



# Orthopaedic Pro Forma - 2010

2010/

Study number

Please return this form to –

Scottish Audit of Surgical Mortality  
2nd Floor  
Cirrus  
Marchburn Drive  
Abbotsinch  
Paisley  
PA3 2SJ

Tel: 0141 282 2280

Fax: 0141 282 2007

E-mail: NSS.isdSASM@nhs.net

For office use only:

Anaesthetic form required	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Interventional Radiology form required	Yes <input type="checkbox"/>	No <input type="checkbox"/>
ICU form required	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Coded  Entered  Anonymised

## Scottish Audit of Surgical Mortality

If this form cannot be completed due to the non-availability of case notes by the 30th July 2011, please have it co-signed here by the Medical Records Officer and the Medical Director (or their deputies), and return it to the SASM office.

### Medical Records Officer:

Signature:

Name: (PLEASE PRINT)

### Medical Director:

Signature:

Name: (PLEASE PRINT)

[WWW.SASM.ORG.UK](http://WWW.SASM.ORG.UK)

Supported by the Medical Royal Colleges and Surgical and Anaesthetic Associations within Scotland

THE SMALL NUMBERS AT THE BOXES ARE FOR OFFICE USE AND SHOULD BE IGNORED  
SECTIONS 1-7 MUST BE COMPLETED

**ALL IDENTIFIERS WILL BE REMOVED BEFORE 'FIRST LINE' ASSESSMENT**

PLEASE COMPLETE THIS SECTION IN BLACK INK FOR ALL PATIENTS

**Name of patient** \_\_\_\_\_

**Hospital** \_\_\_\_\_

**Hospital unit number** \_\_\_\_\_

**CHI Number** \_\_\_\_\_

**Date of birth/age** \_\_\_\_\_

**Consultant surgeon(s)** \_\_\_\_\_

**Email Address** \_\_\_\_\_ @nhs.net

**Responsible consultant anaesthetist (if applicable)**  
*(please provide name)* \_\_\_\_\_

**Responsible consultant Interventional Radiologist (if applicable)**  
*(please provide name)* \_\_\_\_\_

Names of all consultants/trainees with whom care was shared, e.g. surgeons referring from other hospitals/physicians/Hospital At Night (HAN) team. (Those named will also receive a copy of the feedback, addressed to your hospital, unless otherwise informed).

(Feedback for trainees will be sent to the responsible consultant for forwarding to the trainee).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Feedback will be sent automatically to the above named if any areas of concern or for consideration are identified on peer review. Please tick here if you wish feedback even if no areas of concern or for consideration are identified.*

**FOR OPERATIVE CASES, PLEASE FORWARD THE ANAESTHETIC FORM  
(ALONG WITH THE CASE NOTES IF POSSIBLE) TO THE RELEVANT ANAESTHETIST.**

2 Male  1 Female  2 Age  years Study number  2010/

3 Status of surgeon completing form

Consultant  1  
 \*Specialist trainee  7  
 \*Associate Specialist  6  
 \*Staff grade  4  
 \*Other (specify)  19

\* Has the responsible Consultant Surgeon seen this completed form  
 Yes  1 No  2

4 Do you believe this patient was appropriately placed in orthopaedics:

On admission Yes  1 No  2  
 At time of death Yes  1 No  2

5 Degree of patient's mobility:

Independently mobile  1 Walking with 2 sticks  4  
 Mobile with frame  2 In a wheelchair  5  
 Walking with 1 stick  3 Bedridden  6

6 Admission details

Time of admission 08.00 -17.00  1  
 17.00- 22.00  2  
 22.00 -08.00  3

Date of admission        
 Date of death        
 Date of referral to surgical team

Type of admission

Elective  1  
 Urgent  3  
 Emergency  2

Admitted from

Home (independent)  1  
 Home (with extensive social support)  2  
 Nursing home  3  
 Residential home  4  
 Hospital transfer  5

Was this patient transferred from another clinical team in the same hospital  
 Yes  1 No  2  
*If yes, please provide details of consultants involved on facing sheet.*

Was this a death within 24 hours of surgery  
 Yes  1 No  2 NA  3

*If Hospital transfer, please provide details of consultants involved on facing sheet.*

7 Main surgical diagnosis on admission (as suspected by clinicians after initial assessment) \_\_\_\_\_ Code: (Office use only)

Confirmed main surgical diagnosis (taking into account test results, operations, PM etc) \_\_\_\_\_

Cause of death (taking all information into account, including PM)

I a) \_\_\_\_\_

I b) \_\_\_\_\_

I c) \_\_\_\_\_

II \_\_\_\_\_

Was this death discussed with the Procurator Fiscal Yes  1 No  2

8 Significant co-existing factors increasing risk of death (please tick appropriate boxes)

Cardiovascular  1 Respiratory  1 Renal  1  
 Hepatic  1 Neurological/psychiatric  1 Advanced malignancy  1  
 Obstructive jaundice  1 Other (specify)  19 None  2 or

9 Hospital infection (for definitions please see back page)

Was this patient transferred to your care with a hospital acquired infection  Yes (1)  No (2)

Did this patient develop a hospital acquired infection after transfer to your care

Was this a surgical site infection

Was hospital acquired infection MRSA+

Was hospital acquired infection Clostridium difficile

Did infection contribute to death

Did infection cause death

**10 Please describe the significant clinical events leading to death or if significantly detailed, attach an anonymised copy of the discharge summary (please write legibly and use the back page if more space is required).**

**Time frame**

Post admission day number


**11 Use of ICU/HDU resources** (for definitions please see back page)

Did this patient receive ICU care during this admission Yes  1 No  2

If no, did this patient need ICU care during this admission Yes  1 No  2

Did this patient receive HDU care during this admission Yes  1 No  2

If no, did this patient need HDU care during this admission Yes  1 No  2

Was critical care available at time of need

ICU	Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 2	Not Applicable <input type="checkbox"/> 3
HDU	Yes <input type="checkbox"/> 1	No <input type="checkbox"/> 2	Not Applicable <input type="checkbox"/> 3

If no, why not

None in hospital  1 Unit full  2 Other (specify)  3 \_\_\_\_\_

Were there any concerns in the ICU/HDU management of this patient Yes  1 No  2

Specify \_\_\_\_\_

**12 Supportive Care**

Were the following services available, required and appropriate to the patient

	Available			Required			Appropriate		
	Yes (1)	No (2)	NA (3)	Yes (1)	No (2)	NA (3)	Yes (1)	No (2)	NA (3)
Medicine / care of the elderly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other hospital specialities (e.g. cardiology, GI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**13 Was an operation performed during the patient's last admission**

Yes  1 No  2

If no, why was no operation/procedure performed (Tick as many boxes as necessary)

Patient was inappropriately placed in a surgical specialty  1 No operational / procedural option  1

Operation/procedure possible, but: Rapid death  1 Patient refused surgery  1 Surgery would not have affected outcome  1

If decision was made that surgery would not have affected outcome, was this a consultant decision Yes  1 No  2

Would this patient's care have been more appropriately delivered by another specialty Yes  1 No  2

**14 Did the patient have an interventional radiological procedure**

Yes  1 No  2

If yes, please write the name of the consultant radiologist responsible on the inside front cover of this form.

**IF NO OPERATION/PROCEDURE WAS PERFORMED GO TO PAGE 5**  
**OTHERWISE COMPLETE ALL REMAINING SECTIONS OF THE FORM**

COMPLETE THIS PAGE ONLY IF AN OPERATION/PROCEDURE WAS EITHER PERFORMED LESS THAN 30 DAYS PRIOR TO DEATH OR DURING THE PATIENT'S LAST ADMISSION

**15 Description of most significant operation(s)** (including relevant endoscopic interventions)

**1st operation** \_\_\_\_\_

Date 

D	D	M	M	Y	Y
---	---	---	---	---	---

 (Office use only)  
Code:

**Was this operation part of your area of usual practice**

Yes  1 No  2

**If no, were you comfortable performing this procedure**

Yes  1 No  2

**Complexity of operation**

Minor  1  
Intermediate  2  
Major  3  
Complex  4

**Timing of operation**

Elective  1  
Scheduled emergency  4  
Same day emergency  3  
Immediate within 2 hrs  2

**Type of list**

Elective  1  
Urgent bookable  2  
Emergency theatre  3

**Was this procedure delayed by your or other clinicians' elective or non-emergency activity**

Yes  1 No  2

**2nd operation** \_\_\_\_\_

Date 

D	D	M	M	Y	Y
---	---	---	---	---	---

 (Office use only)  
Code:

**Was this operation part of your area of usual practice**

Yes  1 No  2

**If no, were you comfortable performing this procedure**

Yes  1 No  2

**Complexity of operation**

Minor  1  
Intermediate  2  
Major  3  
Complex  4

**Timing of operation**

Elective  1  
Scheduled emergency  4  
Same day emergency  3  
Immediate within 2 hrs  2

**Type of list**

Elective  1  
Urgent bookable  2  
Emergency theatre  3

**Was this procedure delayed by your or other clinicians' elective or non-emergency activity**

Yes  1 No  2

**16**

**Grade(s) of surgeon(s) making decision, operating, assisting and immediately available**

**1<sup>st</sup> operation**  
Deciding Operating Assisting Immed Avail

Consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1
Specialist trainee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 7
Associate Specialist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 6
Staff grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 19

**2<sup>nd</sup> operation**  
Deciding Operating Assisting Immed Avail

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 6
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 19

**Was the lead surgeon a locum consultant**

**1<sup>st</sup> operation**  
Yes  1 No  2

**2<sup>nd</sup> operation**  
Yes  1 No  2

**If consultant not present :**

1) Was the consultant aware of the operation

Yes  1 No  2

Yes  1 No  2

2) If the surgeon was not a consultant, how many years has he/she been in the present grade

3) Was the non-consultant operator competent to perform this procedure

Yes  1 No  2

Yes  1 No  2

COMPLETE THIS PAGE ONLY IF AN OPERATION/PROCEDURE WAS EITHER PERFORMED LESS THAN 30 DAYS PRIOR TO DEATH OR DURING THE PATIENT'S LAST ADMISSION

17

**Grade(s) of anaesthetist(s) present** (Tick as many boxes as necessary)

	1 <sup>st</sup> operation		2 <sup>nd</sup> operation
None	<input type="checkbox"/> 9		None <input type="checkbox"/> 9
Consultant	<input type="checkbox"/> 1		Consultant <input type="checkbox"/> 1
Specialist trainee	<input type="checkbox"/> 7		Specialist trainee <input type="checkbox"/> 7
Associate Specialist	<input type="checkbox"/> 6		Associate Specialist <input type="checkbox"/> 6
Staff grade	<input type="checkbox"/> 4		Staff grade <input type="checkbox"/> 4
Other	<input type="checkbox"/> 19		Other <input type="checkbox"/> 19

18

**Surgeon's view (after surgery) of overall risk of death**

Minimal  1      Small  2      Moderate  3      Considerable  4      Expected  5

19

**Was there a definable post-operative complication**

Yes  1      No  2

**If yes: Surgical complications related to present admission** (more than one may be ticked)

Details:	Yes (1)	No (2)	Yes (1)	No (2)
Procedure related sepsis	<input type="checkbox"/>	<input type="checkbox"/>	Mechanical complication	<input type="checkbox"/>
Significant post-operative bleeding	<input type="checkbox"/>	<input type="checkbox"/>	Other (specify)	<input type="checkbox"/>

\_\_\_\_\_

**Medical complications significantly affecting outcome** (more than one may be ticked)

Details:	Yes (1)	No (2)	Yes (1)	No (2)
Cardiovascular	<input type="checkbox"/>	<input type="checkbox"/>	Myocardial infarction	<input type="checkbox"/>
			Cardiac failure	<input type="checkbox"/>
Respiratory	<input type="checkbox"/>	<input type="checkbox"/>	Arrhythmia	<input type="checkbox"/>
			Pulmonary sepsis	<input type="checkbox"/>
DVT	<input type="checkbox"/>	<input type="checkbox"/>	Pulmonary embolism	<input type="checkbox"/>
Renal failure	<input type="checkbox"/>	<input type="checkbox"/>		
Hepatic failure	<input type="checkbox"/>	<input type="checkbox"/>		
Other	<input type="checkbox"/>	<input type="checkbox"/>	Specify	_____

**Was there a delay in recognising complications**

Yes  1      No  2

PLEASE COMPLETE THE REMAINDER OF THIS FORM FOR ALL PATIENTS  
(I.E. WHETHER OR NOT AN OPERATION/PROCEDURE WAS PERFORMED)

20 Was a decision made to limit treatment

At outset Yes  1 No  2 Subsequently Yes  1 No  2

21 Palliative/terminal care (for definitions please see back page)

Did this patient have **general** palliative/terminal care needs Yes  1 No  2 NA  3  
 If so, in your view were these needs met Yes  1 No  2 NA  3  
 Did this patient receive **specialist** palliative/terminal care needs Yes  1 No  2 NA  3  
 If so, in your view were these needs met Yes  1 No  2 NA  3  
 Was the advice of a specialist palliative care professional/team sought for this patient Yes  1 No  2 NA  3  
 In your view, was palliative care provided in the optimal location for this patient Yes  1 No  2 NA  3  
**If not, what in your view would have been the optimal location** \_\_\_\_\_  
 Was Liverpool Care pathway implemented Yes  1 No  2 NA  3  
 Was this patient **admitted** for palliative care Yes  1 No  2

22 Was a Post Mortem performed

Yes - hospital  1 Yes - Fiscal  2 No  3 Refused  4

If yes, did the PM contribute additional information which, if known, may have changed management

Yes  1 No  2 If yes, please specify \_\_\_\_\_

23 Which statement best describes the **management** of this case? (for definitions please see back page)

There were no areas of concern or for consideration in the management of this patient  3  
 There were areas for consideration but they made no difference to the eventual outcome  4  
 There were areas of concern but they made no difference to the eventual outcome  5  
 There were areas of concern which may have contributed to this patient's death  1  
 There were areas of concern which CAUSED the death of this patient who would have been expected to survive  2

Please comment (Please use back page)

24 Were there any areas of concern or for consideration in any of the following areas?

	Yes (1)	No (2)	Not applicable (3)
Care of the non-operative patient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grade/experience of surgeon deciding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decision to operate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pre-operative management/ preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Choice of operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timing of operation (too soon, too late, wrong time of day)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intra-operative/technical management of surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grade/experience of surgeon operating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grade/experience of anaesthetic staff involved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-operative care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication/continuity of care (including transfer between teams)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital At Night (HAN) team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please comment (Please use back page)

25 In retrospect, could anything have been done differently  
If 'Yes', please specify (Please use back page if more space required)

Yes  1 No  2

Does your hospital have a multidisciplinary M & M Meeting? Yes  1 No  2  
 If so, has this case been discussed? Yes  1 No  2 It will be in the future  3

If yes, what conclusions were reached and what changes will be/have been instituted

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Does your local department have an M & M Meeting? Yes  1 No  2  
 If so, has this case been discussed? Yes  1 No  2 It will be in the future  3

If yes, what conclusions were reached and what changes will be/have been instituted

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27 **Additional comments:**

28 **Definitions:**

An **ICU** is an area to which patients are admitted for treatment of actual or impending organ failure that may require technological support (including mechanical ventilation of the lungs and/or invasive monitoring).

An **HDU** is an area for patients who require more intensive observation and/or nursing than would be expected in a general ward. Patients who require mechanical ventilation or other organ support would not be admitted to this area.

**Palliative care** aims to control physical symptoms (e.g. pain, breathlessness) and to address psychological, social and spiritual issues in patients whose disease, whether malignant or non-malignant, is not responsive to curative treatment. For most patients, general palliative care can be provided by their usual health professionals in any care setting. Where more complex needs are identified, specialist palliative care advice/referral may be sought.

The **Liverpool Care Pathway for the Dying Patient (LCP)** provides an evidence based framework for the delivery of appropriate care for dying patients and their relatives in a variety of care settings. It encourages a multi-professional approach to the delivery of care that focuses on the physical, psychological and spiritual comfort of patients and their relatives that has also been shown to empower generic staff in the delivery of care. End of Life care academic initiatives should be encouraged to bring research, educational and academic credibility to this area.

**Terminal care** is an admission which is not specifically for palliative care, but the disease was not responsive to curative treatment.

An **area of concern** is where it is believed that areas of care should have been better.

An **area for consideration** is where it is believed that areas of care could have been improved whilst recognising that there may be issues for debate.

**Many thanks for your help**