



**Technical Guidance for  
Surgical Workload Audit and Research Database:  
Hernia**

---

**V1.0**



## Contents

1. The Indicators .....	3
1.1. Activity Volume .....	3
3.2. Average Length of Stay (Days) .....	3
3.3. 2/7/30 day Re-admission Rate (%).....	3
3.4. Re-operations within 30 days (%) .....	3
3.5. Day case Rates (%) .....	4
3.6. Short Stay Rates (%).....	4
3.7. Proportion of laparoscopic procedures .....	4
3.8. Ratio of emergency to all admissions .....	4
4. Interventions and Code Sets .....	5
4.1. Primary Inguinal Hernia - Open.....	5
4.2. Primary Inguinal Hernia - Laparoscopic .....	5
4.3. Recurrent Inguinal Hernia Repair - Open.....	6
4.4. Recurrent Inguinal Hernia Repair - Laparoscopic .....	6
4.5. Primary Femoral Hernia Repair - Open.....	7
4.6. Primary Femoral Hernia Repair - Laparoscopic .....	7
4.7. Recurrent Femoral Hernia Repair - Open .....	8
4.8. Recurrent Femoral Hernia Repair - Laparoscopic.....	8
4.9. Paraumbilical Hernia Repair - Open.....	9
4.10. Paraumbilical Hernia Repair - Laparoscopic .....	9
4.11. Epigastric Hernia Repair - Open.....	10
4.10. Epigastric Hernia Repair - Laparoscopic.....	10

## 1. The Indicators

### 1.1. Activity Volume

Methodology: Count of all activity.  
Data Source: HES (Hospital Episode Statistics)

### 3.2. Average Length of Stay (Days)

Numerator: Number of bed days (excluding daycase)  
Denominator: Number of spells (excluding daycase)  
Methodology: Average  
Data Source: HES (Hospital Episode Statistics)

### 3.3. 2/7/30 day Re-admission Rate (%)

Numerator: Total number of emergency re-admissions within 2/7/30 days of discharge  
Denominator: Total number of discharges following an admission  
Methodology: Percentage  
Data Source: HES (Hospital Episode Statistics)  
Note: Re-admission is attributed to the consultant responsible for the patient in the initial admission.

### 3.4. Re-operations within 30 days (%)

Numerator: Total number of re-operations within 30 days of discharge  
Denominator: Total number of discharges following an admission  
Methodology: Percentage  
Data Source: HES (Hospital Episode Statistics)  
Note: Re-operations are attributed to the consultant responsible for the patient in the initial admission.

### 3.5. Day case Rates (%)

Numerator:	Number of procedures carried out as a daycase
Denominator:	Total number of procedures carried out
Methodology:	Percentage
Data Source:	HES (Hospital Episode Statistics)
Note:	Daycase is classified as a patient who is coded as having a 0 day length of stay by checking the admission and discharge dates are the same.

### 3.6. Short Stay Rates (%)

Numerator:	Number of patients admitted and discharged within 48hrs
Denominator:	Total number of patients discharged
Methodology:	Percentage
Data Source:	HES (Hospital Episode Statistics)
Note:	

### 3.7. Proportion of laparoscopic procedures

Numerator:	Number of hernia patients who have undergone a laparoscopic procedure.
Denominator:	Total number of procedures carried out
Methodology:	Percentage
Data Source:	HES (Hospital Episode Statistics)
Note:	

### 3.8. Ratio of emergency to all admissions

Numerator:	Number of emergency procedures.
Denominator:	Total number of procedures carried out
Methodology:	Percentage
Data Source:	HES (Hospital Episode Statistics)
Note:	

## 4. Interventions and Code Sets

### 4.1. Primary Inguinal Hernia - Open

#### Primary OPCS:

T19.8: Other specified simple excision of inguinal hernial sac

T19.9: Unspecified simple excision of inguinal hernial sac

T20: Primary repair of inguinal hernia

#### Secondary OPCS: (will be included after any Primary OPSC)

##### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

##### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

#### Primary ICD-10:

K40: Inguinal hernia

### 4.2. Primary Inguinal Hernia - Laparoscopic

#### Primary OPCS:

T19.8: Other specified simple excision of inguinal hernial sac

T19.9: Unspecified simple excision of inguinal hernial sac

T20: Primary repair of inguinal hernia

#### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or

Y75.2: Laparoscopic approach to abdominal cavity NEC

##### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

##### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

#### Primary ICD-10:

K40: Inguinal hernia

### 4.3. Recurrent Inguinal Hernia Repair - Open

#### Primary OPCS:

T21: Repair of recurrent inguinal hernia

#### Secondary OPCS: (will be included after any Primary OPSC)

##### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

##### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

#### Primary ICD-10:

K40: Inguinal hernia

### 4.4. Recurrent Inguinal Hernia Repair - Laparoscopic

#### Primary OPCS:

T21: Repair of recurrent inguinal hernia

#### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or

Y75.2: Laparoscopic approach to abdominal cavity NEC

##### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

##### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

#### Primary ICD-10:

K40: Inguinal hernia

## 4.5. Primary Femoral Hernia Repair - Open

### Primary OPCS:

T22: Primary repair of femoral hernia

### Secondary OPCS: (will be included after any Primary OPSC)

#### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

#### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

### Primary ICD-10:

K41: Femoral hernia

## 4.6. Primary Femoral Hernia Repair - Laparoscopic

### Primary OPCS:

T22: Primary repair of femoral hernia

### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or

Y75.2: Laparoscopic approach to abdominal cavity NEC

#### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

#### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

### Primary ICD-10:

K41: Femoral hernia

## 4.7. Recurrent Femoral Hernia Repair - Open

### Primary OPCS:

T23: Repair of recurrent femoral hernia

### Secondary OPCS: (will be included after any Primary OPSC)

#### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

#### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

### Primary ICD-10:

K41: Femoral hernia

## 4.8. Recurrent Femoral Hernia Repair - Laparoscopic

### Primary OPCS:

T23: Repair of recurrent femoral hernia

### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or

Y75.2: Laparoscopic approach to abdominal cavity NEC

#### Bilateral:

Z94.1: Bilateral operation or

Z94.2: Right sided operation and Z94.3: Left sided operation

#### Unilateral:

Z94.2: Right sided operation or

Z94.3: Left sided operation or

Z94.4: Unilateral operation

### Primary ICD-10:

K41: Femoral hernia



## 4.9. Paraumbilical Hernia Repair - Open

### Primary OPCS:

T24.1: Repair of umbilical hernia using insert of natural material  
T24.2: Repair of umbilical hernia using insert of prosthetic material  
T24.3: Repair of umbilical hernia using sutures  
T24.8: Other specified primary repair of umbilical hernia  
T24.9: Unspecified primary repair of umbilical hernia  
T97: Repair of recurrent umbilical hernia

### Secondary OPCS:

N/A

### Primary ICD-10:

K42: Umbilical hernia

## 4.10. Paraumbilical Hernia Repair - Laparoscopic

### Primary OPCS:

T24.1: Repair of umbilical hernia using insert of natural material  
T24.2: Repair of umbilical hernia using insert of prosthetic material  
T24.3: Repair of umbilical hernia using sutures  
T24.8: Other specified primary repair of umbilical hernia  
T24.9: Unspecified primary repair of umbilical hernia  
T97: Repair of recurrent umbilical hernia

### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or  
Y75.2: Laparoscopic approach to abdominal cavity NEC

### Primary ICD-10:

K42: Umbilical hernia

## 4.11. Epigastric Hernia Repair - Open

### Primary OPCS:

T27.1: Repair of ventral hernia using insert of natural material  
T27.2: Repair of ventral hernia using insert of prosthetic material  
T27.3: Repair of ventral hernia using sutures  
T27.8: Other specified repair of other hernia of abdominal wall  
T27.9: Unspecified repair of other hernia of abdominal wall  
T98: Repair of recurrent ventral hernia

### Secondary OPCS:

N/A

### Primary ICD-10:

K43: Ventral hernia

## 4.10. Epigastric Hernia Repair - Laparoscopic

### Primary OPCS:

T27.1: Repair of ventral hernia using insert of natural material  
T27.2: Repair of ventral hernia using insert of prosthetic material  
T27.3: Repair of ventral hernia using sutures  
T27.8: Other specified repair of other hernia of abdominal wall  
T27.9: Unspecified repair of other hernia of abdominal wall  
T98: Repair of recurrent ventral hernia

### Secondary OPCS: (will be included after any Primary OPSC)

Y75.1: Laparoscopically assisted approach to abdominal cavity or  
Y75.2: Laparoscopic approach to abdominal cavity NEC

### Primary ICD-10:

K43: Ventral hernia