Developing Procedure Based Assessments

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Creative Learning Associates
Overview

Introduction & Background

Features

Implementation problems

How are PBA's developed?

What does a PBA assess?
Documents

The development of the Procedure Based Assessment tool
CESMA, Brussels

Introduction

1994-2011 (17 years)
relatively recent
Massive change as background
lessons to be learned by all

What is a PBA?

All surgical specialties
2 sides A4 paper/electronic
Key features
How used in practice?
Tool to assess competence (does)
workplace assessment
one of a number of wpba tools

How were/are PBA’s developed?

Counter implementation
Politics
User Training
Paradigm
inexpert meddling
expert group
identify procedure
construct validation sheet
pilot test

implementation problems
competence in learning
single formative
multiple summative
competence as a surgeon?

What does a PBA assess?

Safer Surgery
New book from Ashgate August 2009

New assessment tools
Introduction & Background
1994 – 2011 (17 yrs)

- 1994 early “PBA” in orthopaedics
- 2002-2011 OCAP
- Early 2005 – combined OCAP PBA & OPCOMP
- Sept 05 PBA writing workshops all specialties
- 2011 All specialties now have
  - Index procedures
  - PBA’s
- Development continues

Erasmus Wilson
FRCS 1837 (174)
Against a background of massive change

- Changing Public attitudes to doctors
- Changing training structures
  - Unfinished Business 2002
  - Modernising Medical Careers 2003
  - PMETB 2003
- Changing paradigm of service & training
Paradigm: prevailing worldview, culture or pattern of thought that dictates the relevant questions to ask and the acceptable style or language of the answers.

Pre vs. Post Copernican
Service & Training

- Training
- Trainee
- Service Delivery (experience)
Lessons to be learned

Failure  Success  Resonance
What is a Procedure Based Assessment (PBA)?
Procedure Based Assessment

- A tool to give structured, formative feedback to a trainee which can then be used as evidence to RITA/ARCP of learning, progress and achievement.
• Domains
  – Use all or selection

• Elements
  – Behavioural markers

• Simple scale
  – Not assessed
  – Unsatisfactory
  – Satisfactory
• Global summary
  – Qualitative commentary on completed elements
• NOT “signing off” as competent to do this procedure alone or “unsupervised”
PBA Key Features

- Common framework
  - Consent
  - Pre-operative planning
  - Pre operative preparation
  - Expose & close
  - Intraoperative technique
  - Post operative mgt
  - Global rating (performed elements)
- Procedure specific
- Cross mappable
- “Valid”

- Triggered
  - Trainee or trainer
- Objective
  - Passed / To be improved
- Repeatable
- Use whole or part
- Indicative of wider performance
- Formative individually
- Summative as whole collection
an individual PBA is a formative assessment of a single event. As a full collection PBA’s provide evidence to RITA of the competence of a trainee to learn procedures and perform them to a given standard or protocol.
PBA in “Real Life”

1. Trainer & trainee identify PBA (whole or parts) at start of attachment
2. Trainee downloads forms beforehand (no surprises)
3. Trigger specific assessment
   – Trainer or trainee can initiate
   – Agree elements of PBA to be assessed
4. Conduct assessment
   – Trainer scrubbed (usually)
   – Instruct trainee to verbalise
   – Prompt trainee to verbalise
5. Record assessment immediately following procedure
6. Immediate feedback to trainee
7. Both sign PBA form
8. Scores transferred to PBA summary sheet by trainee
What is a PBA? – Evidence & Feedback

- Evidence for Accrediting bodies
- Open, high quality, structured feedback
- Clear Aims & Objectives
- Knowledge
- Procedures
- Mini CV
- Formative WPB Assessments
- Learning Agreement
- Reports in various formats
- Reports
- Logbook
- Learning agreements
- PBA summary
- PBA & other tools

T&O Curriculum
Good Training Practice
A tool to assess competence

Miller’s Pyramid
One of a number of Workplace Assessment Tools

**Later Years**
- PBA (advanced?)
  - CBD

**Early Years**
- Mini-PAT
- CBD
- Mini-PAT
- Mini-CEX
- DOPS
- CBD

**Foundation**

**Seniority of Trainee**
PBA’s used in a variety of contexts

• Undergraduates
  – Observation sheet

• Early years trainees
  – Selected sections
  – Pre operative preparation

• New trainee
  – Commentary
  – Trainee gives feedback to trainer

• Senior trainees
  – Whole PBA
  – Difficult procedures
What does a PBA assess?
What is a PBA?

- Formative assessment
  - *Informs* the trainee on how they are doing
- Structured feedback
- Coaching tool
- Guiding evidence for the trainer on trainee’s need for supervision
- Snapshot of performance on a particular occasion
- A record to be added to portfolio
- **PART** of the evidence considered at RITA

- A formal requirement of training (not optional)

- A set of key *indicators*
  - If these are right then the rest will (probably) be right
  - Understanding (or lack of it) can be seen at this vantage point
  - *not* a checklist of how to perform procedure
What is a collection of PBA’s, assembled over several years with different trainers and collected as evidence through the PBA summary sheet presented to RITA or ARCP committee?

- A **Summative** assessment of the trainees competence in learning to perform operative procedures using the correct protocol to the correct standards
- Key part of evidence on which panel will base decision to approve individual’s training progress
What does a completed PBA mean?

• NOT a license to operate unsupervised!
• DOES give trainer confidence to allow trainee greater responsibility
• “Completed set demonstrates competence to learn procedures and perform to set protocol and standard”
What is a PBA **not**?

- A checklist of how to perform a specific procedure
- Trainee’s only chance to succeed
- A pass / fail situation
- Summative assessment of operative competence
- License to operate unsupervised
- A stand-alone assessment
  - Correlates across index procedures
  - Set in context of learning agreement
  - One element of overall T&O curriculum
Multiple roles, assessed by whole curriculum requirements

- "Skilful Technician"
- Decision maker
- Team leader
- Patient advocate
- Researcher
- ...

- MRCS
- FRCS
- Logbook
- Research
- PBA
- Other wpba
How were/are PBA’s developed?
Form an “Expert Group”

- Surgical experts
- Assessment professionals
- Educationally competent
- Collaboration
- Consensus
Identify “Index Procedure”

- Not possible to assess all procedures
- “Index Procedure”
  - Accessible
  - Assessable
  - Indicative

- T & O
  - Total Knee Replacement
  - Compression Hip Screw
  - External Fixator

- General Surgery
  - Hernia repair
  - Laparotomy for acute abdomen
  - Blunt/penetrating abdominal trauma
**Construct validation sheet from generic template**

### Procedure-Based Assessment Validation

<table>
<thead>
<tr>
<th>Specialty:</th>
<th>Procedure:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Competencies and Definitions</th>
<th>Positive Behaviours (doing what should be done)</th>
<th>Negative Behaviours (doing what shouldn’t be done)</th>
<th>Negative – Passive Behaviours (not doing what should be done)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Consent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| C1  | Demonstrates sound knowledge of indications and contraindications including alternatives to surgery | Explains using examples relevant to the patient:  
  - Principle benefit of operation  
  - Subsequent improvement of function  
  - Limitations of surgery  
  - Consequences of not having surgery | Expresses unrealistic views of the improvement in function expected following the procedure | Fails to point out the limitation operation |
| C2  | Demonstrates awareness of sequelae of operative or non operative management | Describes consequences, agrees expectations and checks patient understanding | Is over confident in describing consequences, reinforces patient’s unrealistic expectations | Fails to mention key inevitable consequences |

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**Note:**
- Red circle in C2: Fails to mention key inevitable consequences.
Example: Total Shoulder Replacement (work in progress)

<table>
<thead>
<tr>
<th>Communicates clearly and consistently with the scrub team</th>
<th>Communicates clearly and consistently with the anaesthetist</th>
<th>Dislocates shoulder</th>
<th>Prepares humerus appropriately to match design of implant</th>
<th>Demonstrates familiarity and understanding of glenoid preparation</th>
<th>Uses trials and checks component orientation properly</th>
<th>Fixes components appropriately</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sets positive tone with appropriate greeting. Asks for instruments clearly. Informs as to next steps. Asks for instruments by correct name</td>
<td>Sets positive tone with appropriate greeting. Sets clear goals and expectations</td>
<td>Performs a good release and dislocates without excess force</td>
<td>Places jigs correctly and prepares the proximal humerus safely</td>
<td>Obtains good exposure of the glenoid and uses guides appropriately to adequately prepare the glenoid</td>
<td>Inserts the appropriate trials and assesses adequacy appropriately</td>
<td>Inserts the components using a stem design that provides optimal fixation</td>
</tr>
<tr>
<td>Uses rough or inappropriate tone of voice or words. Uses slang or 'local' descriptions of instruments</td>
<td>Proceeds with next step of procedure without anaesthetic advice (where required)</td>
<td>Attempts to force the dislocation by tearing tissues</td>
<td>Prepares bone without adequately protecting the soft tissues. Places jigs in the wrong position</td>
<td>Prepares the glenoid inadequately</td>
<td>Implants trials in an incorrect position and does not correct error</td>
<td>Moves the implant during cementing</td>
</tr>
<tr>
<td>Gives no greeting, does not ask for anything (but expects to be given instruments)</td>
<td>Fails to inform anaesthetist of key phase requiring anaesthetic cooperation</td>
<td>Fails to perform an adequate dislocation and gives a poor exposure of the head</td>
<td>Fails to excise osteophytes before preparing bone</td>
<td>Fails to expose the glenoid appropriately before starting preparation</td>
<td>Is unable to assess adequacy of trials or fails to trial implants</td>
<td>Does not insert cement correctly</td>
</tr>
</tbody>
</table>

NB: Focus on Behaviours!
Pilot Test

- Time
  - debrief
- Observeability
- Unexpected problems
Implement!

“Pirates, not the navy”
Problems we faced/are facing
Politics & Counter implementation

• “its my ball…”
• One size must fit all
User Training

- Powerpoint guides
- Briefings
- Opportunistic
- RCSEd initiative
Paradigms

“The innovator has for enemies those who did well in the old situation and faint friends in those who might do well in the new”

Machiavelli, The Prince
Inexpert meddling

- Evolution?
- Entropy?
- £200k
- >£3.5 million

<table>
<thead>
<tr>
<th></th>
<th>Competent</th>
<th>Incompetent</th>
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<tr>
<td>Nasty</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Nice</td>
<td>3</td>
<td>4</td>
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Questions & Discussion

Introduction & Background

Features

Implementation problems

How are PBA’s developed?

What does a PBA assess?
PBA design and validation
Procedure Based assessment in the workplace faced a design problem – what’s a “Procedure”?

- No such thing as a “procedure”
- Conflicting variables from:
  - patients
  - presenting conditions
  - complexity of procedure
  - theatre teams
  - Trainers / Consultants
  - workplace equipment
  - “Uneven playing field”

- Implications for assessment
  - What’s possible in practice
  - What the assessment means
Design “solution”: **Index** Procedures?

- Indicative of competence or ability across the broad spectrum of the specialty
- Useable by trainers
- Accessible to trainees (i.e. significant numbers available)
- If they can demonstrate that they learned to do procedure X, can they be trusted to learn procedure Y without assessment?
How were index procedures selected?

- Delphic process using approx 150 trainers plus logbook evidence
- Index procedure
  - Indicative
  - Unique
  - Observable
  - Accessible
- Orthopaedics 14 at present, may rise to 20
Establishing PBA validity

• Valid selection of index procedures
  – Delphic group(s)
  – Availability – logbook evidence

• Internal validity
  – Delphic groups
  – Validation worksheets
    • Behavioural markers
    • Positive / negative / negative passive

• Number of assessments

• Number of assessors

• Further studies in progress
PBA Validation worksheet to establish internal face validity by detailed consensus

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  - Principle benefit of operation  
  - Subsequent improvement of function  
  - Limitations of surgery  
  - Consequences of not having surgery | Expresses unrealistic views of the improvement in function expected following the procedure | Fails to point out the limitations of the operation |
| C2 Demonstrates awareness of consequences of taking action operatively | Describes consequences, agrees expectations and checks patient understanding | Over confident in describing consequences, reinforces patient's unrealistic expectations | Fails to mention key inevitable consequences |
| C3 Demonstrates sound knowledge of complications of surgery | Is able to explain in priority order the complications likely to occur in terms of commonality and in terms of seriousness | Spends time explaining rare complications and fails to mention commoner ones | Misses out one or more major complications when explaining to trainer or patient |
Responses: NE Trainers June 03

1. Is it a good idea?
2. Will it work?

Yes  No
1. Is it a good idea?
2. Will it work?

Yes  No
OCAP NE Trainers
June 2004
I'm confident to use this/suitable for my current practice
SW Thames May 04, Trainers able to use how many pba’s?
SW Thames How many trainers able to use which PBA's

- PBA 1: 1 trainer
- PBA 2: 2 trainers
- PBA 3: 3 trainers
- PBA 4: 5 trainers
- PBA 5: 6 trainers
- PBA 6: 7 trainers
- PBA 7: 8 trainers
- PBA 8: 9 trainers
- PBA 9: 10 trainers
- PBA 10: 11 trainers
- PBA 11: 12 trainers
- PBA 12: 13 trainers
- PBA 13: 14 trainers
- PBA 14: 15 trainers
- PBA 15: 16 trainers
- PBA 16: 17 trainers
- PBA 17: 18 trainers
- PBA 18: 19 trainers
- PBA 19: 20 trainers
- PBA 20: 21 trainers
PBA External Reliability & Validity Study
Do’s & Don’ts
How NOT to use a PBA

1. Fail to discuss or identify target procedures
   - No learning agreement
2. No assessments triggered
   - Too busy?
   - Inappropriately fearful
3. Trainer not scrubbed
   - Inadequate view of procedure
   - Patient at risk
4. Inadequate observation
   Judge on basis of evidence on the day, not personal view of what trainee could have done
5. Inappropriate prompting
   - guidance by retractor
6. Over-use of “not assessed”
   - Evidence for intervention
7. Delaying recording to later date
   - Memory test
   - Paperwork will take longer
8. Delaying feedback to later date
   - Less effective
   - Argument pantomime
9. Turning feedback into teaching session
   - Laudable
   - Will take longer
10. Fail to transfer scores to PBA summary sheet
    - RITA cannot see progression
How long should a PBA take?

- Same time as the procedure usually takes when done by trainee
- 10-15 minutes afterwards to review, fill forms
- NB may be more demanding at the early stages of a trainee’s career, where very few assessments have taken place for a lengthy period or at start of whole project when trainer is unfamiliar
- 45 minutes??
- If you don’t do it immediately after the procedure it will take longer
  - Don’t remember what happened
  - Don’t agree what happened
- Completing a PBA is not a teaching session!
PBA in practice

- Trainer or trainee triggers PBA
- NB Trainer agrees to the PBA
- Trainee conducts agreed parts of procedure observed by trainer
- Trainer usually scrubbed
- Trainee verbalises, explains what intentions are
- Trainer steps in as/where necessary
- Forms completed and feedback given immediately after procedure
- Trainee includes all forms in portfolio, notes in logbook and updates PBA summary sheet
PBA: What to write

- Mark elements as “S” if there is observable evidence that performance is satisfactory
- Mark element as “U” if the trainee failed to perform satisfactorily, or provided evidence that they were about to perform unsatisfactorily (NB Patient care and safety is never compromised)
- Mark elements or sections as “N” if they were not assessed, either by agreement beforehand or by circumstances which prevented the trainee from completing the procedure
- If a trainer has to offer guidance or intervene on any element the trainee may continue (having received “U” for that element) at the trainer’s discretion.
- Comments should be added where possible to help the trainee to improve

<table>
<thead>
<tr>
<th>Competencies and Definitions</th>
<th>S/D/E</th>
<th>N/U/S</th>
<th>Comments</th>
</tr>
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<tbody>
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<td>C2 Demonstrates awareness of consequences of taking action operatively</td>
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<tr>
<td>C3 Demonstrates sound knowledge of complications of surgery</td>
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<td>C4 Explains the perioperative process to the patient and/or relatives and checks understanding</td>
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<tr>
<td>C5 Explains likely outcome and time to recovery and checks understanding</td>
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<td>C6 Checks in theatre that consent has been obtained</td>
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<tr>
<td>II. Pre operative planning</td>
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<tr>
<td>Pl1 Demonstrates adoption of anatomical and pathological abnormalities and operative strategy, to deal with these</td>
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<td>Pl2 Ability to make reasoned choice of appropriate equipment, materials or devices (if any), taking into account appropriate investigations e.g. x-rays</td>
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<tr>
<td>Pl3 Checks materials, equipment and device requirements with operating room staff</td>
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<td>Pl4 Where applicable ensures the operation site is marked</td>
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<td>Pl5 Checks patient records</td>
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<tr>
<td>III. Pre operative preparation</td>
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<tr>
<td>Pr1 Ensures proper and safe positioning of the patient on the operating table</td>
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<tr>
<td>Pr2 Ensures supporting the equipment and materials are deployed safely and appropriate drugs administered (e.g. anaesthetic, drugs, tourniquet)</td>
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<td>Pr3 Arranges for and deactivates supporting staff, equipment (e.g. image intensification, visible equipment)</td>
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<td>Pr4 Gives effective briefing to theatre team</td>
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<td>Pr5 Demonstrates useful aseptic technique with little risk of compromising sterile field</td>
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<td>IV. Exposure and closure</td>
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<tr>
<td>E1 Demonstrates knowledge of optimum skin incision</td>
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<td>E2 Achieves an adequate exposure through successful dissection in correct tissue planes and identifies all structures correctly</td>
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<td>E3 Completes a wound repair</td>
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<tr>
<td>E4 Protects the wound with dressings, splints and drains</td>
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<tr>
<td>V. Intra Operative Technique</td>
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<tr>
<td>I1. Follows an agreed, logical sequence or protocol for the procedure</td>
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<tr>
<td>I2. Consistently handles tissue well with minimal damage</td>
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<td>I3. Controls bleeding promptly by an appropriate method</td>
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<td>I4. Knots and sutures demonstrates correct technique</td>
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<td>I5. Appropriate and safe use of instruments</td>
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<td>I6. Proceeds at appropriate pace with economy of movement</td>
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<td>I7. Anticipates and responds appropriately to variation</td>
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<td>I8. Deals calmly and effectively with untoward events/complications</td>
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<td>I9. Uses assistance(s) to the best advantage at all times</td>
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When & How to use them
When to use PBA’s

• Undergraduates
  – Observation sheet
• Early years trainees
  – Selected sections
  – Pre operative preparation
• New trainee
  – Commentary
  – Trainee gives feedback to trainer
• Senior trainees
  – Whole PBA
  – Difficult procedures
NB A PBA is conducted in the real world, in real time. The trainer directs the PBA and must never compromise the quality of patient care for the sake of the assessment.
How to write a PBA
<table>
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<tr>
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- Limitations of surgery  
- Consequences of not having surgery | Expresses unrealistic views of the improvement in function expected following the procedure | Fails to point out the limitation of operation |
<p>|                            | C2 Demonstrates awareness of sequelae of operative or non operative management | Describes consequences, agrees expectations and checks patient understanding | Is over confident in describing consequences, reinforces patient’s unrealistic expectations | Fails to mention key inevitable consequences |
|                            | C3 Demonstrates sound knowledge of complications of surgery | Explains in priority order the complications likely to occur in terms of commonality and in terms of seriousness | Spends time explaining rare complications and fails to mention commoner ones | Misses out one or more major complication(s) when explaining complications to patient or trainer |
|                            | C4 Explains the perioperative process to the patient and/or relatives or carers and checks understanding | Describes what will happen throughout the management of the condition, indicating clear post operative milestones, giving a rough idea of time involved and specifying who will do what. Questions the patient to check that their expectations are realistic and they have understood fully | Uses technical terms, explains too quickly and does not check understanding | Misses out common events, particularly those likely to happen in the early post operative period |
|                            | C5 Explains likely outcome and time to recovery and checks understanding | Expresses sensible prognosis and clearly has knowledge of the current outcome data | Expresses over optimistic outcomes and glosses over realistic difficulties | Fails to check that the patient understood by actively listening to patient’s reiteration of what is said to them |</p>
<table>
<thead>
<tr>
<th>IT9</th>
<th>Uses assistant(s) to the best advantage at all times</th>
<th>Briefs assistants and places them and the instruments where they are needed</th>
<th>Accepts whatever assistant does irrespective of whether or not appropriate</th>
<th>Fails to brief assistant and expresses irritation when positions are not what are required</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT10</td>
<td>Communicates clearly and consistently with the scrub team</td>
<td>Sets positive tone with appropriate greeting. Asks for instruments clearly. Informs as to next steps. Asks for instruments by correct name</td>
<td>Uses rough or inappropriate tone of voice or words. Uses slang or 'local' descriptions of instruments</td>
<td>Gives no greeting, does not ask for anything (but expects to be given it)</td>
</tr>
<tr>
<td>IT11</td>
<td>Communicates clearly and consistently with the anaesthetist</td>
<td>Sets positive tone with appropriate greeting. Sets clear goals and expectations</td>
<td>Proceeds with next step of procedure without anaesthetic advice (where required)</td>
<td>Fails to inform anaesthetist of key phase requiring anaesthetic cooperation</td>
</tr>
<tr>
<td>IT12</td>
<td>Dislocates shoulder</td>
<td>Performs a good release and dislocates without excess force</td>
<td>Attempts to force the dislocation by tearing tissues</td>
<td>Fails to perform an adequate dislocation and gives a poor exposure of the head</td>
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<td>IT13</td>
<td>Prepares humerus appropriately to match design of implant</td>
<td>Places jigs correctly and prepares the proximal humerus safely</td>
<td>Prepares bone without adequately protecting the soft tissues. Places jigs in the wrong position</td>
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<tr>
<td>IT14</td>
<td>Demonstrates familiarity and understanding of glenoid preparation</td>
<td>Obtains good exposure of the glenoid and uses guides appropriately to adequately prepare the glenoid</td>
<td>Prepares the glenoid inadequately</td>
<td>Fails to expose the glenoid appropriately before starting preparation</td>
</tr>
<tr>
<td>IT15</td>
<td>Uses trials and checks component orientation properly</td>
<td>Inserts the appropriate trials and assesses adequacy appropriately</td>
<td>Implants trials in an incorrect position and does not correct error</td>
<td>Is unable to assess adequacy of trials or fails to trial implants</td>
</tr>
<tr>
<td>IT16</td>
<td>Fixes components appropriately</td>
<td>Inserts the components using a good technique. Achieves primary stability</td>
<td>Moves the implant during cement curing. Over or underreduces relative to the trial</td>
<td>Does not insert cement correctly or fails to achieve primary stability in uncemented prostheses</td>
</tr>
<tr>
<td>IT17</td>
<td>Performs final reduction and checks for stability</td>
<td>Reduces the shoulder safely and assesses stability and range of motion properly</td>
<td>Fails to reduce shoulder or forces reduction</td>
<td>Does not assess stability and range of motion after reduction</td>
</tr>
</tbody>
</table>
Writing a PBA exercise

- Form groups 3 or 4
- Pick a specialist interest other than your own (no experts)
- Pick a procedure that meets the criteria
  - Accessible
  - Assessable
  - Indicative
- Agree on worksheet examples and content for intraoperative technique section
- Review examples
  - Behaviour?
  - See / hear?
- Establish Consensus
  - Not democracy!
Writing a PBA exercise

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<table>
<thead>
<tr>
<th>Potencies and Definitions</th>
<th>Positive Behaviours (doing what should be done)</th>
<th>Negative Behaviours (doing what shouldn't be done)</th>
<th>Negative &amp; Passive Behaviours (not doing what should be done)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doesn't affect the wound with dressings, sips and drains where appropriate</td>
<td>Personally supervises the application of the wound dressing</td>
<td>Walks away from the operating table without briefing the assistant or the nurse on what they require to cover the wound</td>
<td>Fails to specify required dressing</td>
</tr>
<tr>
<td>a operative Technique</td>
<td>Justifies actions at any point in procedure</td>
<td>Spends a lot of time removing superfluous tissue</td>
<td>When a difficulty is encountered to complete manoeuvre</td>
</tr>
<tr>
<td>shows an agreed, logical sequence or protocol for the procedure</td>
<td>Personally places self retaining retractors and checks whether the skin is under tension</td>
<td>Pulls and tears tissue. Allows the wound edges to become dry</td>
<td>Fails to recognise tissue damage</td>
</tr>
<tr>
<td>Persistently handles tissue well with minimal damage</td>
<td>Responds calmly by applying pressure initially. Briefs the team about what will need to be done – e.g. asks assistant to be ready for diathermy</td>
<td>Grabs in a non-systematic manner at soft tissue and indiscriminately applies diathermy. Continues with a dissection despite welling up of blood in the field</td>
<td>Fails to act calmly. Fails to brief</td>
</tr>
<tr>
<td>Controls bleeding promptly by an appropriate method</td>
<td>Draws soft tissue together without tension and forms proper reef knots</td>
<td>Pulls tissues tight so that the tissues blanche. Lets a wound edge gape or pulls one layer of tissue under another</td>
<td>Fails to use the correct method of technique</td>
</tr>
<tr>
<td>Demonstrates a sound technique of knots and sutures/staples</td>
<td>Asks for instruments in a timely manner anticipating what is needed</td>
<td>Uses an instrument for a purpose it is not intended. Takes whatever is given to them then complains</td>
<td>Fails to ask for correct instrument at the correct time</td>
</tr>
<tr>
<td>Uses instruments appropriately and safely</td>
<td>Lets the nurse know what is to be done or needed next</td>
<td>Stops and starts, picking things up and then putting them down without using them. Task not at end</td>
<td></td>
</tr>
<tr>
<td>Seeks at appropriate pace with economy of movement</td>
<td>Participates and responds appropriately variation e.g. anatomy</td>
<td>When encountering something unexpected stops and verbalises concerns with the team</td>
<td>Persists in finding difficult area</td>
</tr>
<tr>
<td>Communicates and responds appropriately</td>
<td>Verbalises and briefs the team on what needs to happen next</td>
<td>Verbalises issues continues to continue</td>
<td></td>
</tr>
<tr>
<td>Beware “awareness” Avoid checklisting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Beware “awareness”**

**Avoid checklisting**
Training Needs Analysis: working out how to help
PBA: Training Needs Analysis

Knowledge

Skills

Attitudes / values

Very intuitive to actually use, minimal skill demands

Need to understand their nature and design in order to use them effectively
## Training Needs Analysis

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Attitudes &amp; Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organise &amp; Prepare</td>
<td></td>
<td></td>
<td>Commitment to audit/ learning</td>
</tr>
<tr>
<td>Observe &amp; remember</td>
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</tr>
<tr>
<td>Encourage in Silence</td>
<td></td>
<td>Self-control</td>
<td></td>
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<tr>
<td>Give appropriate feedback</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Engage in validation</td>
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</table>