

Report of Basic Surgical Skills Course

Simulation and Skills Centre,
University Teaching Hospital of Kigali (“CHUK”)

October 11th - 12th 2016

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Executive Summary:

The Basic Surgical Skills course (BSSC) has become an integral part of the curriculum for surgical trainees throughout the world. The UK colleges of surgery developed the course and many courses throughout the world have been 'badged or credentialed' by the UK colleges and the College of Surgeons of East, Central and Southern Africa (COSECSA) to give an internationally recognized qualification. In the context of middle and low income countries, securing appropriate funding to provide for teaching the courses can be difficult.

The BSSC had been run intermittently in Rwanda in previous years but this is now the 3rd consecutive annual BSSC. The opportunity to provide a course taught according to the Royal College of Surgeons of Edinburgh (RCSEd) syllabus with 4 additional techniques arose due to original support from the RCSEd and Binks Trust as well as Johnson & Johnson / Ethicon, the Lochaber Rotary Club and Lochaber Burns' Club.

This course was planned for the new intake of Rwandan post-graduate year 1 (PGY1) surgical trainees for 2016 (14 in total) with 5 surgical trainees from DRC. The latter attended under the auspices of the Rwandan Surgical Society (RSS). The course was ultimately delivered to 17 trainees due to a Rwandan trainee being ill and a government administration delay encountered by a trainee from DRC.

This year, the BSSC was preceded by a 'Train the Trainer' course, led by Dr Georges Ntakiyiruta (GN), and designed to prepare those attending to deliver BSSC, consequently establishing a larger faculty of BSS trainers for Rwanda. This proved to be very successful and has trained a further cohort of 6 instructors who have observed and taken part in the delivery of the course. Both courses were extremely well received once again by the Rwandan faculty and trainees. The trainees were also invited to take part in a quantitative assessment of the impact of the BSSC on technical skills and confidence to perform procedures.

Plans are being made to stage another course with support from RCSEd and a small development fund grant for next year (2017). In the past year an OSCR registered charity called 'Scotland – Africa Surgical Training' has been established as a vehicle to collect and administer funding.

Background:

Over the past 8 years there have been 4 BSSC courses in Rwanda. The initial 2 courses, and a Train the Trainers course, were run by Mr Bob Lane and colleagues in association with the Royal College of Surgeons of England. The current run of consecutive courses began in October 2014 with Mr David Sedgwick (DS) convening.

Planning:

Following the success of the two previous Rwandan BSSCs in 2014 and 2015, which were also credentialed by RCSEd, a decision was made to deliver another BSSC for the new intake of PGY1 Rwanda surgical trainees for 2016. During the planning stage

a request was received for some places on the course for surgical trainees from Democratic Republic of Congo and 5 candidates were accepted.

In March the Vice-Chancellor of the University of Rwanda, Prof Phil Cotton, facilitated the donation of porcine animal tissue from the farm of the University department of Agriculture. Local staff facilitated the transport and processing of the porcine material. Unfortunately the fridge / freezer in the simulation centre was not working and a fridge/ freezer had to be purchased locally.

A request for suture material was made to Johnson and Johnson / Ethicon and they kindly donated 20 suture packs designed for BSS along with a History of Sutures and a Knotting Manual. Retrieval of the packs from Customs at Kigali Airport was a protracted process, taking 6 hours of time by senior Rwandan faculty. The cost of importing was 71,000 RWF (£71).

The convener of education and the education section at RCSEd granted recognition or 'badging' of the course in conjunction with COSECSA and provided essential administrative support.

A small research study was also planned to assess the efficacy of the training of the candidates during the BSSC and ethical approval was requested from the Research Ethics committee of CHUK.

A successful application was made to the British Medical Association Humanitarian fund for a grant to cover flights and hotel accommodation. Doctors Academy generously donated £500, the Rotary Club of Lochaber kindly donated £400 for the fridge/freezer and a donation of £200 was made from Robert and Sandra Provan of Letterfinlay Fine Foods. If there was a shortfall in the funding then a request for support would be made to the Binks Trustees at RCSEd.

DS and SJF arrived in Rwanda on 5th October, allowing pre-planning for the course, coordination of the procurement of animal material (pigs) for the surgical exercises and purchasing of the fridge/freezer.

Setting – The Simulation Centre, CHUK:

The centre is a two-roomed building with one area designated for preparation and storage of equipment, and the other for the delivery of teaching activities. There was reasonable space in the room for the candidates around 5 tables with a good view of the projector screen. A laptop and projector are part of the inventory of equipment in the simulation centre. A webcam for projecting demonstrations had been donated to the centre in 2014, allowing magnification of the techniques for the benefit of all candidates.

Train the Trainer for BSS

Arrangements were made for a COSECSA/RCSEd Train the Trainer course, specifically designed for BSS instructors, and led by Dr Georges Ntakiyiruta. The programme for the day included sessions on theories of adult learning, discussions on the important

features of effective teaching as well as teaching a skill and giving good feedback. (See Appendix 1)

After the lectures and discussion, the candidates were then able to familiarize themselves and engage in the process of setting up the Basic Surgical skills course. This involved preparing the animal material and setting up the abdominal wall jigs. Feedback from the participants of the course is summarized in Appendix 2. This was very positive and the majority felt it was relevant and interesting, well organized and well delivered; 88% felt that the objectives of the workshop had been mostly or completely met

Suggestions for improvement included allocating the skills for teaching earlier so that the instructor for the BSS course has more time to practice, extending the course to 2 days. 2 of the candidates felt there were no issues that needed to be brought to the faculty's attention.

BSS Course Programme:

The course programme was altered once again, to accommodate the problems of potential degradation of the animal material (final programme in appendix 3.) A brief faculty meeting was held to outline the programme and make final arrangements for the tasks of the day. Mrs Florence Gasatura (FG) and Mercy Kamukama, Administrative Assistant at RSS organised the registration of participants. FG assisted throughout the course in the preparation of and distribution of materials between sessions. We were also very helpfully assisted, throughout the TTT and BSS courses, by an Australian consultant colleague, who works with the trainees in DRC.

The introduction by DS, gave a brief summary of the functions of the College of Surgeons in Edinburgh with some background information on Scotland. The example of developing a Basic Surgical Skills course in Palestine was also presented. An emphasis on keeping their work tops tidy and free of sharps was emphasized. The purpose of the small research study planned for the beginning of the course was explained and consent from the candidates obtained. The candidates were then divided into 2 groups, one to perform the OSAT, complete the confidence matrix and operative experience questionnaire, whilst the others practiced hand washing, gowning and gloving. The results of the research study are being prepared for publication in a surgical journal and show that the course resulted in significant improvement in suturing technique and confidence to perform the taught skills.

Hand washing, in preparation for operating, and putting on the theatre gown were ably demonstrated by Dr Herbert Butana (HB). The session on instrument handling was led by Dr Leonard Ndayizeye (LN). Knot tying sessions were started by DS for the reef knot and the rest were taught by Dr Egide Abahuje (EA). All of the knot tying was taught using a four stage process to enhance the learning process. The suturing session was taught by Dr Robert Munyaneza (RM) and included interrupted, vertical mattress and sub-cuticular sutures. The first session of the afternoon was to give experience of techniques for establishing haemostasis led by Dr Christian Urimubabo (CU). A single layer sero-submucosal anastomosis was fashioned in the porcine small bowel by HB and GN. All the candidates had adequate time to practice this technique. The first day was concluded with a session on electrosurgery, which

included viewing of the RCSEd film on diathermy, discussion groups with 2 instructors per group of candidates and a practical 'hands on' session with the diathermy machine. At the end of day 1 the trainees were encouraged to reflect on the things they had performed well and the areas that they wanted to improve.

The faculty meeting in the evening reviewed the running of the course on day 1 and then made preparations for day 2. The whole faculty felt the course had run well and that the new Rwandan instructors had performed well. The latter were given immediate feedback according to Pendleton's Rules by one of the UK or senior Rwandan faculty. All the skills were covered and the day overran by 40 mins. There was excellent engagement in all aspects of the course by the new Rwandan instructors who also demonstrated excellent team working.

Areas for improvement were:

1. The number of gowns for the gowning and gloving skill station should be increased to speed up the process (Only 5 gowns available for the course from theatre- we will considering asking in the UK for old linen theatre gowns)
2. The new faculty members realised the need to prepare their skill station more thoroughly and get 'set' right.
3. A few of the knotting jigs were in need of repair
4. The suture kits had a few sutures missing including those for the tendon repair.
5. Preparing one side of the anastomosis before demonstrating the skill to show the process on the other side would save demonstration time.
6. In the diathermy section –some of the key points not mentioned in the video need highlighted; e.g. care with pedicles and 'end arteries'; clarify the role of alcohol in the skin prep; prepare a list of questions for group discussion
7. Online access to the video material was difficult for the candidates; we should consider issuing DVDs/CDs
8. We should consider acquiring one or two fold-up plastic picnic tables to give extra surfaces for preparation.

Day 2 BSS Course

On arrival at 07:45 on the second day, all faculty members set out the abdominal wall simulation (boxes with balloons and two overlying tight-fitting layers of different coloured Neoprene) and the traumatic wound simulation (chicken legs with gravel, plastic glove particles and soil).

The 'Objective Structured Assessment of Training' (OSAT) was held, when all the trainees were asked to close a simulated skin wound with hand tied knots and then remove the sutures safely and appropriately. 4 stations were used with a new instructor observing for 2 and then being the assessor for 1 or 2 candidates, with close mentoring by an experienced faculty member.

Abdominal closure was taught by LN using the pre-prepared "lunch box' abdominal wall jigs. This was followed by local anaesthetic infiltration, removal of a skin lesion and sebaceous cyst, which was demonstrated by EA. Wound debridement and

abscess drainage were taught by Dr Alex Bonane (AB). The abscess model (salad cream in tied-off glove finger ends) proved to be a popular simulation. The traumatic wounds were also debrided and cleaned extremely well. The final two fine tissue-handling sections were tendon repair and vein patch graft of an artery. The tendon repair was using a 3/0 Prolene suture with a modified Kessler stitch. The demonstration of this by Dr Dominique Mugenzi (DM) was very clear. The arterial repair was taught by SF using a shaped piece of glove and double-ended 4/0 prolene. Important technique modifications for vascular surgery were emphasized.

The final part of the course included brief presentations which introduced 4 skill stations. The skills taught included plastering technique to immobilize a wrist fracture (HB), chest drain insertion (RM), supra-pubic catheter insertion (AB) and cricothyroidotomy (CU) with group changes every 15 – 20 mins.

At the end of the course participants were once again asked to reflect on their training to identify what went well and where improvements were necessary. Course feedback was collected and analysis of the course feedback was performed by Paul Rafferty in the Education Section of RCSEd. The results are reported below in Appendix 4

In addition to the standard RCSEd BSSC feedback form, the candidates completed the skills confidence matrix. The results are being prepared for publication in a peer-reviewed journal.

The faculty meeting at the end of day 2 gave the positive feedback

1. The course went well
2. The simulation material was of high quality
3. There was a good spirit and harmony within the team

Areas for improvement included

1. Order more swabs for the cleaning and debridement of the traumatic wound
2. Order more stockinette and POP
3. Discuss the use of LA / Ketamine / GA for abscess drainage.
4. Consider moving POP session to Day 1 as the day was very long and 15- 20 mins was too short for effective teaching, practice and cast removal
5. Ensure the SIM centre is booked in good time for the courses next year.

Catering:

Morning coffee breaks and afternoon refreshments were taken immediately outside the simulation centre. They were provided by the restaurant on site at CHUK. Food at lunch breaks on both days was served in the hospital dining room.

Setting and Equipment:



TTT preparation of the instruments for BSSC



Faculty prepare the abdominal Wall Jigs



Preparation of the Sebaceous Cysts



Preparation of the 'trotters' for skills



Candidates gather to register for the BSS course



Dr Herbert Butana demonstrates Gowning and Gloving



Dr Leonard Ndayizeye demonstrates Instrument handling



Dr Egide Abahuje demonstrates 'Knot tying' to a candidate using the 4 stage technique.



Candidates practise suturing techniques observed by an instructor



Dr Herbert Butana demonstrates single layer sero-submucosal anastomosis mentored by Dr Georges Ntakiyiruta



Faculty meeting at the beginning of Day 2 of BSSC



OSAT at the beginning of Day 2



Candidates practise opening and closing the abdominal wall



Dr Robert Munyaneza demonstrates safe inter-costal chest drain insertion



Practising application of POP cast.



Candidates complete feedback for BSSC



BSS Feedback:

The feedback was very positive and has been summarized in Appendix 4. It shows high mean scores for the quality of the skills teaching. When asked to highlight the most important thing learnt in the course, the most frequent was bowel anastomosis (9 candidates), followed by knotting (6 candidates), and 4 candidates said 'all' the components of the course. All the candidates said they would be making changes to their working practices as a result of the course.

Topics for further courses were suggested and most frequently included were operative procedures such as perforated peptic ulcer repair, gastrostomy, appendectomy, ureter repair, and laparoscopic surgery.

Among the most popular aspects of the course were the organization by the faculty, the demonstration of the skills, time management and the overall supervision by the the instructors

The aspects that the candidates disliked included most commonly were the limitation of time for practice in a 2-day course including too many topics on the 2nd day .

The majority stated that the quality of the venue, location, audio-visuals and catering were either good or excellent.

Almost all the candidates had difficulty accessing the on-line pre-course materials. However all the candidates who answered said the course had met their expectations and that they would recommend it to a friend.

Of the 15 who answered the questions about the suture materials and packs, all stated they were good or excellent. These were supported by the free text comments about the quality of the suture packs.

Accounts

The accounts in appendix 5 show that financial support for the course consisted of a generous grant from the BMA Humanitarian Fund, and donations from Doctors Academy, Rotary Club of Lochaber, and Letterfinlay Fine Foods. The expenses are listed and show a small surplus which is held in the account of Scotland–Africa Training SCIO

Summary and Conclusion:

A Basic Surgical Skills Course was delivered for the 2016 intake of PGY1 Rwandan surgical trainees and 4 surgical trainees from the DRC training programme. The faculty comprised 2 UK instructors working with 4 experienced Rwandan instructors and 6 novice instructors who had successfully completed a TTT course for BSS instructors on the day before the course started. The Simulation Centre provided a suitable venue in CHUK, the main university hospital in Kigali. The course was taught according to the RCSEd guidelines with additional instruction on performance of a crico-thyroidotomy, chest drain insertion, plastering techniques and supra-pubic catheter insertion. There was no teaching on laparoscopic skills since laparoscopic

techniques are not widely in use in Rwanda. The feedback from the candidates was very positive and further plans have been drawn up to provide a BSSC for the 2017 intake of surgical trainees shortly after they have taken up their posts in early September.

Further plans:

1. Planning will be started for the next course to take place shortly after the next annual intake of trainees in to the Rwandan Surgical Training Programme, in September / October 2017.
2. Decide with the trustees of 'Scotland – Africa Surgical Training Charity' how to take forward future funding of the course.
3. Consider plans for a further 'Training the Trainer course' for BSS Instructors lead by Dr Georges Ntakiyiruta, with support from DS and SF. Next year, we plan to have TTT candidates attend with pre-specified tasks completed such as presentation of a lecture or teaching a skill, in order to give more contextual feedback.
4. Consider a second ('back to back') course on the next visit to accommodate the training of more trainees from neighbouring countries such as DRC and Burundi or a course for the Obstetric and Gynaecology trainees such as Foundation Skills in surgery.
5. Discuss with Johnson & Johnson / Ethicon the need for additional sutures.
6. Obtain more theatre gowns for the gowning and gloving exercise. It may be possible to procure unused linen gowns, that are now surplus to requirement, from the UK.
7. Request glove size from participants and tutors when registering for the course to help with ordering.
8. Pre-order the Plaster of Paris before the course begins.

Acknowledgements:

Thanks to the BMA Humanitarian Fund, Doctors Academy, Letterfinlay Fine Foods and The Binks Trust, RCSEd for their generous financial support.

Thanks also to Catherine Thwaites, International Activities Manager for her administrative support and encouragement.

We are also grateful to RCSEd for making the on-line pre-course materials available to the candidates with no charge.

We give a special thanks to Johnson & Johnson / Ethicon for the generous donation of suture materials, knotting manuals and booklets on the history of sutures.

We are also extremely grateful for the support of the Professor Phil Cotton, Vice –Chancellor of the University of Rwanda, who facilitated the acquisition of animal tissue from the University Department of Agriculture and also for his generous hospitality.

The candidates and instructors also thank Mr Bill Cameron, Technical Skills teacher at Lochaber high School, Fort William for his invaluable help in preparing the 'lunch box' abdominal wall jigs.

Mrs Florence Gasatura was present throughout the course and we thank her for her preparation of instruments, arranging for cleaning and catering provision.
Mr Archie Paterson and Nevis Bakery for delicious shortbread for the tea and coffee breaks.

Appendix 1: Train the Trainer for BSS Programme (10/10/16)

Rwanda Surgical Society

Train The Trainer for Surgical Trainers

October 10 th , 2016			
Hours	Subject	Initials	Time
8h00 – 8h15	Registration	MK	15
8h15 – 10h45	Introduction to Workshop and Introduction of participants	NG	10
	Identification of learning goals	NG	50
	Experiences of good and bad teaching(group discussion)	DS	30
	How adults learn & learning styles	NG	30
10h45 – 11h00	Tea Break		
11h00 – 13h15	Golden rules of giving a presentation	SF	25
	Feedback the food of champions	DS	20
	Teaching a clinical skill(Set Dialogue and Closure)	SF	45
13h15 – 14h00	Lunch break		
14h00 – 14h30	Helpful Tips to BSS Course	SF	45
14h30 – 17h00	Preparation of BSSC	DS & SF	150
17h00 – 17h30	Review and evaluation of the Train the Trainer Programme	MK	15

Tutors:

Ntakiyiruta, Georges (NG)

Fergusson, Stuart (SF)

Sedgwick, David (DS)

Appendix 2 : Summary of feedback from TTT for Basic Surgical Skills Course.

Please summarise your overall impressions of the workshop:

- The workshop was interesting in all aspects
- The workshop was interesting, topics all relevant and interesting and the knowledge and skills are transferred in a perfect method
- Good job
- Well organised, delivered. The knowledge was great
- The workshop was well organised and methods used for learning was wonderful
- Very good workshop, all needed information and provided in a summarised and well conducted manner
- Good overview, well explained, interactive

	Not at all	A little	Mostly	Completely	NA
Do you feel this workshop met the objectives?			50%	38%	12%

	Not at all	A little	Mostly	Completely	NA
Was the general content and style of the workshop what you expected?			38%	50%	12%

What aspects of this workshop did you find most valuable?

- Clear teaching of theory and practical
- Practical part, how to set BSS course
- Feedback
- The Discussion
- Preparation of stations for clinical skills teaching
- The theoretical aspect of the workshop was the most valuable
- The practice of preparing the basic surgical skills course
- Harmonic and progressive training trainers and involving team to prepare practice/materials

Are there any particular issues you would like to bring to our attention?

- Trainers practice before teaching seasons
- None x 2

- You can emphasise the theoretical aspect of learning, presentation, feedback
- Two days could be better
- The skill to be taught should be assigned earlier

WORKSHOP CONTENT

Please indicate your level of satisfaction with each of the sessions using the following scale and include comments if you wish to clarify your score.

1 = Very Dissatisfied 2 = Dissatisfied 3 = About average 4 = Satisfied 5 = Very Satisfied

	1	2	3	4	5	NA
Theory of Learning				50%	38%	12%
Presentation Skills				25%	63%	12%
Feedback				25%	63%	12%
Skills Training				38%	50%	12%
Comments:						
No comments						

Please comment on your experience of the on-line modules:

- Feedback involving a group of 4 – 5 candidates with a moderator – excellent findings – thinks too ameliorate
- No comment
- The online modules are useful and interesting
- They are intensive. However, participants may not take from appropriately
- Online modules are rich in content but you do not get the interaction seen with demonstrators/power ports
- No experience
- No much experience online modules

Organisational arrangements:

Please comment on any aspect of the organisational and administration arrangements

- Throughout the time, beginning and ending could be better, to available

teaching material at time

- Pre-course communication may have been improved – timing etc/accommodation worked earlier
- Well planned, organised workshop
- The course is well organised
- Well arranged and structured
- Well organised. Realistic and very useful for a beginner in teaching skills
- OK

	Yes	No	NA
Would you recommend this programme to a colleague?	75%		25%

Thank you for taking the time to complete this form. Your comments are valuable to us.

Appendix 3 – BSS Course Programme

BASIC SURGICAL SKILLS COURSE

11th & 12th October 2016, Rwanda

DAY 1		
Time	Topic	Demonstration by tutor
08:00 – 08:300	Faculty Meeting in Faculty Discussion Room	Convener & all tutors
08:30 – 09:00	Registration of Participants	Registration Desk
08:45	Introduction	Convener Dr David Sedgwick
09:00	Gowning and Gloving /OSAT	Dr Herbert Butana
10:00	Handling instruments	Dr Leonard Ndayizeye
10:25	Knots (1) Reef knot, instrument tie Assessment	Dr Egide Abahuje / Dr David Sedgwick
11:10	Coffee Break	
11:25	Knots (2) Surgeons knot, tie at depth Assessment	Dr Egide Abahuje / Dr David Sedgwick
12:00	Suturing Needle manipulation and driving, interrupted, continuous, sub-cuticular, assisting Assessment	Dr Robert Munvaneza / Dr Stuart Fergusson
13:00	Lunch Break	
13:45	Haemostasis, ligation in continuity, pedicle ligation, transfixion	Dr Christian Urimubabo
14.30	End to end bowel anastomosis interrupted, hand tied knots	Dr Herbert Butana
15.45	Coffee Break	
16.00	Diathermy	All tutors
!6:45	Question and answer session	All tutors

DAY 2		
Time	Topic	Demonstration by tutors
08:30	Skills consolidation/OSAT	All tutors
09:15	Abdominal incision and closure	Dr Leonard Ndayizeye
10:15	Skin lesions and LA techniques Skin lesions, sebaceous cyst	Dr Egide Abahuje
11:00	Coffee Break	
11:15	Fine tissue handling (2) Vein patch exercise, assisted	Dr Stuart Fergusson
12:15	Wound management Abscess drainage, debriding traumatic wound	Dr Alex Bonane
13:00	Lunch Break	
13:45	Fine tissue handling (1) Tendon repair, assisted	Dr Dominique Mugenzi
14:30	Demonstration of 4 techniques	
15.10	Coffee Break	
15:25	Chest Drain Insertion	Dr Robert Munvaneza/Dr Egide Abahuje
15.50	Crico-thyroidotomy	Dr Christian Urimubabo/ Dr Georges Ntakiyiruta
16.15	Insertion of Suprapubic catheter	Dr Alex Bonane
16.40	Application of Colles POP	Dr Herbert Butana
17.10	Question and answer session, close	All tutors

Appendix 4 Summary of the feedback from the candidates of BSS Course 2016

FROM HERE. HEALTH



BASIC SURGICAL SKILLS COURSE

11th & 12th October 2016. Rwanda

EVALUATION SUMMARY

As a result of attending this course, I have improved in my ability to:	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	NA
Explain the principles of good practice in theatre etiquette, knot tying, suturing, haemostasis, anastomosis, surgical diathermy and ergonomics for endoscopic surgery				12%	65%	23%
Describe correct handling and use of surgical instruments				24%	76%	
Demonstrate an appropriate procedure for 'gowning' and 'gloving' in accordance with recommended standards of practice				6%	94%	
Tie a variety of reliable knots, including surgical reef knots and the Aberdeen knot and tying at depth				24%	76%	
Suture a variety of tissues, including skin, bowel, vascular tissue and tendons effectively				35%	65%	
Perform abscess drainage and contaminated wound debridement in accordance with the basic principles of wound management					100%	
Demonstrate basic techniques for small bowel, vascular and tendon anastomoses				41%	59%	
Demonstrate an understanding of basic diathermic technique			6%	59%	35%	
Demonstrate effective management of ergonomic tissue commonly encountered with endoscopic surgery	6%					94%

Please rate the quality of each session in terms of clarity, relevance and delivery on a scale of 1 to 5

(1 = Very Poor, 2 = Poor, 3 = Adequate, 4 = Good, 5 = Very Good)

Sessions:	Clarity of information	Relevance of session	Delivery (materials/style)
Day 1			
Introduction	4.6	4.8	4.8
Gowning and Gloving	4.9	4.8	4.8
Handling Instruments	4.8	4.9	4.9
Knots (1) Reef knot, instrument tie	4.9	4.9	4.9
Knots (2) Surgeons knot, tie at depth	4.9	4.9	4.9
Suturing Needle manipulation and driving, interrupted, sub-cuticular, vertical mattress	4.9	4.9	4.8
Skin lesions and LA techniques – Skin lesions, sebaceous cyst	4.7	4.9	4.8
Fine tissue handling (1) Tendon repair, assisted	4.9	4.9	4.9
Wound management – Abscess drainage, debriding traumatic wound	5.0	4.9	4.9
Diathermy (practical or seminar)	4.3	4.5	4.5

Sessions:	Clarity of information	Relevance of session	Delivery (materials/style)
Day 2			
Skills consolidation/OSAT	4.7	4.7	4.7
Abdominal incision and closure	4.8	4.8	4.6
Haemostasis – ligation in continuity, pedicle ligation, transfixion	4.8	4.9	4.9
End to end bowel anastomosis – interrupted, instrument tied knots	4.9	4.9	4.8
Fine tissue handling (2) Vein patch exercise, assisted	4.6	4.6	4.4
Chest Drain Insertion	4.9	4.9	4.8
Crico- Thyroidectomy	4.6	4.6	4.4
Insertion of Suprapubic Catheter	4.9	4.9	4.8
Application of Colles POP	4.8	4.9	4.9

What is the most important thing you have learnt from this course?

- Everything I learnt in this course very important to me
- Basic Surgical Skills (all)
- Open Cystostomy
- Attention to details and to always be systematic
- Mostly knot intestinal anastomosis, but all are useful
- Instrumental handling safety of other safe practices knot tying, intestinal anastomosis
- Bowel anastomosis
- Almost all the component of course was important for me
- Means safer practice in general surgery
- End to end bowel anastomosis – interrupted, instrument tied knot
- Hand knot, end to end anastomosis
- The end to end bowel anastomosis and handle knots
- Is to have confidence in what I do as a future surgeon. I got the basics that will bring my skills further
- End to end bowel anastomosis
- Reef Knot
- Bowel anastomosis, one handed knot tying
- Tendon repair
- Bowel anastomosis, haemostasis techniques, chest drain insertion

Will you make any changes to your working practices as a result of attending this course?

- Of course yes, especially I was very unconfident to try chest tube insertion, SPC, doing bowel end to end anastomosis
- Tendon repair
- Yes very clear
- Yes
- Definitely yes
- Yes this course will improve my surgical practices
- Yes many changes in my practice
- I will make many changes in my working practices after this course
- Yes I will
- Yes I will be doing procedures with high level of confidence and standard
- Of course, I will apply everything taught
- Yes I will be confident and safe, all of I learned
- Of course
- Yes, there are many things I thought I did that were wrong and I will be able to teach my juniors too
- Yes (proper material handling, perform on safe procedures)
- Yes I will do so
- Obviously

After having attended the course, do you have any unanswered questions? *

- Yes
- I don't have any
- No, the topics were all well covered
- No x 4
- Yes, Gastric repair
- No, I don't
- Yes, involving the same course on Gastrostomy would be great
- Yes, the use of one layer in end to end bowel anastomosis and not the use of two layer, why this?
- None
- Yes but not asked
- Repair of Viscus Rupture
- To practice some procedures on human living body like Suprapubic Catherisation

In the future, I'd like to see RCSEd offer courses on the following topics: *

- Feeding Gastrostomy
- Bowel resections
- Yes x 3
- I'd like a topic about general surgery in gynecology
- Yes I'd like
- Gastrostomy
- Stomach perforate repair
- Gastric Perforate repair, appendectomy
- Laparoscopy x 2
- Ingrown nail – nail removal
- Ergonomic for Endoscopic Surgery
- Demonstrate effective management of ergonomic tissue commonly encountered with endoscopic surgery
- Feeding Gastrostomy
- How to do horizontal mattress
- Ureter repair
- Repair of viscus rupture

Please comment on up to three aspects of the course that you LIKED:

- Very humble and good instructors
- The organization of the course was fantastic; how the course was given, the use of the time and the material for practice
- The presentation of the topic
- The technic of teaching in practice
- The motivation of presenting the topic
- Good presentation of topic
- Good demonstration of different procedures
- We were well directed
- Technical demonstration was great
- Knot tying was good
- Vein patch
- Well given materials – Good hand practice
- Good materials – hand trainers
- I liked how you used camera and projections and teaching. We could see
- I liked how you provided real tissue
- I liked how you chose operations that we need to do
- Organisation of faculty
- Starting from the earliest to the most difficult technique/surgical skill
- It was a very practical course; after watching a video we would perform the procedure seen
- After the first day I was already confident on many topics
- We respected the teaching
- The courses were prepared well, properly presented
- The presenters allow the trainee to ask the questions and provide good answers
- The way this course was organized, allows almost all participants to make the practice
- Knot tying
- SPC
- Diathermy
- Abdominal incision and closure I learned a lot of things
- Haemostasis Ligation, Pedicle Ligation, transfixion while being assisted. Can try on animal living body
- Chest drain insertion. I will be able to insert it myself
- Time management. Best simulator. Good and clear explanation & demonstrated on direct camera.
- Tea breaks
- The way of demonstration of a procedure
- Asking a trainee to repeat the procedure then giving access to perform
- Supervision of others performing and guiding through the whole course of practice

Please comment on up to three aspects of the course that you **DISLIKED**
(suggestions for improvement are welcome):

- Time limited
- No other issues
- To have more time to practice
- To have more time for practice for showing the procedure
- Not much time for demonstrations
- Questions was very limited
- Short time for practice
- I think we had too many topics on the 2nd day and we did not have enough time to practice. It would be nice to add a day
- The time was not too much
- Add other procedures like Laparoscopy
- Few days (next time at least 4 days)
- Diathermy – I have been unable to understand everything
- Suprapubic Catherisation – we didn't have too much time to practice
- Vascular repair – I have never seen where it's being done
- Medium resolution camera (VHD camera)
- The shortening of time during practice

Are you a member of RCSEd?	YES	NO	NA
I am a Member/Fellow of RCSEd?			100%
I am an Affiliate Member of RCSEd?			100%
My Specialty and Grade/Position <i>(please insert)</i> :			
<ul style="list-style-type: none"> • <i>General surgery PGYI</i> • <i>Post graduate year one Urology</i> 			

Please rate the following:	Very Poor	Poor	Satisfactory	Good	Excellent	NA
Location				53%	35%	12%
Venue				47%	29%	24%
Audio Visual Quality				41%	47%	12%
Catering			5%	53%	18%	24%
Registration Fee				6%	12%	82%
Overall rating of the course				23%	65%	12%

Pre-course Online Materials	YES	NO	NA
Was access to the online pre course materials straightforward?	12%	70%	18%

Have you accessed other areas now open to you on the website (e.g. NOTSS resources)? If so have you found this useful?	18%	70%	12%
<p><i>Comments:</i></p> <ul style="list-style-type: none"> • The course was useful overall • I didn't find the pre-course online materials when I have got in the site with my username • I am still in the registration process • The online course material was not accessible on the website • Very useful and interesting • It would be better if we accessed these materials ahead of time • Not yet having access to the online course materials 			

Other	YES	NO	NA
Did this course meet your expectations?	88%		12%
Would you recommend this course to a friend / colleague?	88%		12%

<i>Comments (your comments are valuable to us)</i>
<ul style="list-style-type: none"> • No words to describe the usefulness of this training because it was wonderful • Strengthen the practice on Crico-Thyroidectomy • Thank you for your hard working and organising this course • This workshop is very interesting and helps us to learn to be confident so that we deliver good service to patient • Thank you very much or the most important surgical skills provided to us. They are so useful in our daily practice as future surgeons • Your team is really of great importance to my knowledge and my career in particular, this is a great job you have done. You may consider to come back for other procedures you did not provide. Thanks • I liked the way course materials at day 1 and 2 were delivered, I profited to improve my surgical skills, especially the golden standard intestinal anastomosis, the Crico-Thyroidectomy was well done. • This course was well organized and what we need for daily activities at the hospital as future surgeons was achieved. Others, we will get them from seniors • The course was wonderful and we will benefit during our training • Thank you for this course. It was green successfully, the simulator was wonderful, excellent but the live camera should have improved the resolution light

- The course was so good and very helpful. I'd request to improve the number of days so that the time for practice would be increased.

The following questions are asked on behalf of Ethicon regarding the suture packs which you have used throughout the course.

In order to enhance our offering please could you spend a minute completing the questions below.



How would you rate the following:	Little Use	Average	Good	Excellent	NA
Content of the suture pack			18%	70%	12%
Beneficial to training course			6%	76%	18%
Overall impressions on the suture pack			6%	76%	18%

Please use the space below to add any comments you may have on ETHICON services/products.

- For me, the materials were excellent in quality at different sizes
- The sutures were good
- I have been optimised to see this useful teaching material
- No comment actually, all was excellent
- Ethicon provides good materials, in proper fashion and safety
- Good products
- Appreciated suture pack
- Ethicon give a good product, it was very helpful for us
- The plates for suturing with rubber for deep suture may have something to fix than on the table like Vaccume (Vontouse)

