meetings and re-vamp R&G board | | Complete | Audit Minutes, Audit Plan | TUG, CAG |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |

**Re-audit date** ____Jan 2023_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No x

**If yes to the above please state who the issues have been referred to:**

**Name** _____ _____ **Designation** _____ _____ **Date 8/3/22 referred** _____

**Signature:**____ _____ **Date:**____ _____

**Have any issues been logged on the risk register?** Yes ☐ No x☐ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Safety Culture Audit (FOCUS Project)**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **Level 4 – Category B** | **9** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Safety Culture Audit (FOCUS Project)**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**Multiple Professionals from ITU & Theatre**

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**Background / Rationale**

Baseline data is required as part of the upcoming FOCUS project, this will allow us to identify shortfalls with regards to the Patient Safety Culture within the department. From this data we can then FOCUS on the systems and patient safety strategies that may require improvement.

**Methodology**

An initial audit tool will be used to gather data (AHRQ Hospital Survey). This data will then be correlated and thus allow the FOCUS team to identify areas for improvement within the department. Once these areas have been identified the FOCUS team will engage the staff and via this engagement improve the areas identified in the audit.

**Aims / Objectives**

To create an overview of the safety culture within Theatre and allow the FOCUS team alongside staff engagement to improve/ re-design any areas that have been identified. This process is designed to further enhance our patient safety culture.

**Standards / Criteria Details (service evaluation N/A)**

Click here to enter text.

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:
https://www.ahrq.gov/sites/default/files/wysiwyg/sops/surveys/hospital/hospitalsurvey2-form.pdf
**https://www.ahrq.gov/sops/surveys/hospital/index.html**

**Name of Standard / guideline:** Agency for Healthcare and Research Qulaity

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☒ State other: See Above

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years):On-Going**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☒

*(If not required please, attach a copy of the tool to be used)*

- Database design ☒
- Data entry ☒
- Analysis ☒
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:Jan 2021**

**Anticipated project completion date: On-Going**

**Anticipated Action Plan Submission date:March 2021 if not earlier**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** Date: 18/12/20

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no:** NS 357

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Assessment the role of CT CAP in newly detected brain lesions | | |
| **Date audit complete** | 20/12/2021 | **Date action plan completed** | 22/03/2022 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Neurosurgery | **Source of policy / guideline** | |

**Audit Rationale:**
The audit was undertaken to see if we can reduce the number of CT CAPs advised by the on call service for newly detected brain lesions.

**Summary of Findings:**

- Screening CTCAP is indicated for multiple or infratentorial lesions and in patients with a history of treated cancer.
- CTCAP should be used judiciously in patients with a single lesion >4cm in size or with >5mm midline shift.
- Further data is required to assess the possible utility of CT Chest alone in newly presenting brain lesions.

**Key success:**

- We identified clinical and radiological criteria which can reduce the number of negative CT CAPS by nearly 45% without missing patients with positive CT CAPs

**Key concerns:**

- CT CAP is requested inadvertently many times, resulting in unnecessary costs and treatment delays.

**Recommendations discussed:**

- Recommendations need to be discussed with the consultant group and to be seen if this can be applied for the on call.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Presented at SBNS- Dundee- Sept 2021
BASO meeting

BTNW, Preston- March 2nd 2022

Department where discussed or presented: Neurooncology MDT- May 2021. No Recommendations were discussed.

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) | | | | | |
| 2) | | | | | |
| 3) | | | | | |

**Re-audit date** _____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:** **Date:** 22/03/2022

**Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 359**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Compliance with Trust guidelines for use of antimicrobial prophylaxis for elective neurosurgery – Re-audit | | |
| **Date audit complete** | March 2022 | **Date action plan completed** | March 2022 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Neurosurgery | **Source of policy / guideline** | |

**Audit Rationale:**

*Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)*

- Re-audit the Compliance with Trust guidelines for use of antimicrobial prophylaxis for elective neurosurgery
- To audit that all antibiotics administered as prophylaxis are documented
- To audit that allergy status of the patient is documented

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- *We audited the elective cases performed between 29/03/21 and 15/04/21.*
- *62 patients' antibiotics audited*
- *2 operations were cancelled*
- *2 patients were not given antibiotics as there was no indication (Trigeminal neuralgia balloon compression)*
- *1 patient received antibiotics without a clear indication (Trigeminal neuralgia balloon compression)*
- *Antibiotics given to 52 patients*
- *Antibiotics were not given in 6 cases where they are indicated.*
- *In 4 patients, the documented antibiotic administration time was after the documented incision time.*
- *There was documentation of the antibiotic used, time of administration and the dose in the anaesthetic sheet for all patients audited.*
- *47 patients (including two with IV Cefuroxime and IV metronidazole)*
- *5 patients had documents penicillin allergy (rash in 3 cases - LL tingling in 1 case – No details in 1 case)*

***True penicillin allergy in 5/12 patients***
***(IV Teicoplanin (1.2 g) +/- Gentamycin (160 mg): 4 patients)***
*1st: cefalexin (anaphylaxis). Penicillin (rash)*
*2nd: details not available*
*3rd: Penicillin (anaphylaxis)*
*4th: Penicillin (Lumps)*
*5th: Penicillin (angioedema)*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- *There was documentation of the antibiotic used, time of administration and the dose in the anaesthetic sheet for all patients audited.*
- *The compliance for prophylactic antibiotics was 82% for all patients audited from 29/03/21 to 15/04/21.*
- *Allergy documentation 91.6%*

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *In 4 patients, the documented antibiotic administration time was after the documented incision time.*
- *There were time delays of giving prophylactic antibiotics at the appropriate time – it is crucial they are given prior to knife to skin*
- *11/52 of patients who received antibiotics were not compliant with Trust guidelines for the choice and dose of antibiotics.*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- To remind all anaesthetists of the current guidelines for prophylaxis
- To educate the anaethestists about time of antibiotic delivery being 30 mintues before knife to skin –
- To improve the compliance with antibiotics before knife to skin, consider adding this to the WHO checklist –
- Re-audit in 1 year

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Antimicrobial Stewardship Group Sept 2021
Department where discussed or presented: Antimicrobial Stewardship Group Sept 2021 and Critical Care Ops group Sept 2021

**Actions agreed following recommendations discussed:-**
***Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) To remind all anaesthetists of the current guidelines for prophylaxis | To re-circulate the antbiotic guidelines to the anaesthetists and an email and verbal reminder at departmental meeting | | Sept 21 | Email to all consultants 3/7/21 | Antimicrobial Stewardship Group |
| 2) To educate the anaethestists about time of antibiotic delivery being 30 mintues before knife to skin | As above, email and verbal reminder at departmental meeting | | Sept 21 | Email to all consultants 3/7/21 | Antimicrobial Stewardship Group |
| 3) To improve the compliance with antibiotics before knife to skin, | To review the WHO checklist and discuss with theatres about adding it on | | 1 year | WHO checklist has | Antimicrobial Stewardship |

| | | | | | |
|---|---|---|---|---|---|
| consider adding this to the WHO checklist | | | | been updated and will be rolled out once the old forms are used up | Group |
| 4) Re-audit in 1 year | Re-Audit | | Jan 23 | | |

**Re-audit date** __Jan 2023_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** No ☐

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** No ☐ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title:** Compliance with Trust guidelines for use of antimicrobial prophylaxis for elective neurosurgery – Re-audit

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **Level 4 – Medium local priority** | **5** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit ☑Service Evaluation ☐**

**Audit / Service Evaluation Title:** Compliance with Trust guidelines for use of antimicrobial prophylaxis for elective neurosurgery – Re-audit

**Division:** Neurology ☐ Neurosurgery ☑Please specify department Click here to enter text.

**Project Lead:**

**Contact No:** Click here to enter text. **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:** Click here to enter text.

**Other professionals involved / project team members' details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

*Re-auditing the compliance with trust guidelines for the use of the appropriate prophylactic antibiotics and doses for neurosurgical operations.*

*Previous audit in 2019 showed 92% compliance ratio.*

**Methodology**

We plan to audit for a minimum of 60 patients in a period of minimum 2 weeks (all patients who underwent elective neurosurgery for the period of 2 weeks).
This will be a prospective review and the information about antibiotic administered as prophylaxis will be obtained from the case notes and electronic patients' records.

**Aims / Objectives**

Re-audit the Compliance with Trust guidelines for use of antimicrobial prophylaxis for elective neurosurgery
To audit that all antibiotics administered as prophylaxis are documented
To audit that allergy status of the patient is documented

**Standards / Criteria Details (service evaluation N/A)**

Based on best practice and available guidance and Trust Antimicrobial guidelines

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**Guideline / Standards available:** Yes ☑ No ☐

If yes, please attach a copy or provide web link to the most current version:
http://wcftsp/sites/clinicalgovernance/All%20Documents/Antimicrobial%20Formulary.pdf

**Name of Standard / guideline:** Antimicrobial Formulary

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☑ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☑ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☑ |
| High risk | Yes ☐ | No ☑ |
| High cost | Yes ☐ | No ☑ |
| Known quality issue | Yes ☐ | No ☑ |
| Wide variation in practice | Yes ☐ | No ☑ |

**Sample No:** 60 patients. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☑

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☑No ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☑

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Rolling programme duration (number of years):** Click here to enter text.

**Is Clinical Audit Team support required?** Yes ☑ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☑
- Design of data collection tool ☑

*(If not required please, attach a copy of the tool to be used)*

- Database design ☑
- Data entry ☑
- Analysis ☑
- Presentation ☑

Collection of case notes ☑Total number _60_ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☑

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☑

**Anticipated start date:** *03/03/2021*

**Anticipated project completion date:** 03/04/2021.

**Anticipated Action Plan Submission date:** May 2021.

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 360**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Outcome of patients with lung cancer and brain mets | | |
| **Date audit complete** | Write up ongoing | **Date action plan completed** | |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | NS | **Source of policy / guideline** | |

**Audit Rationale:**
*Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)*
Brain mets in patients with lung cancer often do poorly. When patients present with a new synchronous lung cancer and brain mets as their first diagnosis, there is an impression that they end up bouncing between the lung and brain mdt's and delaying treatment. The brain MDT is conscious of chemo options, whilst the lung MDT seems to take a long time to get a tissue diagnosis. The aim of this audit was to examine the outcome and treatment for this group of patients,a dn to see if a better pathway could be produced.

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *100 patients with brain mets from lung presented in 2020 and had identifiable records. 51 asynchornopus, 49 synchronous.*
- *Main delays came with SRS treatment in the synchronous group (46 days on average from MDT to treatment)*
- *7 patients who were deemed suitable for SRS did not have this treatment (4 possibly preventable)*
- *Median survival best with surgery / srs (207 and 360 days respectively)*
- *Only 8 patients in both groups ended up having systemic chemo*
- *Synchronous median survivals were better than non-synchronous (139 vs 102 days) but was not significant*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Successfully reviewed the outcomes for this group of paitents
- Survivals are poor, but better with treatment
- The pathway needs to be better
-

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Some patients miss out on treatment, and the implication is because of delays in the system*
- *Very few people end up having chemo, despite delaying everyone's treatment in case they can.*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Audit discussed at CCC audit meeting
- Audit is being presented at Lung SRG
- Audit is being presented at WCFT oncology MDT
- Need to consider a better pathway of urgent brain treatment and then consideration of chemo afterwards if appropriate.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated:
Department where discussed or presented:

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1)Tell people about the problem | Presentations<br>CCC complete, also WCFT, and CCC SRG, and BNOS proposed as well as a publication | | 6 months | | Cancer services |
| 2)Consider new pathway | New pathway agreement which can go through the CQG. | | 12 months | | Cancer services |
| 3)Assessment of complience | Reaudit after pathway running for > 1 yr | | | | Cancer services |

**Re-audit date** ___2024_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☐

| |
|---|
| **If yes to the above please state who the issues have been referred to:**<br><br>**Name** _____ **Designation** _____ **Date referred** _____<br><br>**Signature:**_____ **Date:**_____ |
| **Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐<br>**Please provide details of issue(s) logged on the risk register:** |

# Project Prioritisation Assessment Tool

**Audit title:** Review of halo complications

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **Level 5 – low local priority** | **2** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Review of halo complications**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Neurosurgery**

**Project Lead:**

**Contact No:** **Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
Click here to enter text.

---

**Background / Rationale**
Halo systems are used to manage cervical spine problems, the aim is to compare the delivery of care and resulting outcomes at The Walton Centre against the evidence available, to ensure best practice

**Methodology**

Retrospective data collection examining the complications recorded, length of time in halo, age co morbidities

**Aims / Objectives**

To demonstrate the effectiveness or care, and complication rate experienced by patients treated at Walton Centre, in comparison to those documented in the evidence in order to inform practice

**Standards / Criteria Details (service evaluation N/A)**

Click here to enter text.

---

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**
High volume Yes ☐ No ☒
High risk Yes ☐ No ☒

High cost Yes ☐ No ☒
Known quality issue Yes ☐ No ☒
Wide variation in practice Yes ☐ No ☒

**Sample No: 151 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐
*If yes, please specify type of assistance required:*
- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*
- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☒ Total number 151 / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:** Click here to enter text.

**Anticipated project completion date:** Click here to enter text.

**Anticipated Action Plan Submission date:** Click here to enter text.

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**

- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
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# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 362**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Assessing if CAM-ICU is being used according to trust guidelines to screen for delirium patients admitted on Horsley ITU and if RASS targets are being achieved for each patients being sedated. | | |
| **Date audit complete** | 13th April 2021 | **Date action plan completed** | 13.04.21 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Horsley ITU | **Source of policy / guideline** | |

**Summary of Findings:**

- Compliance with CAM-ICU use to screen for delirium was poor (11.8%)
- Compliance with documenting RASS targets for each patient was poor (13.9%)

**Key success:**

- Nursing staffs compliance of assessing and recording sedated patients' RASS score was 93.6%
-

**Key concerns:**

- Compliance with CAM-ICU recordings was only 11.8%. Mixed delirium is the commonest type of delirium whilst hyperactive delirium is less common. With a poor compliance with CAM-ICU recordings, patients with mixed and hypoactive delirium can be easily missed and therefore, no properly and timely managed, therefore increasing their length of stay in hospital.

- Compliance with documenting RASS target for each patient was only 13.9%. For RASS targets documented, it was only achieved in 16.1% of cases. If RASS targets are not reviewed each day and documented clearly on ward round sheets, patients can be inappropriately sedated. For example, inadequate sedation can lead to patient self-extubating themselves, removing vascular catheters or poor patient-ventilator synchrony and aggressive behaviour by patients against staff. Whilst excessive and prolonged sedation can lead to patient having increasing risk of agitation and delirium or failed extubation.

**Recommendations discussed:**

- As part of our implementation plan, we shall send a gentle reminder email to all clinicians working on Horsley ITU to remind them to document the target the RASS score for every patients requiring sedation
- We shall also send a reminder email to all nursing staff for a gentle reminder to use the ICU CAM for all patients with a RASS target of -3 and above, according to trust guidelines.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: *13.04.21*
Department where discussed or presented: Horsley ITU audit meeting

**Actions agreed following recommendations discussed:-**

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Compliance with use of CAM-ICU | Reminder email to all nursing staff for a gentle reminder to use the ICU CAM for all patients with a RASS target of -3 and above, according to trust guidelines, will be sent out | | By 15.05.21 | NS 362 evidence CAM-ICU compliance audit.pdf | |
| 2) Compliance with recording RASS target score | Reminder email to all clinicians working on Horsley ITU to remind them to document the target the RASS score for every patients requiring sedation, will be sent out | | By 15.05.21 | NS 362 evidence CAM-ICU compliance audit.pdf | |

**Re-audit date** 01.04.2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes x☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☐x

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 363**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | The British Orthopaedic Oncology Management (BOOM) Audit | | |
| **Date audit complete** | March 2022 | **Date action plan completed** | March 2022 |
| **Auditor** | | **Name of policy / guideline** | Metastatic Bone Disease: A guide to Good Practice |
| **Division** | Neurosurgery | **Source of policy / guideline** | British Orthopaedic Oncology Society & British Orthopaedic Association |

## Audit Rationale:

***Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)***

Bone is a frequent site of metastasis and can represent significant morbidity to patients. The guidance created by British Orthopaedic Oncology Society & British Orthopaedic Association in 2015 [1] aimed to set a clear standard of provision of adequate levels of care for the management of metastatic bone disease.

However since the release of this guidance it is unclear whether the recommendations have been adopted into clinical practice. With the impending release of a British Orthopaedic Association Standard for Trauma (BOAST) relating to a metastatic bones disease management we hope to evaluate the current practice before this is released

## Summary of Findings:

***Please concisely state the main conclusions of the project using bullet points***

- Total number of patients included = 54
- Average age of patients = 69
- Male: Female = 37:17
- Data collection period: 01/04/2021 – 16/06/2021
- Sources of referral: Aintree (7), Countess of Chester (3), Isle of Mann (2), Whiston (5), Southport (1), Glan Clywd (6), Warrington (6), Arrowe Park (2), Clatterbridge (4), Royal Liverpool (6), Ysbyty Gwynedd (4), Wrexham (5), St.Helens (1) and Walton (outpatients) (1).

| Compliance to Audit Standard – Diagnostic Imaging | | | |
|---|---|---|---|
| **Standard** | **Yes** | **No** | **Percentage compliance** |
| X ray whole bone obtained? | 4 | 50 | 7.4% |
| MRI whole bone? | 54 | 0 | 100% |
| CT Chest Abdo Pelvis? | 42 | 11 | 79.2% |

| | | | |
|---|---|---|---|
| Bone scan obtained ? | 2 | 52 | 3.9% |

| Compliance to Audit Standard – Investigations | | | |
|---|---|---|---|
| **Standard** | **Yes** | **No** | **Percentage compliance** |
| Full blood count | 46 | 1 | 97.9% |
| UnE | 46 | 1 | 97.9% |
| LFT | 43 | 3 | 93.5 |
| Bone profile | 27 | 9 | 75.0% |
| Calcium | 23 | 13 | 63.9% |
| ESR | 10 | 27 | 27.0% |
| CRP | 36 | 2 | 94.7 |
| Myeloma screen | 15 | 22 | 40.5% |
| Other tumour markers | 15 | 22 | 40.5% |

**Key success:**

***Please concisely state the key success identified by the project – if none identified please state N/A***

- Whole bone MRI – 100% compliance
- Full blood count and UnE – 97.9% compliance
- LFT – 93.5% compliance

**Key concerns:**

***Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A***

- X ray whole bone obtained – 7.4% compliance
- Bone scan obtained – 3.9% compliance
- ESR – 27% compliance
- Myeloma screen and other tumour markers – 40.5% compliance

**Recommendations discussed:**

***Please concisely summarise the recommendations that were discussed following the completion of the project***

- Our reflections for re-audit (in a year) would be to examine the bloods (ESR, myeloma screen)

**Presentation / Dissemination of Project**

| |
|---|
| Date findings were presented / disseminated:<br>Department where discussed or presented: |

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Re-Audit to examine the bloods (ESR, Myeloma screen) | Re-Audit | | 1 year | *Re-audit* | |

**Re-audit date** __March 2023_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No X☐

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Antimicrobial Stewardship**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **Level 5 – low local priority** | **1** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** √ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Antimicrobial Stewardship**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **ITU**

**Project Lead:**

**Contact No:** **Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
Click here to enter text.

---

**Background / Rationale**

Surveillance of appropriate prescribing practice of antimicrobial usage on Horsley ITU. Similar audit carried out 2 years ago but slight variation of data to capture this time around, therefore to register as new audit.

**Methodology**

Prospective data collection of 20 in-patients on Horsley ITU

**Aims / Objectives**

To ensure appropriate and identify inappropriate antimicrobial prescribing practice within the critical care patient group.

**Standards / Criteria Details (service evaluation N/A)**

Public Health England (2015) 'Start Smart – Then focus' Antimicrobial Stewardship Toolkit for English Hospitals.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Public Health England (2015) 'Start Smart – Then focus' Antimicrobial Stewardship Toolkit for English Hospitals

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Public Health England

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**
High volume Yes ☐ No ☒

| | | |
|---|---|---|
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 20 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date: 15.03.21**

**Anticipated project completion date: 15.05.21**

**Anticipated Action Plan Submission date:15.06.21**

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**

- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ _____ Date: Click here to enter text.

**Comments** I support this Audit in principle.The data collection tool /spread sheet hasn't been provided.I request the CAG to approve pending submission /providing more details about the data collection form/spread sheet etc-I am requesting CAG to approve- I am presuming it will be an analysis of the drug prescription charts in ITU(NOT ELECTRONIC).

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

## Clinical Audit / Service Evaluation Action Plan

**Ref no: 364**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Antimicrobial Stewardship- ITU | | |
| **Date audit complete** | June 2021 | **Date action plan completed** | June 2021 |
| **Auditor** | | **Name of policy / guideline** | Antimicrobial stewardship guidance |
| **Division** | ITU / Microbiology | **Source of policy / guideline** | |

**Audit Rationale:**

- To review prescriptions of patients admitted on Horsley ITU to determine alignment with antimicrobial stewardship principles.
- Provide insight to prescriptions and related blood culture sampling practice.

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- Majority of prescriptions made by ITU Reg / ITU Consultant
- Prescriptions evenly made between weekday / weekend!!
- Stop / duration / review dates omitted in 50% of prescriptions
- Indication documented in 89%, good but room to improve
- Top 4 most frequent indications; Relevant reported microbiology / Increased FiO2 requirements / Temp > 38.4 / Rising inflammatory markers
- Blood cultures taken prior to first dose in 39%
- 86% of blood cultures taken prior to first dose were within 4 hours / 43% within 2 hours / 29% within 1 hour
- Limited utilisation of Micro Tracker form to document
- 63% of documented indication for antimicrobial was on prescription kardex

- Microbiology ward round altered 11% of prescriptions, none were discontinued

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Indication documented in 89%, good but opportunity to improve

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *As documented in findings above*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

Increase documentation of stop / duration / review dates

Greater documentation of indication - aim 100%

First dose blood cultures timescale under review

Utilise Micro Tracker form for use on all ITU patient records

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Microbiology MDT meeting
Department where discussed or presented: ITU seminar / MS Teams

**Actions agreed following recommendations discussed:-**
*****Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| Audit results / findings/ recommendations | Disseminate audit findings and recommendations to ITU / Microbiology MDT | | By end of 2021 | *Minutes of Microbiology / ITU MDT* | |
| Stop / duration / review dates omitted in 50% of prescriptions. Indication documented in 89%, | Reminders to ITU prescribers to document a duration / review / stop date /indication on prescription kardex. | | By end of 2021 | *Minutes of Microbiology / ITU MDT plus in practice* | |
| Limited utilisation of Micro Tracker form to document | Encourage use of micro tracker form on ward round | | By end of 2021 | In practice | |
| | Set audit review date for 12 months with changes where relevant | | By end of 2021 | Set as date below | |

**Re-audit date** June 2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes √ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No √

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No √ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Clinical Practice observing VIP Score**

**Division:** Neurosurgery ☒ Please specify department **Horsley ITU**

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**

---

**Background / Rationale**

ITU has poor record of venflon insertion documentation, we are hoping that with this audit this will improve our practice

**Methodology**

Please see attached questionnaire

**Aims / Objectives**

To improve venflon insertion documentation

**Standards / Criteria Details (service evaluation N/A)**

Management of invasive devices policy

---

**Guideline / Standards available:** Yes ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Management of invasive devices policy

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☒ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 10-20 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years): Every 6 months**

**Rolling programme frequency:** Monthly ☒ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date: March 2021**

**Anticipated project completion date: October 2021**

**Anticipated Action Plan Submission date: October 2021**

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title: Effectiveness of Anterior cervical discectomy and fusion (ACDF) in patients with radiculopathy**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | Y | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | Y | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **12 – Level 3** | |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☒ Service Evaluation ☐**

**Audit / Service Evaluation Title:** Effectiveness of Anterior cervical discectomy and fusion (ACDF) in patients with radiculopathy

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Neurosurgery**

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

Patients presenting with cervical radiculopathy undergo surgery to relieve them off their pain as the last resort. These patients experience severe shooting pain which is quite disabling and significantly disrupts their normal life. Most of these patients undergoing surgery have suffered from this pain for quite long and often a number of bouts of it. They often have neurological deficits as well. Most of these patients currently undergo anterior cervical discectomy to provide pain relief and to improve their functional status. According to NICE guidelines these patients need to try conservative management prior to being offered surgery including medical management for upto 12 weeks, interlaminar cervical epidural injections, transforaminal injections etc. Moreover with the advent of new procedures like endoscopic anterior cervical discectomy and resurgence of posterior cervical foraminotomy (Open and endoscopic), there is a need to audit our adherence to the NICE guidelines and to check if the outcomes with ACDF are good enough for us to continue offering the same procedure despite the latest trends. With evidence in Lumbar nerve compression that more than a year of nerve compression leads to worse outcomes in patients after surgery, there is a need to check if the same applies in the neck as well.

**Methodology**

1. All patients undergoing ACDF from 2012 onwards until December 2020 will be included with a minimum 6 month postoperative followup. (from spine tango)
2. All patients relevant clinical / radiological and outcomes data will be collected.
3. Patients with myelopathy/ significant cord compression on radiology will be excluded.
4. Patients undergoing multilevel surgery will be analysed separately.
5. Patients with conditions like Fibromyalgia and arthritis will be excluded.
6. Effectiveness of use of plate in fusion will also be looked into.

**Aims / Objectives**

1. To determine the effectiveness of ACDF in radiculopathy through Patient Reported Outcome Measures (PROMs)
2. To audit to the adherence to NICE guidelines in the management of Cervical Radiculopathy.

**Standards / Criteria Details (service evaluation N/A)**

1. Determine the PROM trend after surgery in patient undergoing ACDF for radiculopathy
.2. Compare these with other studies reporting outcomes from Endoscopic ACDF/ Posterior foraminotomy
.3. To audit the adherence to NICE guidelines in management.

4. To determine the relationship between length of nerve compression and patient outcomes after surgery.
5. To assess the effectiveness of use of plate in cervical fusion

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.
https://cks.nice.org.uk/topics/neck-pain-cervical-radiculopathy/management/management/

**Name of Standard / guideline: Neck pain - cervical radiculopathy:Scenario: Management**

**Source of Standard / guideline:** NSF ☐ NICE ☒ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☒ | No ☐ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐
*If yes, please specify type of assistance required:*

- Population Identification **Spine Tango** ☒
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:20/04/2021**

**Anticipated project completion date: 30/06/2021**

**Anticipated Action Plan Submission date:15/07/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 368**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | LOCAL AUDIT OF CARE AT THE END OF LIFE (LACEL) | | |
| **Date audit complete** | | **Date action plan completed** | 16/4/21 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Trustwide | **Source of policy / guideline** | |

**Summary of Findings:**
Overall, many of the findings from the Local Audit for Care at the End of Life were similar to that of the National Audit for 2019. This will form part of the action plan moving forward when auditing end of life care and providing education to the workforce.
Uptake of the Individualised end of life care plan – Significant improvement noted with this in 2020 71% versus 0% uptake in 2019. Some areas of the end of life care plan were incomplete and times not recorded. From the information available it would appear that the average time that the dying person was supported with an end of life care plan was 38hours
Regular holistic assessment – Due to lack of data available for the 2019 audit, it was not possible to make a comparison with the results seen in the 2020 audit
Page | 15

Spiritual/Religious/Cultural Assessment – The results shown in the 2020 audit showed improvement in the assessment of Spiritual needs although improvement still required
Nutrition and Hydration – Increase in discussion with the nominated person regarding Hydration in the 2020 audit (57% versus 14%) and Nutrition (29% versus 14%)
Anticipatory prescribing - Improvement noted for the prescribing of Anticipatory Medications (100% versus 0%) and Indication for use recorded for all (100% versus 79%).
Length of stay – For the sample of patients in the LACEL audit, Length of time from admission to death was shorter overall (57% versus 28% for the most common time frame of 1-10 days). Recognition of dying was identified earlier in the 2020 audit 152 hours prior to death versus 74 hours in 2019)
Communication - Despite the fact that restrictions on visiting were in place during the Pandemic, discussions and documentation of conversations with the nominated person showed significant improvement. It is important to note that this may not have been the case with all deaths, but was evident in the random sample.
Referral to the Hospital Specialist Palliative Care Team – Increased referral rate in the 2020 audit 100% versus 14% in 2019

**Key success:**
*Family requested if mouth care could be provided with the patient's favourite drink – this was made possible
*Good spiritual needs assessment for a specific culture that required certain practices to be in place
*Very clear communication and family support from all staff members for one family that were particularly struggling with the situation
* Offer of accommodation to NOK

**Key concerns:**

- 

**Recommendations discussed:**

 Disseminate results to Specialist Palliative care team. ✓
 Share results with EOL operational group – Walton Centre Foundation Trust ✓
 Share results as required with General Staff members through education as appropriate
 Share results with CQC if required during inspection
 To participate in the National Audit for End of Life Care 2021.✓

**Presentation / Dissemination of Project**

Department where discussed or presented: Also presented to the EOL operational group 19/05/21 and EOL committee 21/06/21 (not a full attendance) via teams.Will be presented again at Walton EOL committee group 11/10/21.

**Actions agreed following recommendations discussed:-**

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Limited information on previous National Audit of Care at the End of Life, therefore not able to make full direct comparisons to note improvement or areas for development with all aspects of end of life care. | Participate in the National Audit of End of Life Care 2021(Round 3) | | Currently participating – results expected early 2022 | National Benchmark results | EOL operational group/EOL committee |

**Re-audit date** _____N/A_____ **If no re-audit planned please give reasons why?** __This was a local audit in to garner some information regarding end of life care in place of the postponed national audit. The National audit is now reinstated, therefore a local audit is not required again._____

**Will this be an on-going audit?** Yes ☐ No ×☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ×☐

**If yes to the above please state who the issues have been referred to:**

| | |
|---|---|
| **Name** _____ **Designation** _____ **Date referred** _____<br><br>**Signature:**_____ **Date:**_____ | |
| **Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐<br>**Please provide details of issue(s) logged on the risk register:** | |

# Project Prioritisation Assessment Tool

**Audit title: Local Audit for Care at the End of Life**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | Y | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **6 – Level 4** | |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Local Audit for Care at the End of Life**

**Division:** Neurology ☐ Neurosurgery ☐ Please specify department Palliative and End of Life Project Lead within the Specialist Palliative Care Team – Aintree site, LUFHT.

**Project Lead:**

**Contact No:** **Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
Click here to enter text.

---

**Background / Rationale**

This topic has been chosen as the National Audit for End of Life Care for 2020 was cancelled due to the Coronavirus Pandemic. It is helpful to gather such data to audit the quality and outcomes of care provided to the dying person and those important to them during the last admission to hospital.

**Methodology**

Retrospective review of up to 10 case notes of inpatients that have died in the trust. The notes will be randomly using a number generator and will be selected from the last 2 quarters of 2020; this will also include accessing the JAC medication system. The inclusion criteria are those patients recognised to be dying. The data may also include those not identified to be imminently dying but have been recognised to have a life limiting condition, so whilst death was not recognised as imminent, staff were "not surprised" that the patient died. Exclusion criteria are deaths due to a life threatening acute condition caused by a sudden catastrophic event and, deaths within 4 hours of hospital admission. The data collection tool is the same as the National Audit for Care at the End of Life to allow for similar comparisons. The number of reviews is less than would be expected for a national audit.

**Aims / Objectives**

The aim of this audit is to learn and share from best practice as well as improve the quality of care for people at the end of life in the acute setting where it has been recognised that optimal care may not have been achieved. The risks of not undertaking this small study is being unable to identify areas for improvement particularly during a pandemic.

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:

- NICE guidance for end of life care/care of dying in the last days of life

**Name of Standard / guideline:**

**https://www.nice.org.uk/guidance/QS13**

https://www.nice.org.uk/guidance/ng31

- Local Strategy: WCFT End of Life Care Strategy
- The current individualised end of life care plan is measured by standards set in the above guidance and using the 5 priorities for Care of the Dying as per the government 'One chance to get it right document. CQC also incorporate this guidance when inspecting End of Life Care.

**Source of Standard / guideline:** NSF ☐ NICE ☒ Royal College ☐
Trust ☒ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Up to 10 **Procedure codes to identify sample:** Random selection from NHS No from Mortality data

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** N/A

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐
*If yes, please specify type of assistance required:*

- Population Identification ☒
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☒

Collection of case notes ☒ Total number 12 (to allow for exclusion)

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:** W/C 22/03/2021

**Anticipated project completion date:** W/E 30/04/2021

**Anticipated Action Plan Submission date:**30/06/2021

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no:**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Subarachnoid Haemorrhage Time to Treatment | | |
| **Date audit complete** | | **Date action plan completed** | |
| **Auditor** | | **Name of policy / guideline** | National Clinical Guideline for Stroke 2016 |
| **Division** | Neurosurgery | **Source of policy / guideline** | Royal College of Physicians |

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- The findings of this year's audit have been compared with last year's (2018-2019). However, last year's audit has been re-calculated using the methodology employed in the calculations of this year's (2019-2020) audit.

- Only patient's that were eligible for endovascular intervention were *included* in the calculations. Patient's that were delayed in their presentation to services, were transferred, or received neurosurgical intervention were *excluded*.

***2018-2019 Findings***

- The preceding audit (2018-2019), had a total of 113 patients eligible for endovascular intervention.

- Of those 113 patients, 66 were treated within the 48 hour window, and 47 patients were not.

- Of the 47 patients treated *outside* of the 48 hour window, 20 were due to delayed presentation to services, were transferred, or received neurosurgical intervention. Therefore, *only* 27 patients (47-20 = 27) could have been treated within the 48 hour window. As such, the total population that *could* have been treated within 48 hours was 93 (66+27 = 93) – the figure used as the denominator in the following percentage calculation:

- The percentage of patients that were treated within the 48 hour window in 2018-2019 was 71%.

***2019-2020 Findings***

- Of the 151 subarachnoid haemorrhage patients, 98 were eligible for endovascular services.

- Of these 98 patients, 50 were treated within 48 hours, and 48 patients were delayed.

- Of the 48 patients not treated within the 48 hour window, 46% (n=22) were delayed in their presentation to services. This means that of those 48 patients, only 26 could have been treated within the 48 hour window. Therefore, the total population that could have been treated within 48 hours was 76 (50+26 = 76) – the figure used as the denominator in the following percentage calculation:

- The percentage of patients that were treated within the 48 hour window in 2019-2020 was 66% (50/76 = 66%).

***Comparison***

- This demonstrates a reduction of 5% (71-66 = 5) between 2018-2019 and 2019-2020.

**Key success:**

*Please concisely state the key success identified by the project – if none identified please state N/A*

-

**Key concerns:**

*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- Of the 48 patients that were treated after 48 hours of ictus, 46% (22/48 = 46%) were delayed in their presentation to services, and 25% (n=12) was due to weekend/holiday admission.

- In 2018-2019, the percentage of patients delayed as a result of a weekend/holiday admission was 19%, compared to 25% in 2019-2020.

- For the majority of cases there is a lack of *precise documentation* of the timing of ictus; however, it is acknowledged that precise documentation is *not always* possible.

**Recommendations discussed:**

*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Precise documentation of the time of ictus in patient notes.

- Weekend service for endovascular intervention.

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: _____

Department where discussed or presented: _____

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Lack of precise documentation of the timing of ictus onset. | Staff documentation training | | On-going | e-Learning or Staff sign-off | |
| 2) | | | | | |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** _____End of 2021_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☐

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Subarachnoid Haemorrhage Time to Treatment**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | | (x2) |
| **Total** | **8 – Level 4** | |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Subarachnoid Haemorrhage Time to Treatment**

**Division:** Neurology ☒ Neurosurgery ☐ Please specify department **Neuroradiology**

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

Patients presenting with a subarachnoid haemorrhage (SAH) should generally be treated within two days (48 hours) of ictus. This evaluation aims to assess this sites performance.

**Methodology**

Retrospective study evaluating this sites performance 1/11/2019 – 31/10/2020. SAH patients will be identified and their time of endovascular treatment will be identified using the CRIS system. The ictus will be identified using patient notes, Orion and eP2. Delays will be identified and their cause will be investigated.

For the final percentage calculation, only patients eligible for endovascular intervention will be *included*. Patient's that were delayed in their presentation to services, were transferred, or received neurosurgical intervention were *excluded* from this final percentage calculation.

The preceding 1/11/2018 – 31/10/2019 study was re-calculated using the above methodology to facilitate direct comparisons with this 2019-2020 study.

**Aims / Objectives**

To determine the percentage of patients that underwent endovascular treatment within the 48 hour window post SAH ictus.

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☐ |
| High risk | Yes ☐ | No ☐ |
| High cost | Yes ☐ | No ☐ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☐ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☒ No ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☒

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☐
*If yes, please specify type of assistance required:*

- Population Identification ☒
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:** Now

**Anticipated project completion date:** By April 2021

**Anticipated Action Plan Submission date:** Click here to enter text.

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 370**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | **Imaging timing after surgery for glioblastoma- an evaluation of practice in Great Britain (INTERVAL-GB)- Liverpool pilot study** | | |
| **Date audit complete** | 30/05/2021 | **Date action plan completed** | 30/06/2021 |
| **Auditor** | | **Name of policy / guideline** | NICE 2018- Management of primary brain tumours |
| **Division** | Neurosurgery | **Source of policy / guideline** | https://www.nice.org.uk/guidance/ng99/chapter/recommendations |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *Only 40% of patients at the Walton Centre undergo an MRI scan within 72 hours of surgery for glioblastoma (recommendation is 100%)*
- *65% of progression is detected using routine 'scheduled' imaging, with 35% being detected through clinical deterioration (no survival difference between groups)*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- **Survival for GB patients at the Walton Centre is in line with national levels (median 15 months)**
- **Highlighted that patients need an MRI within 72 hours of undergoing GB surgery (2 other centres in pilot had rates of 80% and 96% respectively)**

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *40% adherence to NICE guidelines when target is 100%.*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Increase awareness by presenting findings in audit meeting
- Re-audit in Summer 2022 after finding presentation to see if has had any impact on scanning rates.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: 25th September 2021 (SBNS National meeting)
Department where discussed or presented: Next audit department meeting (planned- date TBC)

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Low compliance to 72hr MRI scan after surgery | Inform surgeons of the low compliance and need to order imaging timely | | Completed | | Oncology services |
| | To have dedicated MRI slots in Radiology on a Monday | | Completed | | Oncology services |
| | Re-audit in 3-6 months | | 3-6 months | *Re-audit* | Oncology services |

**Re-audit date** _____01/05/22-01/08/2022_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes x No

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes No x

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes No x N/A

**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Audit on MRI under sedation/GA**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **1** | **5 C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Audit on MRI under sedation/GA**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc*

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**Background / Rationale**

MRI under deep sedation was introduced at WCFT in 2020, we would like to look at the number of cases done under sedation and general anaesthesia cases since it was introduced and compare it against the earlier practice of MRI under General anaesthesia. We would like to assess the efficacy, feasibility and cost analysis of sedation and GA techniques for patients undergoing MRI.

**Methodology**

Retrospective data collection from June 2019 to May 2021, Data collection sheet attached.

**Aims / Objectives**

To evaluate the current practice compared to earlier practice solely based on General anaesthesia

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: 50 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☒ Total number ___10_ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date: June 2021**

**Anticipated project completion date: November 2021**

**Anticipated Action Plan Submission date: December 2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no:**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | *Clinical Value of immediate postoperative cranial CT in long standing oevert hydrocephalus and NPH patients after CSF diversion* | | |
| **Date audit complete** | 31/08/2021 | **Date action plan completed** | 31/08/2021 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Neurosurgery, Neuroradiology | **Source of policy / guideline** | ICRP Guidelines. |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *Immediate postoperative CTH after CSF diversion in patients with LOVA & NPH showed a low rate of rate of catheter malposition, postoperative complications, and anatomical changes.*
- *Re-surgery requirement in the analysed cohort is 0%*
- *Costs in terms of radiation and economical resources surpasses the benefits.*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Identify objectively a very low incidence of proximal catheter malposition with image guided techniques.
- Gather enough information to support a change in professional custom / habits based on the results.
- Provide evidence to propose alternatives for outcome management.
- Provide awareness of the costs and propose to free these resources for other clear beneficial indications.
- Propose a reduction of congestion, work overload and delays in the radiology department and reduce the time of admission.

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Exposure to unnecessary radiation*
- *Costs in economic terms and length of admission*
- Low incidence of complications and catheter malposition

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- In asymptomatic patients after a reasonable time of observation in the postoperative period or an ETV, CTH can be avoided.
- In asymptomatic patients after a Shunt placement, guided by imaging and performed under the supervision of an experienced operator CTH can be avoided.
- In the case of high risk of catheter malposition (No image guidance or performed by and non-expert operator), CTH can be considered.
- In the case of patients with known risk of bleeding, previous uncontrolled risk factors (seizures, hypertension or coagulopathy) or any other former complications in similar procedures, CTH could be indicated.

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: Audit day 29/09/2021

Department where discussed or presented: Neurosurgery/ Neuroradiology

**Actions agreed following recommendations discussed:-?**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) | | | | | |
| 2) | | | | | |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** _____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☐

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Telephone clinic service review for neuro trauma clinics**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **2** | **5C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Telephone clinic service review for neuro trauma clinics**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Neurotrauma**

**Project Lead:**

**Contact No:** **Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

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**Background / Rationale**

Due to Covid outbreak the Neurotrauma Team had to rapidly charge the delivery of service to remain meeting the head injury patient's needs, as these patients were still being admitted throughout. HIAP took over triaging all referrals and completing a telephone assessment. Patient would then be either discharged, referred on to the consultant clinic or elsewhere.

**Methodology**

Four specific questions with be asked retrospectively to patients that received a telephone clinic appointment, in order to gain their feedback. This information will then be collated in Excel to look for trends etc. 1. Did you receive a follow up telephone call from HIAP?2. Did you feel you received this telephone call at the right time after discharge? (If not when do you think would have been the right time after discharge?)3. Did you find the telephone clinic useful? (If not why not?)4. Would you prefer telephone clinic, video or face to face clinic as the first follow up appointment?

**Aims / Objectives**

To gain important feedback, that the changes made meet the patient's needs, as well as reducing cost of face to face clinic and reducing DNAs.

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Trauma Pathway

**Name of Standard / guideline:** TARN

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: TARN

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**

Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 40 Procedure codes to identify sample: Clinic code**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☒

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☒
- Presentation ☒

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☒ No ☐

**How will the patient be involved?**

Patient Questionnaire ☒ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☒ N/A ☐

**Anticipated start date:May 2021**

**Anticipated project completion date: Sep 2021**

**Anticipated Action Plan Submission date:Dec 2021**

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

# Project Prioritisation Assessment Tool

**Audit title: Acute pain review in thoraco-lumbar surgery patients.**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | N | (x3) |
| High volume | N | (x2) |
| High risk | N | (x3) |
| Known quality issue | N | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | Y | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | N | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | Y | |
| National / regional or multicentre project | N | (x2) |
| **Total** | **8** | Lvl 4 – Cat. B |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit**

**Audit / Service Evaluation Title:** Acute pain review in thoraco-lumbar surgery patients.
**Division:** Neurosurgery
**Project Lead:**
**Contact No:**
**Email address:**
**Audit / service evaluation supervisor:**
**Other professionals involved / project team members' details:**

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**Background / Rationale.**

In 2018 a patient satisfaction survey showed 30% of patients undergoing thoraco-lumbar surgery had moderate to severe pain in recovery- this was the one aspect of our anaesthetic services that was found underperforming at the ACSA review . An acute pain service was started with an acute pain consultant and an acute pain nurse. We are due an ACSA review soon and an audit and service evaluation is necessary to show that we have attained our goals

**Methodology:**

- Review of patient pre-operative medications via JAC.
- Review of patient reported pain scores in theatre recovery.
- Post-operative JAC prescription review.

**Aims / Objectives:**

- To assess effectiveness of post operative analgesia in patients having thoracolumbar spinal surgery following education and introduction of postop analgesic regimes

**Standards / Criteria Details (service evaluation N/A)**

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**Guideline / Standards available:** **Name of Standard / guideline:**

NICE Guideline 180. August 2020.
**Source of Standard / guideline:** NICE

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes

**Is the audit / service evaluation issue:**

| | |
|---|---|
| High volume | No |
| High risk | No |
| High cost | No |
| Known quality issue | No |
| Wide variation in practice | Yes |

**Sample No:** 50 **Procedure codes to identify sample:** N/A- Prospective review of surgical schedule.

**Are you planning to publish your audit/service evaluation findings nationally***?* Yes

**Is this a re-audit or if service evaluation, has service been reviewed previously?** N

**Is this project part of an agreed departmental rolling programme?** N

Multidisciplinary: X

**Is Clinical Audit Team support required?** No

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** No x

**Has approval been sought from the Patient Information Panel?** N/A

**Anticipated start date:** August 2021

**Anticipated project completion date:** September 2021

**Anticipated Action Plan Submission date:** December 2021

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 376**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Cappucinni Test | | |
| **Date audit complete** | 28/6/21 | **Date action plan completed** | 4/4/22 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Neurosurgery | **Source of policy / guideline** | |

**Audit Rationale:**
*Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)*

A test recommended by the Royal College of Anaesthetists to assess trainee supervision whilst working solo. Test being carried out region-wide

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- 
- 

**Key success:**
**Question**

- Who is supervising you? 100%
- Does the supervisor know what the trainee is doing? 100%
- How supported the trainee felt? 100%
- How often supervisors were contactable 100%
- How often the supervisor would be able to attend if required 92%

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- Does the supervisor know they are supervising? 85%
- How often the supervisor would be able to attend if required 92%

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- When assessing the results from this cycle 85% of supervisors knowing who they are supervising should be higher, things have changed subsequently and the weekly rota now places the trainee name next to the consultant.
- Alternative supervisor highlighted if unable to attend
- Maintain improvements from previous audit cycles

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: 30/11/21
Department where discussed or presented: Departmental audit meeting

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Supervisor unaware they were supervising | Supervision highlighted on rota | | Already actioned | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| 3) | | | | | |

**Re-audit date** Regional audit. TBA **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes

**Are there any potential barriers / problems to prevent the implementation of the above actions?** No

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes No N/A
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Nasogastric Tube Management; Compliance with standards & guidelines in checking tube position.**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **3** | **Lvl 5 – Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit ☒ Service Evaluation ☐**

**Audit / Service Evaluation Title:** Nasogastric Tube Management; Compliance with standards & guidelines in checking tube position.

**Division: Neurology ☐ Neurosurgery ☒ Please specify department:** Horsley ITU

**Project Lead:**

**Contact No: Bleep No:** N/A

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

N/A

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**Background / Rationale**

I am currently undertaking the following level 7 course at Liverpool John Moores University; Advancing the Critical Care Practitioner. As part of my academic assessments I am required to complete an audit in practice with a clear review of the literature to demonstrate the justification for the audit. I am seeking approval to carry out an audit on the compliance & documentation of Nasogastric Tube management; checking the position of the nasogastric tube.

**Methodology**

Monitor staff compliance with checking nasogastric tube position and pH tests in accordance to guidelines and policies. Please see attached document.

**Aims / Objectives**

To monitor staffs compliance with documentation of nasogastric tube position checks and aspirate pH levels prior to use.

**Standards / Criteria Details (service evaluation N/A)**

Standards set in the trust policy of nasogastric feeding and the NICE guidelines. My criteria would be a sample of 10 patients in critical care who have a nasogastric tube in place and are being feed via nasogastric tube.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: Walton Centre intranet

**Name of Standard / guideline:** NPSA guidelines; 'Reducing harm caused by misplaced nasogastric feeding tubes in adults, children and infants'.

**Source of Standard / guideline:** NSF ☐ NICE ☒ Royal College ☐

Trust ☒ Other ☒ State other: NPSA Guideline

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☒

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** 10 **Procedure codes to identify sample:** Patients in critical care with nasogastric tube in place and in use.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*
- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*
- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**–**

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)*

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☒ N/A ☐

**Anticipated start date:**26/7/21

**Anticipated project completion date:** 9/8/21

**Anticipated Action Plan Submission date:** 6/9/21

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**–**

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _ Date: 05/0721

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

# AUDIT TOOL

## Nasogastric Tube Management;

## Compliance with standards & guidelines in checking tube position

| Sample | LocSSIPs Form Completed | NGT Position at nose documented | Date of insertion & Nostril used | NGT Position checked prior to administration of medication | NGT Position checked prior to commencing Feed | NGT Position checked 4 hourly when feed on | NGT in same position as documented on insertion | NGT Aspirates Checked | Aspirates PH Checked | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

**Audit Proposal Title**

Nasogastric Tube Management; Compliance with standards & guidelines in checking tube position

**Rationale**

The vast majority of our patient's will have an NGT inserted on the unit or already in place on admission due to use of sedation, artificial airway, low GCS or impaired swallow.

This is vital for nutrition, fluids and administration of medication.

However there is high risk of incorrect position on insertion and/or being displaced overtime especially for the critical ill patient.

**Methodology**

Documentation for auditing;

We use a LocSSIPs (Local Safety Standards for Invasive Procedures) Form when an NGT is inserted which includes the date of insertion, nex measurement, measurement secured at nose and confirmation whether safe to use, determined either by aspirate or chest x-ray.

Further documentation is located on our daily observation charts which states whether an NGT is in place, which nostril was used for NGT, date of insertion along with the nurse checking the measurement at nose for correct positon and aspirates prior to administrating medication, commencing feed and on a minimum 4 hourly bases when enteral feeding is taking place.

Compliance against the standards set in the trust policy of nasogastric feeding and the NICE guidelines.

Propose the audit to take place over a 2 week period; suggest dates from the 26th July to the 9th August 2021.

On a sample size of 10 patients, who meet the criteria of a patient in the critical care setting who have a nasogastric tube in place and are being feed via nasogastric tube.

**Action Plan**

Following the audit process and presentation of audit results with relevant management, I propose the development of an action plan to improve practice on the standards of NGT management with the practice education team. With the aim to improve awareness of guidelines, staff training and nursing documentation. I would propose the use of information posters, worksheets and training sessions.

Action Plan to commence early September 2021, suggest date 6th September 2021 for a period of 3 months to ensure training of every member of staff. After completion of staff updates and training, plan to re-audit to monitor practice improvement.

# Project Prioritisation Assessment Tool

**Audit title: Retrospective review of colloid cysts for last 20 years & outcomes**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | 2 | Lvl 5 – Cat. C |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Retrospective review of colloid cysts for last 20 years & outcomes**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**

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**Background / Rationale**

20 year retrospective study looking at outcomes in colloid cysts – service evaluation audit. Looking at anatomic features of the cyst and different surgical intervention and outcomes including post op complications and the role of neuropsychology in these patients.

**Methodology**

Retrospective audit. Patient population from histology coding. Data collection from patient notes and EP2 and documented on an excel spreadsheet.

**Aims / Objectives**

To retrospectively audit outcomes locally in colloid cyst patient treated with surgery
Use of the Colloid risk score in assessing patients

**Standards / Criteria Details (service evaluation N/A)**

---

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☒

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 107** **Procedure codes to identify sample:** Histology codes for colloid cyst

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☒ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**Anticipated start date: 01/06/2021**

**Anticipated project completion date: 30/06/2021**

**Anticipated Action Plan Submission date: 10/07/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 379**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | **Real World Experience with Minimally Invasive Wireless Percutaneous Neuromodulation in a Tertiary Care Centre** | | |
| **Date audit complete** | 15-07-2021 | **Date action plan completed** | 15-08-2021 |
| **Auditor** | | **Name of policy / guideline** | NA |
| **Division** | Neuromodulation- Pain Medicine, Neurosurgery and Neuroradiology | **Source of policy / guideline** | NA |

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- *All patients showed >50% pain relief at 3months.*
- *EQ-5D and PGIC did not show any improvement in the subjects.*
- *Two of the patients managed to decrease their analgesics after implantation.*
- *Sustained benefits could not be demonstrated after one year of implant.*

**Key success:**

*Please concisely state the key success identified by the project – if none identified please state N/A*

- *Wireless PNS can provide analgesia in appropriately selected cases.*

**Key concerns:**

*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Naivety of the technique and procedure might cause some degree of uncertainty.*
- *Robust prospective controlled studies and RCTs in future might provide further insights on utility in other neuropathic pain diagnosis, long-term outcomes and acceptability of wireless PNS compared to conventional SCS.*

**Recommendations discussed:**

*Please concisely summarise the recommendations that were discussed following the completion of the project*

- *Wireless PNS can provide analgesia in appropriately selected cases*
- *Minimally invasive nature of the technique might be attractive and preferable for patients with complex medical issues, nickel allergy and poor general health who may otherwise be unsuitable for Spinal Cord Stimulation (SCS) with conventional hardware*

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: This manuscript has been accepted for publication in the ***British Journal of Pain*** and is in the process of production.

Department where discussed or presented: Dept. of Pain Medicine

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) | | | | | |
| 2) | | | | | |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** NA **If no re-audit planned please give reasons why?** the audit was to assess our initial experience but has a propensity to be repeated.

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

| | |
|---|---|
| **Signature:** Manohar Lal Sharma | **Date:** 30/11/21 |
| **Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☒<br><br>**Please provide details of issue(s) logged on the risk register:** | |

# Project Prioritisation Assessment Tool

**Audit title: Real World Experience with Minimally Invasive Wireless Percutaneous Neuromodulation in a Tertiary Care Centre**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.
If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **3** | **Lvl 5 – Cat. C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Real World Experience with Minimally Invasive Wireless Percutaneous Neuromodulation in a Tertiary Care Centre**

**Division: Neuromodulation- Pain Medicine, Neurosurgery and Neuroradiology**

**Project Lead:**

**Contact No:** **Bleep No: NA**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

**Background / Rationale**

Wireless Percutaneous nerve stimulation [PNS] for chronic pain is a rapidly evolving in the ever expanding neuromodulation paradigm for chronic neuropathic pain. The safety and lower risks with a potential of long term pain relief obtained from this cannot be over emphasized especially in the ongoing opioid pandemic. PNS with implanted pulse generator with focal pleasant paraesthesia has also been shown to provide similar benefit, without often unpleasant widespread paraesthesia of spinal cord stimulator, in improving mood and functionality in appropriately selected patients

**Methodology**

We retrospectively extracted data pertaining to all wireless PNS implants in our tertiary care highly specialised pain neuromodulation service since initiation of wireless PNS device in August 2019. Patient demographics, pain history, analgesic intake and details on implant were extracted. Follow-up data were extracted at 6 months and 1 year post-implant including pain relief, EuroQol-5Dimension (EQ-5D) and Patients' Global Impression of Change (PGIC) scores.

**Aims / Objectives**

To evaluate the effectiveness or efficiency of PNS neuromodulation implant as a service evaluation at the Walton centre NHS foundation trust to help inform future clinical decision making

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline: NA**

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐

Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: 5 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☒ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:** Click here to enter text.

**Anticipated project completion date: 15-07-2021**

**Anticipated Action Plan Submission date:15-08-2021**

---

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---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

**OUTCOME FORMS / DATA COLLECTION TOOL**

# PNS 4 WEEK QUESTIONNAIRE

Name: Hospital Number:

On the scale below please rate your average **LEG/ARM** pain in the past week by circling a number.

**(No pain)** 0 1 2 3 4 5 6 7 8 9 10 **(Worst pain ever)**

On the scale below please rate your average **BACK/NECK** pain in the past week by circling a number.

**(No pain)** 0 1 2 3 4 5 6 7 8 9 10 (**Worst pain ever)**

**PNS 6 Month Follow Up** Name……. Walton Number……

**Please underline the statement that is closest to how you have been feeling in the past week. Don't take too long over your replies: your immediate is best.**

**I feel tense or wound up**

Most of the time
A lot of the time
From time to time (occasionally)
Not at all

**I still enjoy the things I used to enjoy**

Definitely as much
Not quite as much
Only a little
Hardly at all

**I get a sort of frightening feeling as if something awful is about to happen**

Very definitely and quite badly
Yes, but not too badly
A little, but it doesn't worry me
Not at all

**I can laugh and see the funny side of things**

As much as I always could
Not quite so much now
Definitely not so much now
Not at all

**Worrying thoughts go through my mind**

A great deal of the time
A lot of the time
Not too often
Very little

**I feel cheerful**

Never
Not often
Sometimes
Most of the time

**I can sit at ease and feel relaxed**

Definitely
Usually
Not often
Not at all

**I feel as if I am slowed down**

Nearly all the time
Very often
Sometimes
Not at all

**I get a sort of frightened feeling like butterflies in the stomach**

Not at all
Occasionally
Quite often
Very often

**I have lost interest in my appearance**

Definitely
I don't take as much care as I should
I may not take quite as much care
I take just as much care as ever

**I feel restless as if I have to be on the move**

Very much indeed
Quite a lot
Not very much
Not at all

**I look forward with enjoyment to things**

As much as I ever did
Rather less than I used to
Definitely less than I used to
Hardly at all

**I get a sudden feeling of panic**

Very often indeed
Quite often
Not very often
Not at all

**I can enjoy a good book or radio or television programme**

Often
Sometimes
Not often
Very Seldom

**Please answer every section and tick in each section only the statement which applies to you. We realise you may consider that two of the statements in any one section relate to you. But please just tick the one which most closely describes your problem.**

SECTION 1 PAIN INTENSITY

- ☐ My pain is mild to moderate but I do not need pain killers
- ☐ The pain is bad but I manage without taking pain killers
- ☐ Pain killers give complete relief from pain
- ☐ Pain killers give moderate relief from pain
- ☐ Pain killers give very little relief from pain
- ☐ Pain killers have no effect on the pain

SECTION 2 PERSONAL CARE (WASHING, DRESSING, ETC)

- ☐ I can look after myself normally without causing extra pain
- ☐ I can look after myself normally but it causes extra pain
- ☐ It is painful to look after myself and I am slow and careful
- ☐ I need some help but manage most of my personal care
- ☐ I need help every day in most aspects of self-care
- ☐ I do not get dressed, wash with difficulty, and stay in bed

SECTION 3 LIFTING

- ☐ I can lift heavy weights without extra pain
- ☐ I can lift heavy weights but it gives extra pain
- ☐ Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned.
- ☐ Pain prevents me from lifting heavy weights but I can manage light weights if they are conveniently positioned.
- ☐ I can lift only very light weights
- ☐ I cannot lift or carry anything at all

SECTION 4 WALKING

- ☐ I can walk as far as I wish
- ☐ Pain prevents me walking more than 1 mile
- ☐ Pain prevents me walking more than ½ mile
- ☐ Pain prevents me walking more than ¼ mile
- ☐ I can only walk using a stick or crutches
- ☐ I am in bed or in a chair for most of everyday

SECTION 5 SITTING

- ☐ I can sit in any chair as long as I like
- ☐ I can only sit in my favourite chair as long as I like
- ☐ Pain prevents me sitting more than 1 hour
- ☐ Pain prevents me from sitting more than ½ hour
- ☐ Pain prevents me from sitting more than 10 minutes
- ☐ Pain prevents me from sitting at all

SECTION 6 STANDING

- ☐ I can stand as long as I want without extra pain
- ☐ I can stand as long as I want but it gives me extra pain
- ☐ Pain prevents me from standing more than 1 hour
- ☐ Pain prevents me from standing more than 30 minutes
- ☐ Pain prevents me from standing for more than 10 minutes
- ☐ Pain prevents me from standing at all

SECTION 7 SLEEPING

- ☐ Pain does not prevent me from sleeping well
- ☐ I can sleep well only by using tablets
- ☐ Even when I take tablets I have less than 6 hours sleep
- ☐ Even when I take tablets I have less than 4 hours sleep
- ☐ Even when I take tablets I have less than 2 hours sleep
- ☐ Pain prevents me from sleeping at all

SECTION 8 SEX LIFE

- ☐ My sex life is normal and causes no extra pain
- ☐ My sex life is normal but causes some extra pain
- ☐ My sex life is nearly normal but is very painful
- ☐ My sex life is severely restricted by pain
- ☐ My sex life is nearly absent because of pain
- ☐ Pain prevents any sex life at all

SECTION 9 SOCIAL LIFE

- ☐ My social life is normal and gives me no extra pain
- ☐ My social life is normal but increases the degree of pain
- ☐ Pain has no significant effect on my social-life apart from limiting my more energetic interests e.g. dancing.
- ☐ Pain has restricted my social life and I do not go out as often
- ☐ Pain has restricted my social life to my home
- ☐ I have no social life because of pain

SECTION 10 TRAVELLING

- ☐ I can travel anywhere without extra pain
- ☐ I can travel anywhere but it gives me extra pain
- ☐ Pain is bad but I manage journeys over two hours
- ☐ Pain restricts me to journeys of less than 1 hour
- ☐ Pain restricts me to short necessary journeys under 30 minutes
- ☐ Pain prevents me from travelling except to the doctor or hospital

Under each heading, please tick the **ONE** box that best describes your health **NOW**

**MOBILITY**

I have no problems in walking about ☐

I have slight problems in walking about ☐

I have moderate problems in walking about ☐

I have severe problems in walking about ☐

I am unable to walk about ☐

**SELF-CARE**

I have no problems washing or dressing myself ☐

I have slight problems washing or dressing myself ☐

I have moderate problems washing or dressing myself ☐

I have severe problems washing or dressing myself ☐

I am unable to wash or dress myself ☐

**USUAL ACTIVITIES** ***(e.g. work, study, housework, family or leisure activities)***

I have no problems doing my usual activities ☐

I have slight problems doing my usual activities ☐

I have moderate problems doing my usual activities ☐

I have severe problems doing my usual activities ☐

I am unable to do my usual activities ☐

**PAIN/DISCOMFORT**

I have no pain or discomfort ☐

I have slight pain or discomfort ☐

I have moderate pain or discomfort ☐

I have severe pain or discomfort ☐

I have extreme pain or discomfort ☐

**ANXIETY/DEPRESSION**

I am not anxious or depressed ☐

I am slightly anxious or depressed ☐

I am moderately anxious or depressed ☐

I am severely anxious or depressed ☐

I am extremely anxious or depressed ☐

**Please rate, with a tick, how much better or worse you feel with this treatment**

**3** **Very much improved**

**2** **Much improved**

**1** **Minimally improved**

**0** **No change**

**Please rate, with a tick, how satisfied you are with the care and attention you have received from the neuromodulation service as a whole**

**2** **Very Satisfied**

**1** **Satisfied**

**0** **Neither Satisfied nor Dissatisfied**

On the scale below please rate your average **LEG/ARM** pain in the past week by circling a number.

**(No pain)** 0 1 2 3 4 5 6 7 8 9 10 **(Worst pain ever)**

On the scale below please rate your average **BACK/NECK** pain in the past week by circling a number.

**(No pain)** 0 1 2 3 4 5 6 7 8 9 10 **(Worst pain ever)**

Please specify any other pain you may have

_____

_____

_____

| **Employed** | **Not employed** |
|---|---|
| ☐Full-time | ☐Unemployed (not due to pain) |
| ☐Full-time (on sick leave) | ☐Unemployed (due to pain) |
| ☐Part-time | ☐Retired |
| ☐Part-time (on sick leave) | ☐On sickness benefits (not due to pain) |
| | ☐On sickness benefits (due to pain) |
| **Student** | ☐Home maker |
| ☐Full-time | |
| ☐Part-time | Other: |

**You have now completed the questionnaire pack, thank you for your time and co-operation**

# Project Prioritisation Assessment Tool

**Audit title: Visual Impairment Service Review**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **2** | **Lvl 5 – Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title:** **Visual Impairment Service Review**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
Click here to enter text.

---

## Background / Rationale

Each year increasing numbers of patients with visual impairment attend or are admitted to The Walton Centre. The severity of the visual impairment (sight impairment or severely sight impairment) is not always formally documented as an alert record within the medical notes. Not recognising visual impairment could result in individuals having greater difficulty accessing and negotiating services within The Walton Centre, as well as increased risk of falls resulting in potential harm to the patient.

Within outpatient department we have adopted an electronic systems to summon patients to clinic rooms, this is particularly challenging for any visually impaired individual, potentially reducing their independence. The early identification of visual impaired patients attending the hospital should be an important pre-requisite for good healthcare.

The service evaluation will provide evidence towards a sight loss project where we have been successful in gaining charitable funds to purchase alert signs for the patient bedside and offer basic training for ward and clinic staff. We hope to improve patient experience by improving staff confidence, skills to approach and escort patients, creating staff champions and the daily visual field and acuity clinic run by outpatient staff, so results are available for the consultation.

## Methodology

We would like to retrospectively identify skull base patients with a visual impairment to see if they have a corresponding alert record on their medical records. Both the paper and electronic medical records will be accessed to gain the information.

## Aims / Objectives

The aim of the study is to measure the number of skull base patients classified as having a visual impairment and record the number of corresponding ‘alert’ (VISN) documented within the medical records.

Objectives

Access both paper and electronic medical records on all skull base patients under the care of

Collect data on the number of patients classified as having a visual impairment. Visual impairment will be measured by visual acuity and mean deviation from visual field assessment in both eyes.

Collect data on the number of visual impairment (VISN) alerts recorded from the medical records (this will include paper patient alert records and PAS alerts).

As well as the data collection, I plan to devise a staff survey monkey questionnaire in relation to the identification and specific needs of a visually impaired patient, staff confidence with patient interaction and perceived training benefits.

**Standards / Criteria Details (service evaluation N/A)**

N/A

---

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other:

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☒

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☐ |
| High cost | Yes ☐ | No ☐ |
| Known quality issue | Yes ☐ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☐ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Rolling programme duration (number of years):** Click here to enter text.

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☒

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☒
- Presentation ☒

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☒ N/A ☐

**Anticipated start date:** June 2021

**Anticipated project completion date:** Oct 2021

**Anticipated Action Plan Submission date:** Dec 2021

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 380**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Visual Impairment Service Review | | |
| **Date audit complete** | March 2022 | **Date action plan completed** | March 2022 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | Neuro surgery | **Source of policy / guideline** | |

**Audit Rationale:**
To assess the quality of documentation of patients with a visual impairment (VI) within a neurosurgery department to see if they have a corresponding vision alert (VISN) within the medical notes.

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- Out of 256 surgical patients only 56 patients had a documented visual impairment
- Although VI was common in this study population, most patients had useful vision.
- Documentation to alert clinicians and carers about VI was poor and needs improvement.

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- A significant number of patients had a preservation or recovery of central vision despite peripheral visual field loss
- The ranges of VFD were predominately graded minimal to subtle level of field loss.

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- 23.40% patients had a VISN alert on their medical records while 77% were not identified or not supported for their VI
- 3 patients certified sight impaired and severely sight impaired (75%) did not have an VISN alert.

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

Second part to the audit:

- Patient questionnaire sent to 44 patients, return of 20 questionnaires. Results pending

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Nil
Department where discussed or presented: Article submitted to BJNN journal

**Actions agreed following recommendations discussed:-**
***Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) 20 patient questionnaires returned out of 44 sent. | Results need to be processed | | 3 months | | |
| 2) Set up a working group to identify and improve healthcare access for patients with a disability visiting or staying at The Walton Centre. | Working group set up key members identified and agreed<br><br>1st meeting 28th April 2022 | | ongoing | | |
| 3) Write best practice guidelines for visually impaired.<br>4) Staff awareness of this group of patients | Training for staff funded by charitable funds<br>Care plan for inpatients with VI<br>Magnetic alert signs for bed space | | 1 year | | |

**Re-audit date** _____ **If no re-audit planned please give reasons why?** _____Complete_____

**Will this be an on-going audit?** No Project will continue

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes - Time

| |
|---|
| **If yes to the above please state who the issues have been referred to:**<br><br>**Name** _____ **Designation** _____ **Date referred** _____<br><br>**Signature:**_____ **Date:**_____ |
| **Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐<br>**Please provide details of issue(s) logged on the risk register:** |

# Project Prioritisation Assessment Tool

**Audit title: Evaluation of pharmacological management of (exclude the term delirium) agitation in patients with traumatic head injury in the immediate (intensive care )and intermediate (wards and neurorehab ) time frame**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-

Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | N | (x3) |
| High volume | N | (x2) |
| High risk | N | (x3) |
| Known quality issue | N | (x3) |
| Wide variation in practice | N | |
| NICE / NCEPOD related audit | N | (x3) |
| Defined measurable standards available | N | |
| Re-audit / repeat service evaluation | N | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | N | |
| National / regional or multicentre project | N | (x2) |
| **Total** | **N** | |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☐  Service Evaluation ☒**

**~~Audit~~ / Service Evaluation Title: Evaluation of pharmacological management of (exclude the term delirium) agitation in patients with traumatic head injury in the immediate (intensive care )and intermediate (wards and neurorehab ) time frame.**

**Division:** Neurology ☒ Neurosurgery ☒ Please specify department **Anaesthesia & Intensive care and neuropsychiatry and neurorehab**

**Project Lead:**

**Contact No: Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**

---

**Background / Rationale We are the tertiary care centre for all neurotrauma in the region. There are a large group of patients that we treat here at the Walton Centre with traumatic brain injury.**

Traumatic brain injury (TBI) is a major cause of mortality and morbidity. In England and Wales, ~1.4 million patients per year attend hospital following head injury and it is the most common cause of death under the age of 40 years (Lawrence et al, BMJ Open 2016). The commonest mechanisms of injury were falls in the elderly and road traffic collisions in the young, many of whom are likely to present with cognitive and behavioural manifestation both in the acute and long term.

**Agitation is a prominent problem as patients sedation is weaned off and as they continue to recover either as a consequence of the delirium or the core structural damage to the brain).**

A constellation of behaviours has been associated with the term 'agitation' in TBI patients, including restlessness, confusion, physical- verbal aggression, impulsivity, perceptual disturbances and inattention creating a very heterogeneous group of patients to study(Williamson et.al 2019 BMJ Open). Ciurli et all 2011 found a wide range of neuropsychiatric symptoms in the population with severe TBI including irritability (37%), disinhibition (28%) and agitation (24%). Agitation has been reported in 20%–41% of patients during the early stage of recovery in acute care units and up to 70% of patients in rehabilitation unit (van der Naalt J et. al 2000).

For the purpose of investigation all the above terms would be utilised as behavioural and cognitive manifestation of TBI. The term post traumatic amnesia (PTA) incorporates the features of confusion and memory loss in any domain following a traumatic injury. Van der Naalt et al 2000 noted in their patient sample that PTA might still remain long after the acute agitation associated with confusion resolves. The treatment focus of agitation manifestation therefore need to encompasses all the above entities and investigation should also aim to evaluate how each of these domains change to different medication that are used in practice.

Bogner 2001 study on role of agitation in prediction of outcome highlighted that increase length of hospital stay and decreased achievement of rehabilitation goals. It was also found those individual presenting with agitation are discharged earlier to residential placement. A similar observation was made around cognitive function with lower levels of cognitive functioning associated with more agitation and conclusion around agitation at least partially

driving the cognitive decline. It is therefore essential to consider cognitive functions among other benefits in management of agitation.

In the intensive care we have done extensive work into the agitation management of our patients and have had remarkable results. This is a combination of non-pharmacological and pharmacological interventions. However patients once discharged to the wards do not get the same standard of non-pharmacological interventions and the neuropsychiatry team are often asked to review patients regarding the agitation that develops.
There is a pathway for TBI patients in intensive care whereby we wean the intravenous sedatives off, substituting them with oral drugs. Our primary attention is on restoration of sleep pattern ensuring the patients get adequate sleep at night and the diurnal rythmn is maintained as far as possible. Additional pharmacological assistance with melatonin 4-8 mg and Trazadone as the preferred night sedation agent especially for TBI patients is the normal practice. RASS scores and Delirium scores are done daily and if they manifest hyperactive delirium -Olanzapine is added . The incidence of agitation and delirium in Intensive care has decreased over the time frame we have introduced this protocol. We hope this would therefore have benefit on these patient long term outcomes.

A similar clinical approach guided by Neuropsychiatry is undertaken on the wards. Here patients are either transferred from the intensive care for further rehabilitation or moved from other sites for that purpose.
In addition to the above pharmacotherapy and non pharmacotherapy we recognise the care and treatment of these patients might be different. Again PTA and its long-term presence might still be evident when patients are on these intermediate units. The range of drugs used in controlling agitation are wider and so are the non pharmacological management approaches. The long term benefit or impact on these drugs on the patients rehabilitation have not been assessed so far

We wish to do a service evaluation to assess the effectiveness of our policies We also wish to follow up our patients in the intermediate and longterm as they are discharged to the wards and then their journey through rehabilitation particularly looking at the impact of the early management of agitation.

The list of commonly used pharmacotherapy will be compared to national standards and to research evidence. The service evaluation would guide local policies in future with the aim to individualise care and treatment based on patients needs, future goals and outcome.

## Methodology

For the purpose of data collection we would categorise the patients based on national standards of TBI severity.

In terms of the classification of severity, historically TBI was classified as mild, moderate or severe by using the Glasgow Coma Scale, a system used to assess coma and impaired consciousness. The Glasgow Coma Scale is divided into three components – eye opening, verbal response and motor responses. These are usually summed to produce a total score. A Glasgow Coma Scale score of 13-15 is defined as mild, 9-12 as moderate and 3-8 as severe. Post-traumatic amnesia (PTA) is another important index of the severity of traumatic brain injury. PTA is the interval from injury until the patient is orientated, and can form and later recall new memories. A PTA of 1-24 hours used to be considered to indicate a TBI within the category of moderate severity. Current classifications of moderate TBI generally refer to PTA extending beyond 24 hours, while less than that is mild. Severe TBI can PTA lasting from anywhere from a week to months especially in elderly.

For patient entering into intensive care unit we already have the threshold set at below 8 of GCS which clearly demarkcate the patient sample as severe. The patient entering on the intermediate care and wards could be both severity of Moderate i.e. GCS of 9-12 and severe as above.

For the purpose of the evaluation mild TBI are excluded. This is predominantly as this patient group have a different pathway of management and support, most of which we recognise will be in the community.

Data will be collected of all patients with moderate/severe TBI that are treated in Horsley intensive care, the neurotrauma ward (all walton wards) and rehab( Lipton and CRU) units in year 2020 (we recognise these numbers would be skewed due to Covid 19 Pandemic).

We will collect data on:-

Severity and type of injury

Age and demographics of patient

Premorbid and comorbid medical and psychiatric illness

Substance misuse history and substance withdrawal as confounders

Infection, subacute neurosurgical, pain or other causes as confounders

Other non brain poly trauma

Agitation scores or records of the same

List of drugs used for management of agitation and effects (on agitation) of them

Duration of ITU/ward/rehab stay

**Aims / Objectives**

Assess the effectiveness of our pharmacological management by collecting information of incidence of agitation of our with traumatic head injury patients in the immediate and intermediate care and its long term outcome.

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: NA

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☒

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☒
- Analysis ☒
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:** Click here to enter text.

**Anticipated project completion date:** Click here to enter text.

**Anticipated Action Plan Submission date:** Click here to enter text.

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title:** Audit of Coagulation Tests. To identify and minimize the number of rejected samples, in order to optimize costs and improve time results

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | Y | (x3) |
| High volume | Y | (x2) |
| High risk | | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **12** | **Level 3 – Cat A** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - Clinical Audit ☒

**Audit / Service Evaluation Title:** Audit of Coagulation Tests. To identify and minimize the number of rejected samples, in order to optimize costs and improve time results.

**Division:** Neurology ☐ Neurosurgery ☒

**Project Lead: Contact No:**  **Bleep No:**

**Email address:**
**Audit / service evaluation supervisor:**

**Other professionals involved / project team member's details**

---

**Background / Rationale**

- Coagulation tests are a must in preoperative workup of Neurosurgical and Anaesthetic assessment in every patient who undergo an urgent or elective procedure.
- Perioperative clotting management became a complex topic since the arrival of new generations of anticoagulants and antiagregants.
- This clinical assay has a significant impact on the surgical decision making and management, thus effectiveness in terms of sample collection, time processing and transport are crucial mainly in urgent cases.
- Sample collection and handling, are the most vulnerable steps throughout the testing process.
- The receipt of unsuitable samples is commonplace in laboratory practice and represents a serious problem, the reliability of test results can be e adversely compromised following analysis of these specimens and have serious consequences for doctors and patients.
- As a routine, clotting screen includes prothrombine time and APTT in seconds, INR, APTT ratio and eGFR.

**Methodology**

A retrospective review of rejected samples of clotting results will be assessed sent from the Walton Center to the RLUH laboratories from March 2020 to May 2021.

**Aims / Objectives**

- Identify the number of samples without results published in TD web by Aintree laboratory.
- Identify the basis for rejection.
- Detection of the process failure will allow shortening awaiting periods, avoiding repeated phlebotomies patient and saving resources.

**Standards / Criteria Details**

- Grainer Bio-met
- NICE British society of haematology

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:

**Name of Standard / guideline:**

**Source of Standard / guideline:** Other ☒ State other: British Society for Haematology

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☒ | No ☐ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: 104 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Will the audit involve direct patient contact?** Yes ☐ No ☒

**Anticipated start date:/2021**

**Anticipated project completion date: 08/2021**

**Anticipated Action Plan Submission date:06/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 384**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | **Clinical Audit of Spinal Tumour Management and Outcomes** | | |
| **Date audit complete** | Feb 22 | **Date action plan completed** | March 22 |
| **Auditor** | | **Name of policy / guideline** | Improving Outcomes for People with Brain and Other CNS Tumours |
| **Division** | Neurosurgery | **Source of policy / guideline** | NICE |

**Audit Rationale:**
*Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)*
Delineate current practice at the Walton Centre in regard to 3 main objectives for spinal tumours:
Identify frequency of patient MDT discussion, Use of intra-operative neurophysiological monitoring, Post-operative complications

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *17.9% pts discussed in spinal MDT  improving, especially since guidance (likely reflects change in NICE guidance issued in 2016 – number post 2016 has improved dramatically although still not 100%)*
- *Proportion of patients discussed in MDT has increased over time*
- *Intra-operative neuro-monitoring is used in 12.3% of cases*
- *Monitoring was likely reserved for more technically challenging operations*
- *Surgical complication rates have remained low over the last decade for spinal tumours (16%)*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Presented at spinal MDT and agreed to discuss all primary intradural tumours
- Identified need for MDT discussion of primary intradural tumours – highlighted improving nature of the data

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *nil*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- To discuss all primary intradural tumours at MDT

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Neuro-ortho spinal MDT in January 2022
Department where discussed or presented:

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Frequency of intradural tumour not at level recommended by NICE however is improving | Present findings at spinal MDT and encourage discussion of intradural tumours | | Completed | MDT records | Y |
| 2) As above | Re-audit in summer of 2022 to identify if 100% concordance in the stop-gap between audits. | | Within the next 6 months. | Audit to be completed | Y |
| 3) | | | | | |

**Re-audit date** _____2022_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No x

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No x

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Clinical Audit of Spinal Tumour Management and Outcomes**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-

Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | Y | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **4** | **Lvl 4- Cat B** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - NS 384 Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Clinical Audit of Spinal Tumour Management and Outcomes**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Department of Neurosurgery**

**Project Lead:**

**Contact No:** Click here to enter text. **Bleep No:**

**Email address:**
**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

**Background / Rationale**

Spinal tumours are uncommon and typically present with focal neurological symptoms. Typically, they are caused by meningiomas and schwannomas. NICE has published guidance on the appropriate management of spinal tumours. The guidance stipulates that CNS tumours should be managed in the MDT setting. Additionally, they recommend that intra-operative neurophysiology recordings should be used to minimise post-operative morbidity. Complication rates are important to continually evaluate as they provide a useful metric for optimal clinical care.

**Methodology**

To conduct this clinical audit, a retrospective review of patient clinical records will be conducted. Additionally, access to MDT records may be required. Imaging characteristics of tumours will not be required. Descriptive statistical analysis will be conducted, depending on the distribution of data for each variable. To determine if data is skewed or normally distributed, a Shapiro-Wilk test of normality will be used.

**Aims / Objectives**

This clinical audit has 3 main aims: 1) To determine if all patients diagnosed with spinal tumours have been presented in an MDT setting (in accordance with NICE guidance). 2) To determine if neurophysiological recording was used intra-operatively (again, in accordance with NICE guidance). 3) To evaluate post-operative complication rates following surgical resection of spinal tumours.

**Standards / Criteria Details (service evaluation N/A)**

The NICE guideline, "Improving outcomes for people with brain and other central nervous system tumours" will be used as a comparative metric for this clinical audit.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:
(https://www.nice.org.uk/guidance/csg10/resources/improving-outcomes-for-people-with-brain-and-other-central-nervous-system-tumours-update-27841361437

**Name of Standard / guideline:** Improving Outcomes for People with Brain and Other CNS Tumours

**Source of Standard / guideline:** NSF ☐ NICE ☒ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years): n/a**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐
*If yes, please specify type of assistance required:*

- Population Identification ☒
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:1/9/21**

**Anticipated project completion date: 1/10/21**

**Anticipated Action Plan Submission date:1/12/21**

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title: Audit of quality of reporting peripheral nerve biopsies at the Walton Centre.**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | Y | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **3** | **Level 5 – Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - HIST/386 Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Audit of quality of reporting peripheral nerve biopsies at the Walton Centre.**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Neuropathology**

**Project Lead:**

**Contact No: Bleep No: N/A**

**Email address:**

**Audit / service evaluation supervisor: N/A**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
**N/A**

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## Background / Rationale

The neuropathological examination of nerve biopsies is an essential part of the in-depth diagnostic workup of acquired and, occasionally genetic peripheral neuropathies when imaging, laboratory and neurophysiological methods are not leading to a definitive diagnosis. The 'Tissue pathways for non-neoplastic neuropathology specimens' document provides guidance on current accepted practice for the diagnostic approach and reporting of peripheral nerve biopsies.

## Methodology

Review of finalised reports over a one-year period and record whether the report contains the data items outlined in the Royal College of Pathologists document and the percentage of compliance with the standards.

## Aims / Objectives

To determine the percentage of peripheral nerve biopsy reports that meet the recommended criteria for specimen handling and report contents.

## Standards / Criteria Details (service evaluation N/A)

The agreed standard is that each report should include minimum descriptors as defined in the tissue pathway. All reports should include an interpretation of the findings within the available clinical information (clinicopathological correlation) with a comment on limitations or other recommendations as appropriate. Criteria range is that 95% of the reports should fulfil the minimum requirements.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:
https://
www.rcpath.org/resourceLibrary/g101-tissue-pathways-for-non-neoplastic-neuropathology-specimens.html

**Name of Standard / guideline:** Section 7 of the Tissue pathways for non-neoplastic neuropathology specimens.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☒
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 6 Procedure codes to identify sample: NN specimens on TD-HC**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:01/09/2021**

**Anticipated project completion date: December 2021**

**Anticipated Action Plan Submission date: December 2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.** Click here to enter text.
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** Date: 24/08/2021

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

The Walton Centre NHS
NHS Foundation Trust

## Clinical Audit / Service Evaluation Action Plan

**Ref no: HIST/386**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Audit of quality of reporting peripheral nerve biopsies at the Walton Centre. | | |
| **Date audit complete** | 18/11/2021 | **Date action plan completed** | 18/11/2021 |
| **Auditor** | | **Name of policy / guideline** | Section 7 of the Tissue pathways for non-neoplastic neuropathology specimens. |
| **Division** | Neurosurgery, Anaesthesia, Critical Care, Pain and Pathology | **Source of policy / guideline** | RCPath |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

The purpose of this audit was to review Nerve Biopsy reports produced by Neuropathology at the Walton Centre to determine the percentage that meet the recommended criteria for specimen handling and report content (see section 7 of Tissue pathways for non-neoplastic neuropathology specimens produced by the Royal college of Pathologists (RCPath)).

- 6 Nerve reports were produced during the audit period (14/07/2020 – 14/07/2021).
- Majority of the reports are in concordance with the RCPath Tissue Pathway guidelines.
- Three observations – see Key Concerns.

Please see attached documents for full data and details:


Audit-of-quality-of-reporting-peripheral-n


Audit reviewing practice HIST386.doc

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Majority of reports in concordance with the RCPath Tissue Pathway guidelines.

This audit showed 100% compliance with the standards such as clinical information, date of biopsy, date of sample received, age at biopsy, site of biopsy, biopsy dimensions, availability of material for electron microscopy, assessment of myelinated fibre density, assessment if changes are acute or chronic (eg signs of active axonal degeneration, fibrinoid necrosis or vessel wall scarring, endoneurial fibrosis or oedema), assessment of amyloid, interpretation of the findings, clinicopathological correlation, differential diagnosis, recommendations as appropriate and SNOMED coding).

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

Although not concerns, three observations were noted:

- Material for teased fibre preparation or frozen materials are not routinely obtained in our laboratory therefore not applicable in the report.
- None of the histopathology report record size of fascicles. This is considered not clinically relevant hence information is not provided. Also majority of the reports do not have information on orientation. However all our nerve biopsy specimens are orientated both transversely and longitudinally hence never felt the requirement.
- Majority reports comment on endoneurial inflammatory cells although do not specify if those are in relation to vasculature or not. This practice is to be incorporated in the department following this audit. This was also raised as one of the UKAS findings. Perineurial cell infiltrates have not been specifically mentioned but all reports comment on epineurium.

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

Few exceptions noted whilst carrying out this audit which are as follows -

- While describing endoneurial cellular infiltrates, specific comments to be added as to their relation with the endoneurial vasculature or not.
- Nerve report template to include information on availability of material for EM.
- Changes to the existing nerve panel and follow the panel suggested in RCPath Tissue Pathway.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Will be presented at the next departmental audit meeting on 25/11/2021

Department where discussed or presented: The Neuroscience Laboratories

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Assessment of endoneurial inflammatory reaction, particularly in relation to vasculature. | While describing endoneurial cellular infiltrates specific comments to be added as to their relation with the endoneurial vasculature or not. | | Immediate | *Future nerve biopsy reports* | N/A |
| 2) Information of material available for electron microscopy. | Nerve report template to incorporate this information under macroscopy. | | 1month | Future nerve biopsy reports | N/A |
| 3) Existing nerve panel | This requires changing in line with that suggested by RCPath. | | 1month | Future nerve biopsy reports | N/A |

**Re-audit date** __July/Aug 2024_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Registration Form

## Clinical Audit definition

Clinical Audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.

## Service evaluation

Service Evaluation is undertaken to benefit those who use a particular service and is designed and conducted to define or judge current service. Your participants will normally be those who use the service or deliver it. It involves an intervention where there is no change to the standard service being delivered (e.g. no randomization of service users into different groups). This does not require ethical approval.
It is possible to use data collected from participants during a service evaluation for later research as long as:

- the data is completely anonymous;
- it is not possible to identify participants from any resulting report;
- use of the data will not cause substantial damage and distress

Please note that to complete this form your project **must be clinical audit or service evaluation**. If you are unsure whether your project is clinical audit, service review or research brief definitions are given below as a guide:

**Clinical Audit**

➢ Measures existing practice against **best practice**, **evidence based clinical standards** *(this may include Royal College, British Association, NICE or Local guidance etc.)*

**Research**

➢ Generates new knowledge where there is no or limited research evidence available and which has the potential to be generalisable.

**Service Evaluation:**

➢ Seeks to evaluate the effectiveness or efficiency of a new or existing service to help inform local decision making (has been also referred to as service review, benchmarking or a baseline audit). This includes patient or staff satisfaction surveys.

If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone
Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☐** **Service Evaluation ☐**

**Audit / Service Evaluation Title: Assessing the quality and quantity of maintenance fluid prescriptions for neurosurgical patients at the Walton Centre**

**Division:** Neurology ☐ **Neurosurgery** ☐ Please specify department Click here to enter text.

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**

---

## Background / Rationale

Patients on general surgical wards are frequently placed on Nil By Mouth (NBM) orders as part of their management. This can be for various reasons, the commonest being in preparation for surgery. Patients who are NBM require careful provision of maintenance fluids and electrolytes to replace daily losses. Without such replacement patients are prone to dehydration and electrolyte imbalances with significant consequences.

NICE guidelines provide clear quantitative guidelines on the quantity of maintenance fluids and electrolytes that ought to be prescribed according to a patient's weight. When a patient is anticipated to be placed on NBM orders, the caring team are encouraged to prescribe enough fluids to cover a 24 hour period to reduce the likelihood that a patient is NBM overnight without adequate fluids. Additionally, the choice of fluids prescribed should be carefully selected to approximate the patient's 24 hour requirements. Anecdotally, fluid volumes and electrolytes (particularly potassium) are frequently not calculated when prescribing fluids.

## Methodology:

- Data from 20 patients will be collected prospectively
- Inclusion criteria:
    - Patients admitted under the care of the neurosurgical team at the Walton Centre
    - Patients with NBM orders
- Exclusion criteria:
    - Patients with sepsis
    - Patients on fluid restrictions

    - Patients on DDAVP for sodium derangements
- Data to be collected:
    - Patient details: Walton number, age, gender, weight
    - Clinical details: reason for NBM order, electrolyte derangements on latest U+E
    - Treatment details: volume of fluids prescribed over 24hours, choice of fluids prescribed
- From the above, a calculation of volume and electrolytes prescribed over 24hours will be made and compared to what is recommended by NICE against the patient's body weight.

**Aims / Objectives**

Determine whether sufficient fluid volume and electrolytes are prescribed for NBM patients on the neurosurgical ward

**Standards / Criteria Details (service evaluation N/A)**

- NICE Clinical Guideline (CG174), section 1.4
    - https://www.nice.org.uk/guidance/cg174/chapter/1-recommendations

---

**Guideline / Standards available:** **Yes** ☐ No ☐

If yes, please attach a copy or provide web link to the most current version:

**Name of Standard / guideline:** Intravenous fluid therapy in adults in hospital

**Source of Standard / guideline:** NSF ☐ **NICE** ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
**Yes** ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | **No** ☐ |
| High risk | Yes ☐ | **No** ☐ |
| High cost | Yes ☐ | **No** ☐ |
| Known quality issue | **Yes** ☐ | No ☐ |
| Wide variation in practice | **Yes** ☐ | No ☐ |

**Sample No:** 20 **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* **Yes** ☐ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ **No** ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☐ **No** ☐

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

**Multidisciplinary**: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ **No** ☐

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ **No** ☐

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ **N/A** ☐

**Anticipated start date:** As soon as possible.

**Anticipated project completion date:** In 1 - 2 months.

**Anticipated Action Plan Submission date:** 22/09/21

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 386**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Assessing the quality and quantity of maintenance fluid prescriptions for neurosurgical patients at the Walton Centre | | |
| **Date audit complete** | May 2022 | **Date action plan completed** | February 2022 |
| **Auditor** | | **Name of policy / guideline** | NICE Clinical Guideline (CG174), section 1.4<br>○ https://www.nice.org.uk/guidance/cg174/chapter/1-recommendations |
| **Division** | Neurosurgery | **Source of policy / guideline** | NICE Clinical Guideline |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *100% of our patient sample did not adhere to the NICE guidelines re: fluid prescriptions in NBM situations.*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- **Identifying a basic and essential missing component of patient care.**

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Patients have not been getting adequate fluid and electrolyte replacement during their Nil By Mouth period.*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Concise fluid prescription guideline stickers to be put at the back of doctors' ID cards for easy access during prescription
- Teaching sessions –both in person and sending out slides via email to nurses and doctors
- Continuing to audit to make sure guidelines are being adhered to

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: to be presented at Grand Round

Department where discussed or presented: to be presented at Grand Round

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Incorrect fluid prescriptions | Concise fluid prescription guideline stickers to be put at the back of doctors' ID cards for easy access during prescription | | 1 month | *Copy of stickers & percentage uptake* | Patient safety group |
| 2) | Teaching sessions –both in person and sending out slides via email to nurses and doctors | | 2 months | Copy of slides and pictures from in-person sessions | Patient safety group |

**Re-audit date** 08/2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** **Yes** ☐ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ **No** ☐

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:** _____ **Date:** _____

**Have any issues been logged on the risk register?** Yes ☐ **No** ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Registration Form

## Clinical Audit definition

Clinical Audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.

## Service evaluation

Service Evaluation is undertaken to benefit those who use a particular service and is designed and conducted to define or judge current service. Your participants will normally be those who use the service or deliver it. It involves an intervention where there is no change to the standard service being delivered (e.g. no randomization of service users into different groups). This does not require ethical approval.
It is possible to use data collected from participants during a service evaluation for later research as long as:

- the data is completely anonymous;
- it is not possible to identify participants from any resulting report;
- use of the data will not cause substantial damage and distress

Please note that to complete this form your project **must be clinical audit or service evaluation**. If you are unsure whether your project is clinical audit, service review or research brief definitions are given below as a guide:

**Clinical Audit**

- Measures existing practice against **best practice**, **evidence based clinical standards** *(this may include Royal College, British Association, NICE or Local guidance etc.)*

**Research**

- Generates new knowledge where there is no or limited research evidence available and which has the potential to be generalisable.

**Service Evaluation:**

- Seeks to evaluate the effectiveness or efficiency of a new or existing service to help inform local decision making (has been also referred to as service review, benchmarking or a baseline audit). This includes patient or staff satisfaction surveys.

If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone
Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Assessing Neurosurgical Ward Round Documentation**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Neurosurgery**

**Project Lead:**

**Contact No:** **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

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**Background / Rationale**

Ward Rounds are essential clinical activities that provide the basis of daily assessment and management of surgical inpatients. At The Walton centre, we have multidisciplinary teams looking after the neurosurgical patients, and it is important to have clear and adequate information provided during ward rounds. Guidelines by the Royal College of Surgeons (RCS) provide a structured ward round checklist to improve patient safety. The added importance of ward round notes in neurosurgery reflects the super specialised care we provide at The Walton Centre. For example, we commonly use acronyms which are rare in other specialities such as, GCS (Glasgow Coma Scale), SWI/DWI (MRI terminology) etc. There is no published data, to the best of the authors knowledge, which describes how closely neurosurgical ward round documentation adheres to published RCS guidelines.

**Methodology**

Baseline/first cycle data will be collected prospectively from EP2 over consecutive 7 days. Patients included are neurosurgical patients and who are undergoing active medical care. Data point collected will be: 1. Medical professional grade, 2. Ward round documentation and 3.Consultant responsible for patient care. This data collected will be compared with a known standard of ward round documentation (please see attached RCS SHINE guidelines). If the first cycle data is below 80% compliance against the RCS SHINE guidelines, there will be a dual intervention; first, a classroom based tutorial for the senior house officers, and second, a poster which will serve as a visual reminder. A period of two weeks will elapse between intervention and second cycle. Second cycle data collection will again be a prospective 7 day period which will re-assess compliance with RCS SHINE guidelines. Data will be presented using descriptive statistics such as mode/median/range as appropriate. Graphical representation of adherence to RCS SHINE will be shown.

**Aims / Objectives**

Aim: Increase adherence of ward documentation to RCS SHINE guidelines. Objective: To compare current ward round entries with the RCS SHINE standard. 2. To provide teaching to the junior medical team about the standard guidelines.

**Standards / Criteria Details (service evaluation N/A)**

RCS SHINE guidelines, available at: https://www.rcsed.ac.uk/media/4590/tool-3-surgical-ward-round-tool.pdf

1.

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**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:
https://www.rcsed.ac.uk/media/4590/tool-3-surgical-ward-round-tool.pdf

**Name of Standard / guideline:** RCS SHINE Surgical Ward Round Toolkit

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☒
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 80 Procedure codes to identify sample: N/A**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☒
- Data entry ☒
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*
**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date: 22/09/2021**

**Anticipated project completion date: 15/11/2021**

**Anticipated Action Plan Submission date:15/11/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: NS 388**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | **Audit of Consent for Posterior Lumbar Discectomy** | | |
| **Date audit complete** | 01/03/2022 | **Date action plan completed** | 05/05/2022 |
| **Auditor** | | **Name of policy / guideline** | 2017 BASS/SBNS consensus statement |
| **Division** | Neurosurgery | **Source of policy / guideline** | |

**Audit Rationale:**
To determine the degree of compliance with the 2017 BASS/SBNS consensus statement with regards to discussing vascular injury in the consent process.

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *Compliance with the standard was 41%*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- N/A

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *Failure to mention vascular injury during consent*
- *Spinal level not mentioned in 4 cases*
- *Consent on day of surgery in 17% of cases*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Staff re-education regarding the need to mention vascular injury during consent

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: TBC
Department where discussed or presented: TBC

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) *Failure to mention vascular injury during consent* | Publicise the standard | | May 2022 | *Presentation* | Neurosurgery team |
| 2) | | | | | |
| 3) | | | | | |

**Re-audit date** 01/09/2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:** 05/05/2022

**Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐
**Please provide details of issue(s) logged on the risk register:**

# Project Prioritisation Assessment Tool

**Audit title: Audit of consent for posterior lumbar discectomy**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | Y | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **4** | **Level 4 – Cat B** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☒ Service Evaluation ☐**

**Audit / Service Evaluation Title: Audit of consent for posterior lumbar discectomy**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**

---

**Background / Rationale**

Major vascular injury during posterior lumbar discectomy is a rare (1:4000) complication, associated with significant morbidity and mortality. The process of informed consent requires the clinician to inform the patient of all material risks relevant to the intervention. Given the potentially life-threatening sequelae of major vascular injury during lumbar discectomy, it is vital that all patients are informed of the possibility of such an occurrence. In 2017 The Society of British Neurological Surgeons (SBNS) and The British Association of Spine Surgeons (BASS) issued a consensus statement to their members, highlighting the importance of disclosing and discussing the risk of major vascular injury during elective posterior lumbar discectomy.

**Methodology**

Retrospective casenote review.

**Aims / Objectives**

To compare current consent practice among spinal orthopaedic and neurosurgeons against best practice.

**Standards / Criteria Details (service evaluation N/A)**

SBNS and BASS consensus statement concerning major vascular injury during lumbar discectomy.

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version: https://www.judiciary.uk/wp-content/uploads/2017/09/2017-0193-Response-by-Royal-College-of-Surgeons.pdf

**Name of Standard / guideline:** major vascular damage during lumbar discectomy; consensus statement

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☒
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 50 Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☒ No ☐

*If yes, please specify type of assistance required:*

- Population Identification ☒
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☒ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:25/10/2021**

**Anticipated project completion date: 25/11/2021**

**Anticipated Action Plan Submission date:06/12/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

# Project Prioritisation Assessment Tool

**Audit title:** Global Neurotrauma Outcomes Study: Spine

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | Y | (x3) |
| Wide variation in practice | Y | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | Y | (x2) |
| **Total** | **6** | **Level 4- Cat B** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title:** Global Neurotrauma Outcomes Study: Spine

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Spine**

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**


**Background**

Traumatic spinal injury (TSI) accounts for a significant proportion of disability and death worldwide, with the majority of this burden affecting individuals in low- to middle- income countries. Crucially, to date, the current disease profile of TSI has not been characterised globally. In addition, the global approach to the care of patients following TSI is inconsistent with considerable geographical differences in process of care reported, and limited data available on the impact of these variations on outcomes following TSI. A better understanding of case-mix and processes of care is urgently needed to underpin efforts to identify ways of improving outcome relevant to different socioeconomic settings globally.

**Methods**

A multi-centre, international, prospective, observational study. Any unit assessing patients with TSI worldwide will be eligible to participate. Each participating unit will form a study team responsible for gaining local approval, identifying patients for inclusion and conducting data collection. Data will be collected via a secure online platform in an anonymised form. Processes of care will be characterised by a detailed provider profiling exercise. A registry describing the case-mix and care of all adults presenting with radiologically confirmed TSI will be collected, in a given consecutive 30-day period during the study period starting in 2021.

**Results**

The dataset, developed through an iterative feedback process involving clinicians from low and high Human Development Index (HDI) countries, includes patient demographics, details of injury mechanism, local injury management and, if applicable, timing and nature of surgery, post-operative care and immediate postoperative complications. Outcome measures include Frankel grade at 6 weeks post-admission (or at discharge or death, whichever event occurs first), early mortality, peri-operative complications, adverse events of special interest, functional status and mobility. Descriptive analyses of case-mix and the variations 3 in processes of care will be conducted. Available resources, use of guidelines and variations in processes of care will be characterised using both provider profiling responses and patient-level data collected. Areas where known best practice is deficient or unavailable will be identified as potential targets for future implementation studies.

**Objectives**

1.1 Primary Objective • Characterise case-mix, processes of care and variations in nonoperative and operative management strategies, including emergency, ward, surgical and ICU care, in patients presenting with traumatic spinal injury (TSI) between centres across low and high Human Development Index (HDI) countries

1.2 Secondary Objectives
• Summarise the current resources and management pathways for patients presenting with suspected traumatic spinal injury worldwide, through validation of provider profiling data
• Describe differences in current (i) indications for conservative management vs surgery, and (ii) short term outcomes (early mortality, functional, neurological, adverse events) following TSI worldwide.
• Identify gaps in implementation of current evidence-based best practice and explore possible reasons in specific settings.
• Identify targets for future global health, process of care or clinical interventions to improve outcomes across different settings.
• Obtain point-estimates of, and gain insights into local variations in the epidemiology of TSI.
• Define patient profiles which predict efficacy of specific interventions and pathways of care. • Identify possible performance indicators to characterise TSI care across settings in preparation for a future consensus study.

**Standards / Criteria Details (service evaluation N/A)**

N/A

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Not applicable

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☒ State other:

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☒ | No ☐ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: Unknown Procedure codes to identify sample: Not necessary**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is <u>not</u> part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date: November 2021**

**Anticipated project completion date: Data – December 2021, write-up undetermined**

**Anticipated Action Plan Submission date:2 years post-start**

---

- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE – within protocol.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**
- **Departmental Clinical Audit Lead *(Signature)*** _____ Date: 29/09/2021

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Action Plan

**Ref no: NS 390**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Central line insertion documentation audit / Re-audit of CVC LocSIPPs' documentation adherence | | |
| **Date audit complete** | March 2021 | **Date action plan completed** | N/A |
| **Auditor** | | **Name of policy / guideline** | N/A |
| **Division** | Critical care | **Source of policy / guideline** | N/A |

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- *The 'Before procedure', 'Time Out' and 'Sign Out' subsections of the LocSIPPs had a completion rate of 100%*
- *The 'During procedure' section however only had a completion rate of 43%*

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- **Clinicians have been adhering to the CVC LOCSSIP forms, especially the 3 main sections (i.e. Before procedure, Time out and sign out) whilst performing CVC insertion on Horsley ITU**
-

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- *The completion rate of the 'during procedure' section on the LocSIPP*

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Continue to adhere to the CVC LOCCSSIP forms when performing CVC insertion, reminders to all appropriate staff to fill in the during procedure section, presentation and discussion has been made during the audit meeting
- CVC LOCCSSIP also available in theatre for any CVC that are inserted in theatres
- To re-audit to check for improvement

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: 11.03.21

Department where discussed or presented: Horsley ITU

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Ongoing adherence to CVC LOCSIPPS documentation | Staff to be reminded of form adherence | | March 2021 - Complete | | Anaesthetic and critical care ops group |
| 2) | Re-audit compliance rates | | 1 year – reg form submitted | | Anaesthetic and critical care ops group |
| 3) | Discuss outcomes with Anaesthetic and ITU ops group meetings | | 1 year | | Anaesthetic and critical care ops group |
| 4) | | | | | |

**Re-audit date** March 2022 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ **X** No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒ **X**

**If yes to the above please state who the issues have been referred to:NA**

**Name** _____ **Designation** __ **Date referred** _____

**Signature:**__. **Date:**___11.04.21_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☒X

| **Please provide details of issue(s) logged on the risk register:** |
| --- |

# Project Prioritisation Assessment Tool

**Audit title: Re-audit of CVC LocSIPPs' documentation adherence**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | | (x3) |
| High volume | | (x2) |
| High risk | | (x3) |
| Known quality issue | | (x3) |
| Wide variation in practice | | |
| NICE / NCEPOD related audit | | (x3) |
| Defined measurable standards available | | |
| Re-audit / repeat service evaluation | | (x2) |
| Topic is a key clinical interest for the department / division | | (x2) |
| Multidisciplinary project | | |
| National / regional or multicentre project | | (x2) |
| **Total** | **0** | **Level 5- Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Re-audit of CVC LocSIPPs' documentation adherence**

**Division:** Neurology ☐ Neurosurgery ☐ Please specify department **Anaesthetics and Critical Care**

**Project Lead:**

**Contact No:** Click here to enter text. **Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*
Click here to enter text.

---

**Background / Rationale**

Local Safety Standards for Invasive Procedures (LocSSIPs) have been introduced in the daily practice of the intensive care community to improve patient safety and prevent never event. However, in order for the LocSIPPs to fulfill their purpose of preventing never event, they should be filled in correctly at the time of the procedures

**Methodology**

We conducted a retrospective study on the documentation of LocSIPPS for CVC performed on Horsley ITU between the 1st Dec 2020 and 31st Dec 2020. We looked at whether the 'before procedure', 'time out', 'sign out' and 'during procedure' sections of the LocSIPPs were completed. The data were collected and analysed using an excel spreadsheet.

**Aims / Objectives**

The aim of the audit was to check if the health care professionals trained in performing central lines are correctly completing the central venous catheter (CVC) LocSIPPs at the time of carrying out the procedure.

**Standards / Criteria Details (service evaluation N/A)**

Data was retrospectively from CVC LocSIPPs that were completed between 1st Dec 2020 to 31st Dec 2020.

---

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☒ No ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

---

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:04/02/21**

**Anticipated project completion date: 15/02/21**

**Anticipated Action Plan Submission date:12/03/21**

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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Registration Form

## Clinical Audit definition

Clinical Audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.

## Service evaluation

Service Evaluation is undertaken to benefit those who use a particular service and is designed and conducted to define or judge current service. Your participants will normally be those who use the service or deliver it. It involves an intervention where there is no change to the standard service being delivered (e.g. no randomization of service users into different groups). This does not require ethical approval.
It is possible to use data collected from participants during a service evaluation for later research as long as:

- the data is completely anonymous;
- it is not possible to identify participants from any resulting report;
- use of the data will not cause substantial damage and distress

Please note that to complete this form your project **must be clinical audit or service evaluation**. If you are unsure whether your project is clinical audit, service review or research brief definitions are given below as a guide:

**Clinical Audit**

- Measures existing practice against **best practice**, **evidence based clinical standards** *(this may include Royal College, British Association, NICE or Local guidance etc.)*

**Research**

- Generates new knowledge where there is no or limited research evidence available and which has the potential to be generalisable.

**Service Evaluation:**

- Seeks to evaluate the effectiveness or efficiency of a new or existing service to help inform local decision making (has been also referred to as service review, benchmarking or a baseline audit). This includes patient or staff satisfaction surveys.

If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone
Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title:** Prevalence of airway complications and association with aerosol precautions – a prospective,multicentre, service evaluation (AeroComp)

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **Anaesthesia**

**Project Lead:**

**Contact No: Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

## Background / Rationale

Although most airway management is uncomplicated, when complications occur they can becatastrophic resulting in significant morbidity and mortality [1]. The severe acute respiratorysyndrome coronavirus-2 (SARS-CoV-2) pandemic has resulted in significant changes to airwaymanagement [2] due to concern over transmission of aerosolised virus particles to healthcareprofessionals [3]. Initial reports suggest that patients infected with SARS-CoV-2 may be more at risk ofairway complications including hypoxaemia [4], airway trauma [5], and airway oedema [6]. While it ispossible SARS-CoV-2 itself may be a risk factor for airway complications, aerosol precautions, designedto reduce the transmission of virus particles to healthcare workers, may also contribute

## Methodology

Prospective study, - Site (automatically populated dependent upon the login credentials of the local investigator)- Day of the study- Age of patient (grouped into 18-39, 40-59, 60-79 and ≥ 80 years)- Sex of patient- American Society of Anesthesiologists (ASA) physical status- Patient body mass index (BMI), grouped into underweight (< 18.5 kg/m2), normal (18.5 –24.9 kg/m2), overweight (25.0 – 29.9 kg/m2), class 1 obesity (30.0 – 34.9 kg/m2), class 2obesity (35.0 – 39.9 kg/m2), class 3 obesity (>= 40.0 kg/m2)- Surgical urgency (elective; expedited; urgent; emergency)- Start time of procedure (first set of observations entered into the anaesthetic record),grouped into daytime (07:30–17:59); evening (18:00–23:59); and overnight (00:00–07:29)- Surgical specialty- Surgical severity (minor; intermediate; major)- Location of procedure: within or outside the main operating theatre complex (includingstand-alone day surgery units), used to identify “remote-site anaesthesia”.- Grade of anaesthetist managing airway (initial airway manager and second airway managerif required)- PPE worn by anaesthetist managing airway: - Eye protection: visor; goggles; other - Respiratory protection: surgical mask; disposable FFP2/3 mask; re-usable FFP2/3 mask;powered air-purifying respirator; other - Body protection: plastic apron; long-sleeved gown; hazmat suit; other - Gloves: single pair; double pair; other

## Aims / Objectives

1. To determine the incidence of airway complications in patients undergoing generalanaesthesia, and any association with components of the aerosol precaution bundle.

## Standards / Criteria Details (service evaluation N/A)

Patient inclusion criteria: ● Adult patients (≥ 18 years of age)● Undergoing a surgical, radiological or cardiological procedure (interventional or diagnostic)with the primary method of anaesthesia planned to be general anaesthesia7.2 Patient exclusion criteria● Paediatric patients (< 18 years of age)● Patients where the induction of

general anaesthesia occurs in the emergency department(ED), critical care unit or general ward● Patients in cardiac arrest at the time of airway intervention● Patients having obstetric procedures (pregnant patients undergoing non-obstetric surgery willbe included)● Procedures planned to be performed under regional anaesthesia, local anaesthesia orsedation● First set of observations outside the 96-hour study period● Patients already with an airway device in place (e.g. ventilated patients transferred from ITU,tracheostomy)

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:

**Name of Standard / guideline:** Aerocomp study protocol

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Aerocomp national service evaluation

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☒ | No ☐ |

**Sample No: 60 Procedure codes to identify sample: NA**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:November 2021**

**Anticipated project completion date: November 2021**

**Anticipated Action Plan Submission date:January 2022**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** ____ Date: 5/1021

**Comments** I am unable to comment since I am personally involved in the project.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☒ No ☐

# Project Prioritisation Assessment Tool

**Audit title: CSF cell count comparison 2021**

The below table provides a system for prioritising locally conceived projects and what level of clinical audit team resource should be offered / provided.

If the project is mandatory please specify what priority level:-
Level 1 – External 'must do' ☐ Level 2 'Internal 'must do' ☐

| Criteria | Tick all that apply | Score |
|---|---|---|
| High cost | N | (x3) |
| High volume | N | (x2) |
| High risk | N | (x3) |
| Known quality issue | N | (x3) |
| Wide variation in practice | N | |
| NICE / NCEPOD related audit | N | (x3) |
| Defined measurable standards available | N | |
| Re-audit / repeat service evaluation | Y | (x2) |
| Topic is a key clinical interest for the department / division | N | (x2) |
| Multidisciplinary project | N | |
| National / regional or multicentre project | N | (x2) |
| **Total** | **2** | **Level 5 – Cat C** |

**Priority levels and audit team support**

| Priority level | Priority score |
|---|---|
| Level 1 – External 'must do' | Category A |
| Level 2 – Internal 'must do' | Category A |
| Level 3 – High local priority | > 10 |
| Level 4 – Medium local priority | 4 – 9 |
| Level 5 – Low local priority | < 4 |

| Priority level | Audit team resource | |
|---|---|---|
| Level 1, 2 & 3 | Category A – Full support | Full practical assistance offered |
| Level 4 | Category B – Moderate support | Level of practical assistance will be negotiated and agreed with project lead |
| Level 5 | Category C – Minimal support | Advice, registration and monitoring |

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - BIOC/182 Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: CSF cell count comparison 2021**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **The Neuroscience Laboratories**

**Project Lead:**

**Contact No: Bleep No:**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

## Background / Rationale

The Neurobiochemistry department in The Neuroscience Labs at The Walton Centre (WCFT) perform CSF cell counts during working hours (Monday to Friday, 9 am to 5 pm). This enables rapid generation of results for most WCFT patients (target turnaround time is <2 hours), and minimises the risks associated with transport of precious CSF samples. However, the workload of the Neurobiochemistry department is such that it is not feasible to fund this service on a 24/7 basis. Therefore, for samples received outside working hours, a service is provided by the Microbiology department at Liverpool Clinical Laboratories (LCL) based at The Royal Liverpool University Hospital. CSF cell counts are also performed at LCL for WCFT patients if only a single specimen collection bottle is received, to prevent sample contamination before it can be cultured in Microbiology. Both laboratories are UKAS accredited for CSF cell counts (accreditation numbers are 8642 for WCFT, 9756 for LCL Microbiology), indicating that both sites perform work to a high standard. This audit is intended to provide additional reassurance that the CSF cell count results from both sites are comparable. Ideally, both sites would analyse the same sample and results would be compared directly; however, this is not feasible due to the instability of the cells in CSF (Reference 1). Therefore, the approach adopted for this audit is to review CSF cell count results from individual patients where multiple samples have been taken and analysed at both sites, and assess whether these correlate clinically. References: (1) Public Health England. UK Standards for Microbiology Investigations. Investigation of Cerebrospinal Fluid 2017

## Methodology

Every CSF cell count from a patient on intensive care (ITU), high dependency (HDU) or a surgical ward that was analysed at the Neuroscience Labs over a 12-month period will be identified. Patients from these locations are most likely to have increased numbers of cells present in CSF, and are most likely to have had repeat samples taken. To assess whether repeat samples were sent to Microbiology for CSF cell count, the relevant patient records in TD-Web (electronic results viewer) will then be reviewed. The results of any cell counts performed within 7 days of those done at the Neuroscience Labs will be compared, to ensure that all of the results fit the same clinical picture.

## Aims / Objectives

All CSF cell counts should yield clinically comparable results, whether analysed at the Neuroscience Labs or at LCL.

## Standards / Criteria Details (service evaluation N/A)

N/A

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** N/A

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** One year's worth of CSF cell count results from patients in ITU, HDU and the surgical wards
**Procedure codes to identify sample:** Patients in ITU, HDU and the surgical wards as identified in the laboratory information management system (LIMS), TD-NexLabs

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☐ No ☒

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☒ No ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☒ No ☐

**Rolling programme duration (number of years):** Ongoing, performed every 2 years

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:01/12/2021**

**Anticipated project completion date: 31/01/2022**

**Anticipated Action Plan Submission date:31/01/2022**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**

BIOC182 data collection proforma.d

- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**

- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature)*** _ Date: 04/11/2021

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: BIOC/182 NS393**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | **CSF cell count comparison audit 2021** | | |
| **Date audit complete** | 10/02/2022 | **Date action plan completed** | 21/02/2022 |
| **Auditor** | | **Name of policy / guideline** | N/A |
| **Division** | Neurosurgery (Neuroscience Laboratories) | **Source of policy / guideline** | N/A |

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- Between 01/11/2020 and 31/10/2021, 62 patients from ITU, HDU or a surgical ward had a CSF cell count performed in the Neuroscience Laboratories at WCFT. Of these 62 patients, 25 also had a CSF cell count performed in the Microbiology department at LCL within 7 days of the cell count performed at WCFT. These 25 patients were included in the audit. A total of 68 CSF cell count results from these patients were included in the audit.
- In 21 of the 25 cases (84%), the CSF cell count results from both sites were consistent with each other and the overall clinical picture.
- In three cases where one or more cell counts appeared to be out of consensus, a number of possible factors other than the location of the analysis were identified that could explain the discrepant results. These factors included possible CNS infection (stated in clinical details), which would cause increased numbers of white blood cells in the CSF. Treatment of the infection would then cause a reduction in white blood cell count.
- In the fourth case there was insufficient data to assess fully whether the discrepancy could be explained, and indeed whether it was a true discrepancy.
- The full data set is included below:

BIOC182 data collection proforma.d

**Key success:**

*Please concisely state the key success identified by the project – if none identified please state N/A*

- In the majority of cases (84%), the CSF cell count results were consistent with each other and the clinical picture, independent of the site on which the sample was analysed.

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- There were four cases with a cell count result that was out of consensus with other samples from the same patient. In three of these cases, the discrepancies could be explained by other factors, whereas in the fourth there was insufficient data to be able to say whether the result was actually discrepant or part of an emerging trend.
- For 17 out of the 68 samples included in the audit (25%), the results from Microbiology at LCL appeared in TD-Web as an "interim report", containing the cell count result but no culture results.

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Raise the interim report issue with LCL to establish whether this is due to electronic reporting problems or other factors

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Neurobiochemistry lab meeting 02/03/2022; Neuroscience Laboratories departmental audit meeting 24/03/2022; Neuroscience Laboratories departmental audit meeting 26/05/2022

Department where discussed or presented: Neuroscience Laboratories

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) Some Microbiology reports on TD-Web remain as interim, with no culture results | Contact LCL IT to investigate the absence of culture results. If required this will be taken to the LCL SLA meeting for discussion. | | September 2022 |  Investigation of possible reasons for r | Department audit meeting |
| 2) | | | | | |
| 3) | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 4) | | | | | |

**Re-audit date** _Dec 2023_____ **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☒ No ☐

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

# Clinical Audit / Service Evaluation Registration Form

## Clinical Audit definition

Clinical Audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.

## Service evaluation

Service Evaluation is undertaken to benefit those who use a particular service and is designed and conducted to define or judge current service. Your participants will normally be those who use the service or deliver it. It involves an intervention where there is no change to the standard service being delivered (e.g. no randomization of service users into different groups). This does not require ethical approval.
It is possible to use data collected from participants during a service evaluation for later research as long as:

- the data is completely anonymous;
- it is not possible to identify participants from any resulting report;
- use of the data will not cause substantial damage and distress

Please note that to complete this form your project **must be clinical audit or service evaluation**. If you are unsure whether your project is clinical audit, service review or research brief definitions are given below as a guide:

**Clinical Audit**

- Measures existing practice against **best practice**, **evidence based clinical standards** *(this may include Royal College, British Association, NICE or Local guidance etc.)*

**Research**

- Generates new knowledge where there is no or limited research evidence available and which has the potential to be generalisable.

**Service Evaluation:**

- Seeks to evaluate the effectiveness or efficiency of a new or existing service to help inform local decision making (has been also referred to as service review, benchmarking or a baseline audit). This includes patient or staff satisfaction surveys.

If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone
Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: -  Project Type: - **Clinical Audit ☒ Service Evaluation ☐**

**Audit / Service Evaluation Title: Comparison of Clinical Outcomes For The Online Pain Management Programme (PMP) Compared To Previous Face to Face Outcomes**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No: Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**
**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

## Background / Rationale

The Pain Management Programme (PMP) Department supports people from all over the UK with disabling chronic pain conditions to improve quality of life and reduce reliance on other health care providers. Our service provides a general pain management programme but also several specialist programmes including Young Adult, Facial and Pelvic with new developments on the horizon. Since the pandemic required face to face clinical activity to cease, our service capitalised on available technology to continue to provide a service to our patients. Our online activity with patients has been running since August 2020 and continues whilst we offer hybrid models from September 2021. We aim to conduct this audit to review, present and learn from our service activity and outcomes since we became online activity from September 2021 till August 2021 as well as pre-pandemic data for comparison. It is important to interpret these results in the context of our patient population and in pandemic circumstances which will be expanded on in the discussion. Furthermore, questionnaire outcomes can only demonstrate some of the benefits we observe in our patients following intervention therefore we will also include physical measures and patient feedback. We will provide contextual information to aid interpretation throughout.

## Methodology

Patient Group: In order to present the group with the largest number of outcomes for statistical power, we will only present those that attended the 'General PMP' and not include specialist programmes such as facial, pelvic or young adult. This will comprise patients with conditions such as chronic widespread pain, Fibromyalgia, low back pain, Complex Regional Pain Syndrome (CRPS). They will be of varied ages from 18 year old onwards. The majority of our patient will be relatively local although some will be based in areas external to Liverpool as we are the main specialist centre for pain in The North West UK. Design: This audit will comprise three components: 1) Pre and post outcomes comparison of the Online PMP, 2) Comparison between Online PMP and Face to Face 16 Day PMP pre-pandemic and 3) A matched sample comparison of Online PMP and Face to Face 16 Day PMP between patients of similar ages, gender, diagnosis and mental health status. Outcomes collected pre and post-treatment: we collect a range of subjective validated measures to assess multiple domains with the pain experience including pain intensity, distress, pain-related anxiety, self-efficacy and level of depression. We also collect physical performance measures including goal performance and use the 'sit to stand' test. We also administer a satisfaction questionnaire at the end of our programme. Our outcomes measures are stored securely in accordance with Clinical Effectiveness guidelines and we will extract the data anonymously for analysis using Excel and SPSS ® Statistical Package. All outcomes will be presented where appropriate as frequency, mean scores with standard error or percentage for some proportion data. Where statistical analyses criteria allows, we will test for statistical difference using within and between sample t-tests for normal data distribution (or non-parametric equivalent). PMPs are now recommended to utilise Reliable Change Index (RCI) and Clinically Significant Change (CSC) to determine individual reliable and meaningful improvements using the reliability of measures used and the population in question (Morley ,2013). Fenton &

Morley (2013) also provide data which we can use to benchmark our outcomes to that expected in a randomised control trial of a PMP (Fenton & Morley, 2013). We will therefore use RCI, CSC and effect size calculations to determine improvement.

**Aims / Objectives**

The aim of this audit is to determine if our change to Online PMP offers a 'good enough' service compared to our previous standard face to face programme. We also aim to determine from our satisfaction data if patients agree that this service is good enough for their needs.

**Standards / Criteria Details (service evaluation N/A)**

1) Does the online programme make a significant difference in pain outcomes post-treatment? 2) Does our online PMP programme perform as good as our previous face to face? 3) Are patients overall satisfied with their care since the online service began? Benchmark data will be provided in the published article by Fenton and Morley (2013).

---

**Guideline / Standards available:** Yes ☒ No ☐

If yes, please attach a copy or provide web link to the most current version:

**Name of Standard / guideline:** Both papers are attached. Fenton, G & Morley, S. A tale of two RCTs: Using Randomized Controlled Trials to benchmark Routine Clinic (psychological) Treatments for chronic pain. Pain 2013;154: 2108-2119. Morley, S. (2013) A rough guide to evaluating your Pain Management Programme: The analysis of individual patient data and benchmarking (Version 3.1). Unpublished manuscript, University of Leeds

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☒ State other: Published data from RTCs

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☒ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☒ | No ☐ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No:** Click here to enter text. **Procedure codes to identify sample:** Click here to enter text.

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☒ No ☐

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☒ Single disciplinary: ☐

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☒ No ☒

**How will the patient be involved?**

Patient Questionnaire ☒ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☒ N/A ☒

**Anticipated start date:05/11/2021**

**Anticipated project completion date: 15/12/2021**

**Anticipated Action Plan Submission date:15/12/2021**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead** ***(Signature*** Date: 15 November 2021

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: 394**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | Comparison of Clinical Outcomes For The Online Pain Management Programme (PMP) Compared To Previous Face to Face Outcomes | | |
| **Date audit complete** | | **Date action plan completed** | |
| **Auditor** | | **Name of policy / guideline** | A tale of two RCTs: Using Randomized Controlled Trials to benchmark Routine Clinic (psychological) Treatments for chronic pain. |
| **Division** | Neurosurgery | **Source of policy / guideline** | Fenton G, Morley S. A tale of two RCTs: using randomized controlled trials to benchmark routine clinical (psychological) treatments for chronic pain. Pain. 2013 Oct;154(10):2108-2119. doi: 10.1016/j.pain.2013.06.033. Epub 2013 Jun 24. PMID: 23806654 |

**Audit Rationale:**
*Please summarize the rationale of the audit for the members of the Clinical Audit Group (please limit to one or two sentences)*

We aimed to audit our patient outcomes of our pain management programme as delivered online from September 2021 till August 2021 and compare it with pre-pandemic face to face outcomes. To the best of our knowledge, there is limited published data on pain management programme (PMP) outcomes during the pandemic.

**Summary of Findings:**
*Please concisely state the main conclusions of the project using bullet points*

- Conversion rates from assessment to online PMP were lower than pre-pandemic suggesting fewer patients were suitable or wished to attend an online programme.
- The online group were 10 years younger, more patients were in full time work and it did not comprise our usual cohort of retired patients. Although our face to face PMP typically includes more female patients, even fewer men attended online PMP compared to the face to face PMP. This suggests that our online clinical work is being accessed by a different population compared to the face to face group.
- The outcomes for the online PMP surpassed accepted benchmarked PMP outcome measures in the UK (Fenton & Morley, 2013) which is also seen with the face to face PMP. This suggests online PMP treatment delivery performed as good as expected for a face to face PMP in our subgroup of suitable patients.
- Patient satisfaction data suggests that although the online programme had practical benefits, they felt greater clinical gains could be made in face to face.

**Key success:**
*Please concisely state the key success identified by the project – if none identified please state N/A*

- Delivery of our online PMP is efficacious for a select group of patients deemed suitable following MDT assessment.

**Key concerns:**
*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

- The differences in the demographics of the online group compared to face to face suggest we are targeting a different population with our online service and possibly discriminating against other cohorts of patients. Some patients were unsuitable for the online PMP, including those without a computer and those patients complex needs, who the PMP Team considered were required to wait for face-to-face.

**Recommendations discussed:**
*Please concisely summarise the recommendations that were discussed following the completion of the project*

- Our team are assured that quality of treatment is not affected for those who attend online PMP and that patients are making significant improvements.
- It is important to be aware that online is not a replacement for face to face PMP work because we can only effectively treat a smaller number of patients in the absence of face to face groups.
- We will create an MDT assessment guidance document to support clinicians assessing patients to identify relevant factors that suggest a patients will be best suited to either online or face to face.

**Presentation / Dissemination of Project**
Date findings were presented / disseminated: Presentation to PMP team and Pain Clinic (Planned for 11th Feb 2022)
Department where discussed or presented: PMP team and Pain Clinic.

**Actions agreed following recommendations discussed:-**
**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1)Lack of existing published data on online pain management programmes | Write up this audit for publication | | 6 months | Submission to a journal | PMP Research Committee) |

| | | | | | |
|---|---|---|---|---|---|
| 2) Lack of 6 month follow up data | Examine outcomes of follow up data and compare with face to face | | 12 months | Written up report | Service Lead |
| 3) Guidance document | Develop assessment guidance document to improve assessment decision making when deciding treatment planning. | | 6 months | Written internal guidance for department | Service Lead |

**Re-audit date** Dec 2024 **If no re-audit planned please give reasons why?** _____

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☐ N/A ☒
**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

**Clinical Audit / Service Evaluation Action Plan**

**Ref no: BIOC/213 NS 396**

| | | | |
|---|---|---|---|
| **Clinical Audit Title** | CSF Index and Oligoclonal band (OCB) results 2021 | | |
| **Date audit complete** | 25/03/2020 | **Date action plan completed** | 07/04/2022 |
| **Auditor** | | **Name of policy / guideline** | |
| **Division** | The Neuroscience Laboratories, Neurosurgery Division | **Source of policy / guideline** | |

**Summary of Findings:**

*Please concisely state the main conclusions of the project using bullet points*

- 1101 OCB results were identified between 1st November 2018 -26th November 2021. Results were excluded based on exclusion criteria (refer to the attached report). Of the 935 results remaining, 386 results (41.3%) had a T1 OCB status i.e. no bands present in the CSF or serum 61.4% were female with a median IgG Index of 0.51 compared to 0.50 for males. The calculated reference range was 0.37-0.68.
- Of the 935 patients included in the study 935 had a final diagnosis of MS (24.2%). Of these 212 (93.81%) were OCB positive i.e. T2/T3 pattern. Ratio of females to males was 2.21:1. Median IgG index for both sexes were raised, 0.99 for females and 0.74 for males.
- The diagnostic utility of an elevated IgG index (>0.7) for the diagnosis of MS: sensitivity 73 %, specificity 90%, PPV 71%, NPV 91%
- The diagnostic utility of a positive OCB status for the diagnosis of MS: sensitivity 94%, specificity 87%, PPV 70%, NPV 98%
- Comparison of our calculated diagnostic utility of IgG Index to that calculated by Simonsen et al is shown below:

| | Our study | Simonsen et al |
|---|---|---|
| **Sensitivity** | 73 % | 82% |
| **Specificity** | 90 % | 92% |
| **PPV** | 71 % | 99% |
| **NPV** | 91 % | 27% |

- The calculated reference range for IgG index confirms that the current in use cut off value of 0.7 is appropriate for The Walton Centres patient population.
- The diagnosis of MS in our patient population was inline with those reported in the literature, the observed prevalence of MS was higher for females than males, at a ratio of 2:1.
- The sensitivity of OCB for the diagnosis of MS was 93.8%, similar to the sensitivity of 95% reported within the literature.
- The diagnostic sensitivity of positive OCB was significantly higher than that of an elevated IgG Index. Replacement of OCB analysis with IgG

Index would miss approximately 20% of diagnoses.

- The diagnostic specificity of an elevated IgG Index was marginally higher than a positive OCB status, both showed acceptable specificities >80%. OCB status or an elevated IgG Index must be interpreted with other investigations for a diagnosis of MS.
- In conclusion, the current cut off value of 0.7 to define an elevated IgG Index is appropriate for the patient population served by the Walton Centre.
- An elevated IgG Index does not have an acceptable diagnostic sensitivity to replace OCB analysis for the diagnosis of MS.

**Key success:**

*Please concisely state the key success identified by the project – if none identified please state N/A*

- **Verified our reference range for CSF IgG index based on our patient population with a cut off of 0.7 as a raised CSF IgG index result.**
- **We can confirm that the CSF IgG index does correlate with OCB status, however we have determined that the CSF IgG index alone does not have acceptable diagnostic sensitivity to replace OCB analysis to aid in the diagnosis of MS.**

**Key concerns:**

*Please concisely state the key concerns identified by the project using bullet points– if none identified please state N/A*

N/A

**Recommendations discussed:**

*Please concisely summarise the recommendations that were discussed following the completion of the project*

-

**Presentation / Dissemination of Project**

Date findings were presented / disseminated: Report emailed to all relevant members of Neurobiochemistry staff 07/04/22

Department where discussed or presented: Neurobiochemistry, The Neuroscience Laboratories

**Actions agreed following recommendations discussed:-**

**Please ensure each action has a named lead, timescale and reportable group stated on the action plan below. Please list the evidence of the action implementation e.g SOP, protocol, standardised template, presentation or meeting minutes etc*

| Issue | Action required | Named lead for action | Timescale | Evidence | Reportable to (group/meeting) |
|---|---|---|---|---|---|
| 1) | . | N/A | N/A | N/A | N/A |

| | | | | | |
|---|---|---|---|---|---|
| 2) | | | | | |
| 3) | | | | | |
| 4) | | | | | |

**Re-audit date** _____ **If no re-audit planned please give reasons why?** No further useful information to be gained in the short term

**Will this be an on-going audit?** Yes ☐ No ☒

**Are there any potential barriers / problems to prevent the implementation of the above actions?** Yes ☐ No ☒

**If yes to the above please state who the issues have been referred to:**

**Name** _____ **Designation** _____ **Date referred** _____

**Signature:**_____ **Date:**_____

**Have any issues been logged on the risk register?** Yes ☐ No ☒ N/A ☐

**Please provide details of issue(s) logged on the risk register:**

The Walton Centre NHS
NHS Foundation Trust

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It is possible to use data collected from participants during a service evaluation for later research as long as:

- the data is completely anonymous;
- it is not possible to identify participants from any resulting report;
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- Measures existing practice against **best practice**, **evidence based clinical standards** *(this may include Royal College, British Association, NICE or Local guidance etc.)*

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- Generates new knowledge where there is no or limited research evidence available and which has the potential to be generalisable.

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If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone
Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - BIOC/213 NS396 Project Type: - **Clinical Audit** ☒ **Service Evaluation** ☐

**Audit / Service Evaluation Title: Clinical audit of CSF index and oligoclonal band (OCB) results**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department **The Neuroscience Laboratories**

**Project Lead:**

**Contact No: Bleep No: N/A**

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

---

## Background / Rationale

The Neurobiochemistry department in The Neuroscience Labs at The Walton Centre (WCFT) perform CSF IgG Index and oligoclonal band (OCB) analysis during working hours (Monday to Friday, 9 am to 5 pm). OCB status is currently included in the 2017 revised McDonald criteria for the diagnosis of Multiple Sclerosis, as demonstration of dissemination in time (DIT) (reference 1). It has recently been reported in the literature that CSF IgG index can be used to predict OCB status in patients with Multiple Sclerosis, thus removing the need for OCB analysis to be performed (reference 2). There are conflicting reports in the literature regarding the diagnostic utility of CSF IgG Index with some laboratories moving towards reporting IgG index only, (reference 2, 3) and some deciding to not report it at all. We want to establish the diagnostic utility of CSF IgG Index in our patient population to determine if there is a correlation with OCB status and to review our IgG index reference values. Reference 1: Thompson et al. (2017) Diagnosis of Multiple Sclerosis: 2017 revisions of the McDonald Criteria. Reference 2: Simonsen et al (2020) 'The diagnostic value of IgG index versus oligoclonal bands in cerebrospinal fluid of patients with multiple sclerosis. Reference 3: Zheng et al (2020) 'IgG Index Revisited: Diagnostic Utility and Prognostic Value in Multiple Sclerosis'.

## Methodology

Retrospective study of all patients from The Walton Centre who had OCB and CSF Index measured from November 2018 – November 2021. Patient results and demographics for this time period will be accessed via the laboratory information management system (LIMS), TD-NexLab. Final diagnosis for these patients and details of their medication history will be identified using ePortal. Statistical analysis will then be performed to assess correlation between CSF IgG Index and OCB status according to different patient cohorts and to assess the current IgG index reference range.

## Aims / Objectives

To determine if CSF IgG index correlates with OCB status. To verify our reference range for CSF IgG Index based on our patient population.

## Standards / Criteria Details (service evaluation N/A)

N/A

---

**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** N/A

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | |
|---|---|
| High volume | Yes ☐ No ☒ |
| High risk | Yes ☐ No ☒ |
| High cost | Yes ☐ No ☒ |
| Known quality issue | Yes ☐ No ☒ |
| Wide variation in practice | Yes ☐ No ☒ |

**Sample No:** 1101 patient results identified from the 3 year period for having OCB analysis.

**Procedure codes to identify sample:** Patients from The Walton Centre trust who have had OCB analysis as identified in the LIMS, TD-NexLab

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):**

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒
*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☐

**Anticipated start date:01/12/2021**

**Anticipated project completion date: 01/04/2022**

**Anticipated Action Plan Submission date:01/04/2022**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**

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- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

---

**Departmental Clinical Audit Lead *(Signature)*** _ Date: 01/12/2021

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead *(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐

The Walton Centre NHS
NHS Foundation Trust

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If your project is research please contact Head of Research and Development, for advice and guidance with the project

Telephone

Email

**CLINICAL AUDIT / SERVICE EVALUATION PROJECT REGISTRATION FORM**

Ref No: - NS397 Project Type: - **Clinical Audit** ☐ **Service Evaluation** ☒

**Audit / Service Evaluation Title: Evaluation of the ablative service for brachial plexus avulsion (DREZ lesion).**

**Division:** Neurology ☐ Neurosurgery ☒ Please specify department Click here to enter text.

**Project Lead:**

**Contact No: Bleep No:** Click here to enter text.

**Email address:**

**Audit / service evaluation supervisor:**

**Other professionals involved / project team members details**
*(Please provide names and roles within the project eg data collection, analysis etc.)*

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**Background / Rationale**
Evaluation of the ablative service for brachial plexus avulsion (DREZ lesion).

**Methodology**

Retrospective review of clinical notes, MRI and neurophysiology protocol including outcome measure collected prospectively.

**Aims / Objectives**

Identify long term results in a cohort of 40-50 pts over 12 yrs. Review of procedural changes over last 12 yrs (including neurophysiology,surgical approach, lesion etc).

**Standards / Criteria Details (service evaluation N/A)**

Primary outcome measure (VAS) other secondary outcome measures (QOL etc collected prospectively and present in the notes/database)

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**Guideline / Standards available:** Yes ☐ No ☒

If yes, please attach a copy or provide web link to the most current version: Click here to enter text.

**Name of Standard / guideline:** Click here to enter text.

**Source of Standard / guideline:** NSF ☐ NICE ☐ Royal College ☐
Trust ☐ Other ☐ State other: Click here to enter text.

**Review/assessment of guideline/standard undertaken to ensure it is appropriate & can be measured**
Yes ☐ No ☐

**Is the audit / service evaluation issue:**

| | | |
|---|---|---|
| High volume | Yes ☐ | No ☒ |
| High risk | Yes ☐ | No ☒ |
| High cost | Yes ☐ | No ☒ |
| Known quality issue | Yes ☐ | No ☒ |
| Wide variation in practice | Yes ☐ | No ☒ |

**Sample No: 40-55 Procedure codes to identify sample: Drez lesion for brachial plexus avulsion**

http://www.raosoft.com/samplesize.html - link to tool that may be used to calculate sample size

**Are you planning to publish your audit/service evaluation findings nationally**

*(e.g. Medical journal)?* Yes ☒ No ☐

**Is this a re-audit or if service evaluation, has service been reviewed previously?** Yes ☐ No ☒

**Is this project part of an agreed departmental rolling programme?** Yes ☐ No ☒

**Rolling programme duration (number of years):** Click here to enter text.

**Rolling programme frequency:** Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐

Multidisciplinary: ☐ Single disciplinary: ☒

**Is Clinical Audit Team support required?** Yes ☐ No ☒

*If yes, please specify type of assistance required:*

- Population Identification ☐
- Design of data collection tool ☐

*(If not required please, attach a copy of the tool to be used)*

- Database design ☐
- Data entry ☐
- Analysis ☐
- Presentation ☐

Collection of case notes ☐ Total number ____ / per week ____

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**Patient Contact / Involvement –** *(If project involves patient contact that is not part of the patients usual treatment or care please explain how in this section)*

**Will the audit involve direct patient contact?** Yes ☐ No ☒

**How will the patient be involved?**

Patient Questionnaire ☐ At clinic appointment ☐

Other *(please give details)* Click here to enter text.

**Has approval been sought from the Patient Information Panel?** Yes ☐ No ☐ N/A ☒

**Anticipated start date:Dec 2021**

**Anticipated project completion date: Feb 2022**

**Anticipated Action Plan Submission date:N/A**

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- **PLEASE ATTACH A COPY OF YOUR DATA COLLECTION TOOL / PATIENT QUESTIONNAIRE.**
- **FOR ALL RE-AUDITS OR REPEAT SERVICE EVALUATIONS PLEASE ATTACH A COPY OF THE PREVIOUS AUDIT OR SERVICE EVALUATION REPORT.**
- **PLEASE ENSURE THIS FORM IS SIGNED BY YOUR DIVISIONAL AUDIT LEAD BEFORE SUBMISSION TO THE CLINICAL AUDIT TEAM.**

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**Departmental Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Comments** Click here to enter text.

**Divisional Clinical Audit Lead** ***(Signature)*** _____ Date: Click here to enter text.

**Is this topic a key clinical interest for the department / division?** Yes ☐ No ☐