

# Data Extraction Form

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Record ID

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Record ID

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Endnote ID (author surname, year, #number)  
(e.g Smith,2013#3655)

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Reviewer Name

- Charlotte Davies  
 Gareth Davies  
 Shelley Potter

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Date Extracted

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## Part 1 Study Demographics

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Year of publication

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Study type and design

- Randomised controlled trial  
 Observational comparative study  
 Case/control study  
 Case-series (observational, no comparison group)  
 Other  
 Not clear

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If other, please state study design

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Data collection

- Prospective  
 Retrospective  
 Combination of prospective and retrospective  
 Unclear/Not stated

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Type of economic analysis (as described in study by authors)

- Cost analysis
- Economic analysis
- Cost-effectiveness analysis
- Cost utility analysis
- Cost benefit analysis
- Cost minimization analysis
- Cost comparison analysis
- Cost outcome description
- Cost of illness study
- Other

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If other, please state \_\_\_\_\_

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Country of Origin

- UK
- Europe
- America
- Canada
- International
- Other

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If other, please state \_\_\_\_\_

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Number of participating centres (involved in the study as a whole)

- Single centre
- Multi centre
- Not clear, not stated
- Other

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If other, please state \_\_\_\_\_

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Number of participating centres (in the micro-costing study, if separate to whole study)

- Single centre
- Multi centre
- Not stated/not clear
- Other
- Not applicable

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If other, please state \_\_\_\_\_

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Area

- General surgery
- Orthopaedics
- ENT
- Neurosurgery
- Paediatric surgery
- Other

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If other, please state \_\_\_\_\_

Study intervention: State intervention(s)

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Study intervention: surgical implant used (e.g mesh)

Yes  No

If yes, please state type of implant

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Study intervention: type of hospital stay

- Daycase  
 In-patient stay  
 Both inpatient and daycase procedures  
 Not stated/not clear

Study intervention: anesthetic used

- General anesthetic (GA)  
 Local anesthetic (LA)  
 Both GA and LA cases  
 Not stated/Not clear

Study Population (e.g patients undergoing thyroidectomies (full and partial) performed in study hospital)

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Sample size : of the whole study

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Sample size: number of cases or procedures micro-costed

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Stated aims and objectives of study

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## Part 2 Critical Appraisal

Is the study population clearly defined?

Yes  No  Unsure

Are the competing alternatives clearly described?

Yes  No  Unsure  
 Not applicable

Is a well-designed research question posed in an answerable form ?

Yes  No  Unsure

Is the economic study design appropriate to the stated objective ?

Yes  No  Unsure

Is the actual perspective chosen appropriate ?

Yes  No  Unsure  
 Not stated

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Sensitivity analysis performed

- Stochastic (probabilistic) sensitivity analysis  
 Deterministic sensitivity analysis  
 No sensitivity analysis performed  
 Other stated sensitivity analysis  
 Unsure  
 Not applicable

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Please give details

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Do the conclusions follow from the data reported?  Yes  No  Unsure

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Does the study discuss the generalizability of the results to other settings and patient/client groups?  Yes  No  Unsure

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Do the authors reports any conflict of interest?  Yes  No  Not stated

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If yes, what is the stated COI?

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Are ethical issues discussed appropriately ?

- Yes  
 No  
 Unsure  
 Ethics approval (or IRB) not mentioned

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### Part 3 Reporting of micro-costing methodology

Identified by authors as being a micro-costing study  Yes  No

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If No, please state authors description of study if not specifically described as a micro-costing study

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Extent of micro-costing  Whole study micro-costed  
 Parts of procedure/pathway micro-costed

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Which elements of the study were micro-costed

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What of aspects of study were NOT micro-costed and what alternative costing methods were used used?

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Separate reporting of input utilization quantity and unit cost data  Yes  No  Not clear

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Did the author report both direct and indirect costs?  Direct costs only  
 Both direct and indirect costs  
 Not stated

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What cost components were stated as being included in 'direct costs'

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What cost components were stated as being included in 'indirect costs'

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Methods by which resources were identified

- Patient pathway mapping
  - Interviews with surgeon(s) or other medical staff
  - Accounting department
  - Database(s)
  - Direct observation/observation fieldwork
  - Other
  - Review of patient notes or charts
  - Review of operating logs/books
  - Not stated
- 

If other, please state

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Please provide details

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Elements of the patient pathway considered

- Pre-operative planning/investigations
  - Surgical procedure (including anaesthetic)
  - Hospital stay
  - Complications of surgery (if any)
  - Follow up
  - Any rehabilitation (e.g occupational or physiotherapy) required
  - Other
  - Not stated
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If other, please state

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If follow up period included, please state duration and details of follow up

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If rehabilitation included, please state duration and details reported

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Resources identified (labeled a to j below) as being involved in the provision of care (cost components)

a) Personnel costs reported (e.g surgeon, nurse, anesthesiologist time)

Yes  No

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a) Personnel costs reported, please indicate for e.g if surgeon, nurse or anesthesiologist time

- Surgeon
  - Nurse
  - Anesthesiologist
  - Operating department practitioner
  - Other
  - Not stated
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a) If other, please state

\_\_\_\_\_

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Please provide details

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a) Personnel costs : methods of measurement / method of quantity data collection

- time-motion study (direct observation)
  - casenote/patient record review
  - cost accounting database
  - Interviews with surgeons/nurses/other staff
  - survey of clinicians
  - expert opinion
  - other
  - Not stated
- 

a) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for MEASURING personnel costs reported in paper

---

a) Personnel costs : methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider price catalogue
  - national/regional/provincial/hospital/ insurer fee schedule
  - human resources/payroll record
  - other
  - not stated
- 

a) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for VALUING personnel costs reported in paper

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a) Personnel costs : actual stated costs

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b) Materials/ Disposable instrument/consumables costs reported (e.g needles, disposable staplers)

Yes  No

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b) Specify Materials/ Disposable instrument/consumables costs reported (e.g needles, disposable staplers)

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b) Materials/Disposable instrument/consumables : methods of measurement / method of quantity data collection

- time-motion study/direct observation in theatre
  - cost accounting database
  - provider/staff interview
  - case note/patient record review
  - survey of clinicians
  - expert opinion
  - other
  - not stated
- 

b) If other, please state

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Please provide verbatim details of methods for MEASURING materials/instruments/disposables reported in paper

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b) Materials/Disposable instrument/consumables: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider/government price catalogue
  - national/regional/provincial/hospital/insurer fee schedule
  - Online databases/electronic resources (not institution specific)
  - other
  - not stated
  - Government contracts
- 

b) If other, please state

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Please provide verbatim details of methods for VALUING materials/instruments/disposables reported in paper

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b) Actual stated costs of Materials/Disposable instrument/consumables

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c) Medical device costs reported (e.g endoscopy column, laparoscopic tower, also includes equipment repair costs)

Yes  No

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c) Specify the medical devices reported (e.g endoscopy column, laparoscopic tower, also includes equipment repair costs)

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c) Medical device costs : methods of measurement / method of quantity data collection

- time-motion study/direct observation in theatre
  - cost accounting database
  - provider/staff interview
  - case note/patient record review
  - survey of clinicians
  - expert opinion
  - other
  - not stated
- 

c) If other, please specify

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Please provide verbatim details of methods for MEASURING medical device costs reported in paper

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c) Medical device costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider/government price catalogue
  - national/regional/provincial/hospital/ insurer fee schedule
  - Online databases/electronic resources (not institution specific)
  - other
  - not stated
- 

c) If other, please state

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Please provide verbatim details of methods for VALUING medical device costs reported in paper

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c) Actual stated costs of medical devices (e.g endoscopy column, laparoscopic tower, also includes equipment repair costs)

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d) Re-usable instrument costs reported (e.g bowel graspers, surgical scissors)

Yes  No

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Details of re-usable instruments included

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d) Re-usable instrument costs : methods of measurement / method of quantity data collection

- time-motion study/direct observation in theatre
  - cost accounting database
  - provider/staff interview
  - case note/patient record review
  - survey of clinicians
  - expert opinion
  - other
  - not stated
- 

d) If other , please state

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Please provide verbatim details of methods for MEASURING re-usable equipment costs reported in paper

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d) Re-useable instrument costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider/government price catalogue
  - national/regional/provincial/hospital/ insurer fee schedule
  - Online database/electronic record (not institution specific)
  - other
  - not stated
- 

d) If other, please state

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Please provide verbatim details of methods for VALUING re-usable equipment costs reported in paper

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d) Actual stated costs of re-usable instrument reported (e.g bowel graspers, surgical scissors)

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e) Operating room costs reported (separate from hospital admission costs)

Yes  No

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e) Operating room costs : methods of measurement / method of quantity data collection

- time-motion study/direct observation in theatre
  - cost accounting database
  - provider/staff interview
  - case note/patient record review
  - survey of clinicians
  - expert opinion
  - other
  - not stated
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e) If other, please state

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Please provide verbatim details of methods for MEASURING operating room costs reported in paper

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e) Operating room costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider/government price catalogue
  - national/regional/provincial/hospital/ insurer fee schedule
  - Online resources/databases (not institution specific)
  - other
  - not stated
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e) If other, please state

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Please provide verbatim details of methods for VALUING operating room costs reported in paper

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Details of how operating room is costed

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e) Actual stated costs of operating room reported (separate from hospital admission costs)

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f) Inpatient hospital stay costs reported

Yes  No

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f) Inpatient hospital stay costs : methods of measurement / method of quantity data collection

- time-motion study (direct observation)
  - cost accounting database
  - provider/staff interview
  - case note/patient record review
  - survey of clinicians
  - expert opinion
  - other
  - not stated
- 

f) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for MEASURING inpatient hospital stay costs reported in paper

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f) Inpatient hospital stay costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
  - hospital/clinic/provider/government price catalogue
  - national/regional/provincial/hospital/ insurer fee schedule
  - human resources/payroll record
  - other
  - not stated
- 

f) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for VALUING inpatient hospital stay costs reported in paper

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f) Actual stated costs of Inpatient hospital stay

\_\_\_\_\_

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g) Overhead and/or Administration costs reported

Yes  No

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g) Overhead and/or administration costs : methods of measurement / method of quantity data collection

- time-motion study
- cost accounting database
- provider/staff interview
- case note/patient record review
- survey of clinicians
- expert opinion
- other
- not stated

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g) If other, please state

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g) Overhead and/or Administration costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
- hospital/clinic/provider/government price catalogue
- national/regional/provincial/hospital/ insurer fee schedule
- Online/electronic database (not institution specific)
- other
- not stated

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g) If other, please state

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Details of how overheads/indirect costs calculated

\_\_\_\_\_

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g) Actual stated costs of overheads and/or Administration

\_\_\_\_\_

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h) Medicinal costs (e.g anesthetics) reported

- Yes    No

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Details of medicinal costs included

\_\_\_\_\_

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h) Medicinal costs : methods of measurement / method of quantity data collection

- time-motion study (direct observation)
- casenote/patient record review
- cost accounting database
- provider/staff interview
- survey of clinicians
- expert opinion
- other
- not stated

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h) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for MEASURING medicinal costs reported in paper

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h) Medicinal costs: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
- hospital/clinic/provider/government price catalogue
- national/regional/provincial/hospital/ insurer fee schedule
- Electronic/online databases/resources (not institution specific) e.g BNF
- other
- not stated

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h) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for VALUING medicinal costs reported in paper

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h) Actual stated medicinal costs (e.g anesthetics)

\_\_\_\_\_

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i) Imaging/Investigations/Blood tests costs

- Yes  No

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i) Imaging/investigations/Blood Test costs etc : methods of measurement / method of quantity data collection

- time-motion study (direct observation)
- casenote/patient record review
- cost accounting database
- provider/staff interview
- survey of clinicians
- expert opinion
- other
- not stated

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i) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for MEASURING imaging/investigation/blood test costs reported in paper

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i) Imaging/investigations/Blood tests costs etc: methods used for valuation/ Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
- hospital/clinic/provider/government price catalogue
- national/regional/provincial/hospital/ insurer fee schedule
- Online/electronic database/resources (not institution specific)
- other
- not stated

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i) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for VALUING imaging/investigation/blood test costs reported in paper

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i) Actual stated Imaging/Investigations/Blood tests costs

\_\_\_\_\_

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j) Any other resources or costs identified as being involved in the provision of care ?, that do not fall under the following categories:

- a) Personnel costs
- b) Materials/Disposable instrum/Consumables
- c) Medical device costs
- d) Re-useable instruments costs
- e) Operating room costs
- f) Inpatient hospital stay costs
- g) Overhead/Admin costs
- h) Medicinal costs
- i) Imaging/Investigations/Blood tests

Yes  No

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j) Please describe this other resource or cost

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j) Method of measurement used/ method of quantity data collection ?

- time-motion study
- casenote/patient record review
- cost accounting database
- provider/staff interview
- survey of clinicians
- expert opinion
- other
- not stated

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j) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for MEASURING other stated resource costs reported in paper

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j) Methods used for valuation /Method of unit cost data collection (consider assessing methods used in paper as a whole)

- invoice amount
- hospital/clinic/provider price catalogue
- national/regional/provincial/hospital/ insurer fee schedule
- human resources/payroll record
- other
- not stated

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j) If other, please state

\_\_\_\_\_

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Please provide verbatim details of methods for VALUING other stated resource costs reported in paper

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j) Actual stated costs of other resource/cost

\_\_\_\_\_

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Did the authors identify any cost drivers ?

Yes  No

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If yes, please state the cost drivers reported in the study

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Notes (please record any additional features of the study that deserve consideration when evaluating its quality)

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Confirm paper not to be included in SR

Yes  No