# Future surgeons:
# “The importance of supporting your successors”

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- I have no declarations or conflicts of interest

# Except:

I was lead author for:

- RCS mentoring guide
- RCS ‘learning in the operating theatre’
- RCS Avoiding unconscious bias
- RCS undergraduate surgical curriculum
- RCS Consultant job planning guide
- RCS Quality indicators for job plans for SAS surgeons
- ‘Exercise: the miracle cure’ – Academy of Medical Royal Colleges

- And I contributed to: RCS ‘Surgical Tutor handbook 2014’
- And RCS: ‘Surgical Care Practitioner curriculum’ update

# The answer:

1. Be nice
2. Focus on the real hurdles
3. Maximise time

1. Be nice!
    a. Be a good role model
    b. Challenge the bad stuff

2. Focus on the real hurdles
    a. Get knowledge, skills and surgical thinking

3. Time – maximise
    a. Get timetable right
    b. Get support right

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# Role models – look who's moved into the big chair!

AND many
more younger and
female now

Clare Marx

me here!


ANY Member or
Fellow can stand for
Council:

- 6 mornings /year
- write 100 words
- apply any JANUARY


**Mentoring:** New RCS guide

www.rcseng.ac.uk in “publications”

This is a simple guide about being a mentor or mentee, basic ground rules

# I’m a rubbish role model!


This surgeon is a better role model:

- Part-time training
- 2 children
- Full-time Consultant

# Being brave and always doing the right thing…

Me

+ (Prof Farah Bhatti in 1995)

# We need to support all our trainees

East Sussex Healthcare NHS
NHS Trust

RCS

RCS
ADVANCING SURGICAL STANDARDS

http://surgicalcareers.rcseng.ac.uk

# Pregnancy and Maternity

Many surgeons successfully combined motherhood with a rewarding surgical career. Surgery benefits from a diverse workforce.

Remember the months of pregnancy are a short time in a surgical career

www.rcseng.ac.uk look in “careers” section

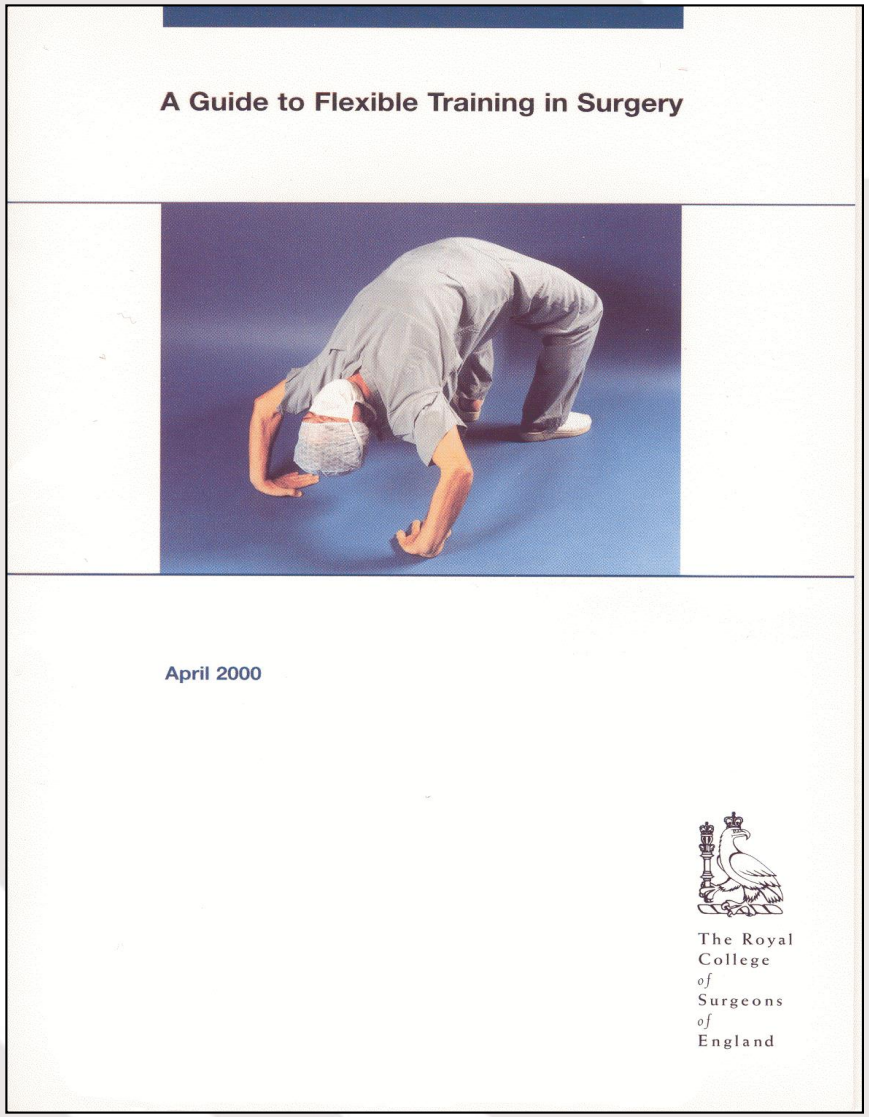
JUST KNOW – there is a way

# Breastfeeding

- If you want…
- You can express milk
- Takes 20 minutes
- Freeze it for daddy/ nanny/ nursery/ etc to give later
- You can just do morning and evening feeds
- Or take up to a year out – it is best to have a job to go back to

East Sussex Healthcare NHS
NHS Trust

# Less Than Full Time = “Flexible training”




- If “well founded reason”
- Administered through local region (all specialties)
- Date for completion of training (CCT) moves
- Options:
  - “slot share”
  - “supernumerary”
  - LTFT in a full-time post

- **RCS has a flexible working advisor careers@rcseng.ac.uk**

# I think the biggest impact on life (surgeon & patient) is…

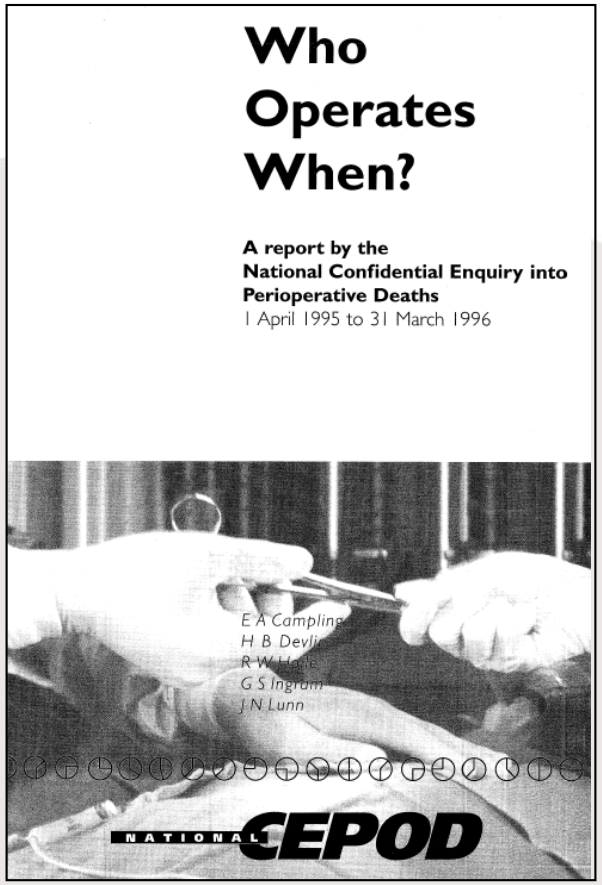
NCEPOD

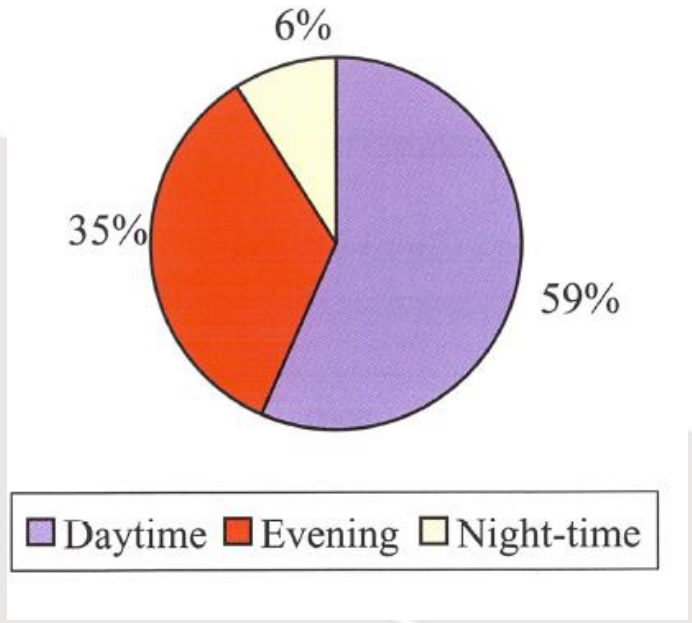
Then:

- 41% Emergency ops Out of hours
- Very scary
- You had to be hard
- You had to be macho next day

Now:

- everyone works 48 hrs/ week
- lists saved for emergencies & trauma every day
- Team-working is nicer and better




www.ncepod.org.uk

NCEPOD

Improving the quality of healthcare

National Confidential Enquiry into Patient Outcome and Death

# What motivates (or de-motivates...)?

- 76% motivated by personal contact / senior
- 34% “clinical placement actively discouraged them from surgery”
- 65% identified their specialty at medical school

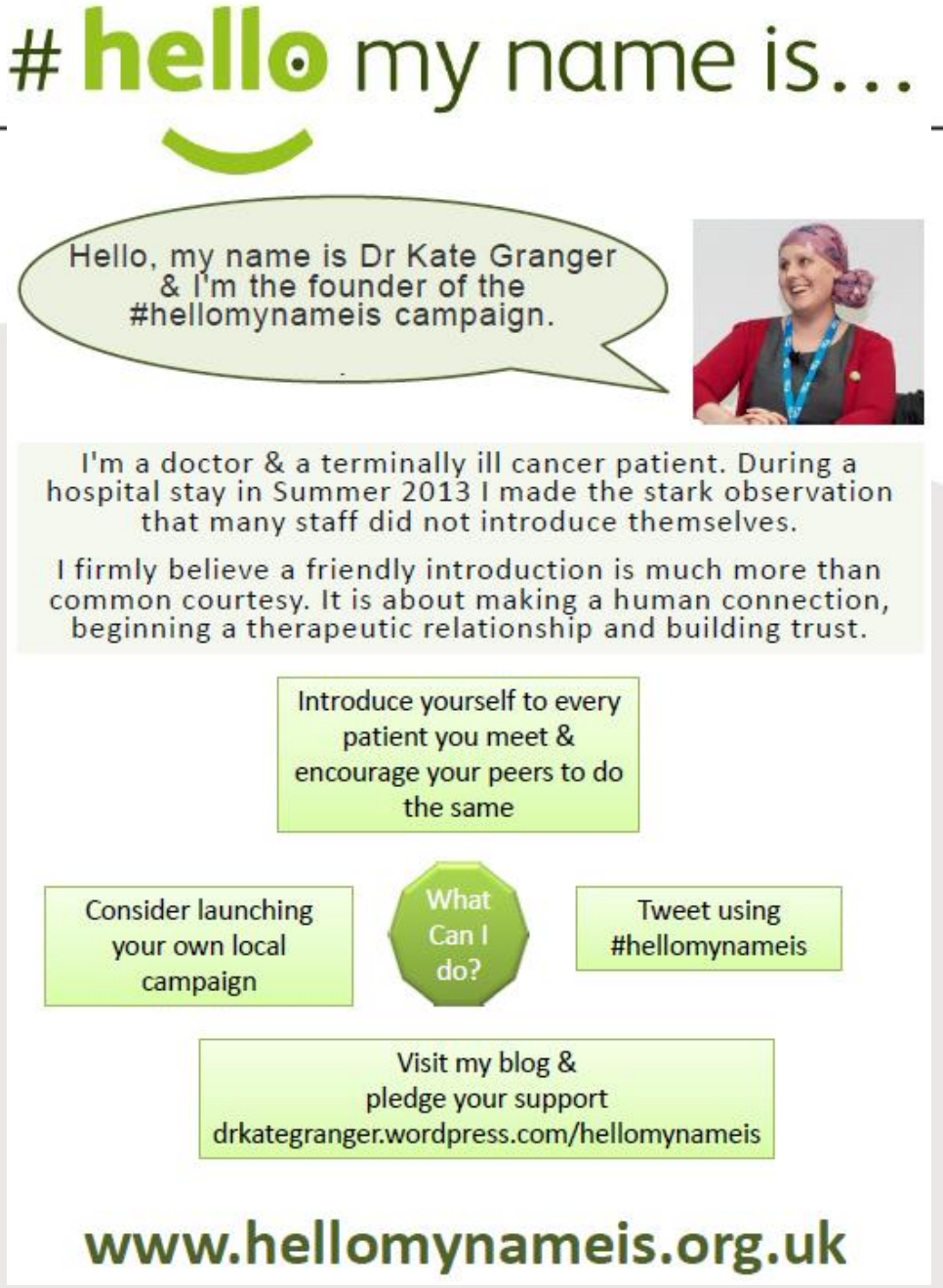
**Attitudes, Motivators, and Barriers to a Career in Surgery: A National Study of UK Undergraduate Medical Students**

*Paul A. Sutton, BMBS,*[*,†] *John Mason, BMBS,*[*] *Dale Vimalachandran, BMBS,*[*,†] *and Scarlett McNally, BMBS*[*,‡]

[*]Royal College of Surgeons of England, London, United Kingdom; [†]Countess of Chester Hospital NHS Foundation Trust, Chester, United Kingdom; and [‡]East Sussex Healthcare NHS Trust, Sussex, United Kingdom

# Start…

By saying hello
By knowing the student
Look nice
And/or be nice



# What's in a name?

*"We also believe that another term needs to be found to describe 'junior' or 'trainee' doctors. These are highly skilled and committed professionals and should be recognised as such."*

President RCSEd, 9.8.16.

*"One of the challenges facing doctors in training is the respect they receive in the workplace and the national media. For a long time there have been concerns that the term 'junior doctor' is inappropriate. Today we have asked ASiT and BOTA to agree on a new term which this College will ruthlessly adhere to in all future communications.*

Council of RCS England, open letter, Sept 2016


https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/avoiding-unconscious-bias/

- We all have unconscious bias
- Start by NOT saying the first thing that comes into your head
- Start by saying hello and looking welcoming
- Try to find common ground
- Focus on the task not the individual
- Have systems to reduce your stress and trigger points

# Thiedeman's (2008) Seven Steps for defeating bias in the workplace

1. Become mindful of your biases
2. Put your biases through triage
3. Identify the secondary gains of your biases
4. Dissect your biases
5. Identify common kinship groups
6. Shove your biases aside
7. Fake it till you make it (what we say can become what we believe)

https://www.amazon.co.uk/Making-Diversity-Work-Defeating-Workplace/dp/0793177634

# Expert Advisory Group

on discrimination, bullying and sexual harassment

*Advising the Royal Australasian College of Surgeons*

# Report to RACS

ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

RCS

**Report to the Royal Australasian College of Surgeons**

www.surgeons.org/respect

28 September 2015

- Characteristics linked to discrimination, bullying and sexual harassment include that surgeons may have a strong sense of entitlement and may lack impulse control; many would benefit from more skills in managing stress and developing emotional intelligence.
- Supervisors were frequently reported to have poor interpersonal skills or leadership capability, which leads to both deliberate and unintentional bullying and ineffective teamwork. There was a general sense that badly behaved surgeons were unaware of – or dismissed – the link between effective teams and quality patient care.

# The operating theatre – reduce difficult behaviour

- Use the team briefing well
  - To ensure that everyone knows who everyone else is
  - To explain any particularly tricky step or patient i.e. when tension
  - To think in advance who should assist, scrub, etc. for the whole list
- Getting new staff and students to understand the possibilities & expectations:
  - Be clear about what you expect – eg where to meet?
  - Send them the RCS guidance: “learning in operating theatres”
  - Try very hard not to make assumptions. For example, there are still some surgeons who assume that the male student/trainee will want to scrub and the female trainee/student will not. Treat everyone as their role requires.
- Be aware that you may be a few decades out of date about career-planning and know where you can refer trainees to, for example, the RCS.
- Be polite. If you are distracted from the operation in hand, find a polite way.

# UNACCEPTABLE BEHAVIOURS

- Persistent attempts to belittle and undermine work / undervaluing efforts
- Persistent and unjustified criticism and monitoring of work
- Intimidating use of discipline or competence procedures
- Destructive innuendo and sarcasm / persistent teasing / threats / inappropriate jokes
    - Withholding necessary information from individual
    - Freezing out, ignoring or excluding
    - Unreasonable refusal for applications for leave/training
    - Setting impossible deadlines/ Undue pressure to produce work
    - Shifting goalposts / removal responsibilities without telling the individual
    - Persistent attempts to demoralise individual
    - Persistent attempts to humiliate individual in front of colleagues

Work style

- Physical violence / Violence to property
- Discrimination based on racial, gender, sexual orientation and disability
- Unwelcome sexual advances

# TRAINERS SHOULD:

- Provide support, guidance and fair treatment to trainees irrespective of gender/race/
- Avoid demonstrating favouritism to the exclusion of individuals or groups, allowing all trainees equity of access to the appropriate training opportunities
- Offer prompt, timely and constructive feedback that links feedback to performance
- Work with trainees in a constructive and professional manner
- Avoid giving feedback in such a way as to belittle, humiliate, threaten or undermine
- Provide feedback which highlights observed behaviours and helps the trainee to find alternative strategies to overcome problems
- Highlight areas of good performance
- Avoid behaviour that intimidates/bullies trainees, seeking to deal with problems in an appropriate manner for a professional practice which aims to encourage positive approaches to practice
- Avoid inappropriate behaviours: shouting/swearing/public outbursts about trainees Make time
- Focus on the tasks, not the individual

# It is like a party invitation…

- Unless you say what the rules are, you can't penalise them for not adhering

- Start time
- Expectations
- Dress code
- Leave policy
- Set clear rules
- Induction
- Write it down

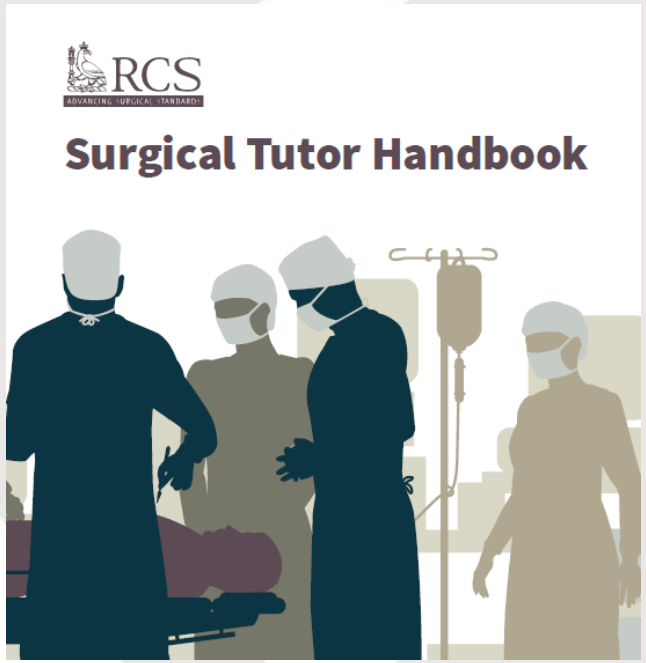
"It's another one of your tick-box forms, Scarlett"

1. Be nice!
    a. Be a good role model
    b. Challenge the bad stuff

**2. Focus on the real hurdles**

**a. Get knowledge, skills and surgical thinking**

3. Time – maximise
    a. Get timetable right
    b. Get support right


RCS
ADVANCING SURGICAL STANDARDS
Surgical Tutor Handbook

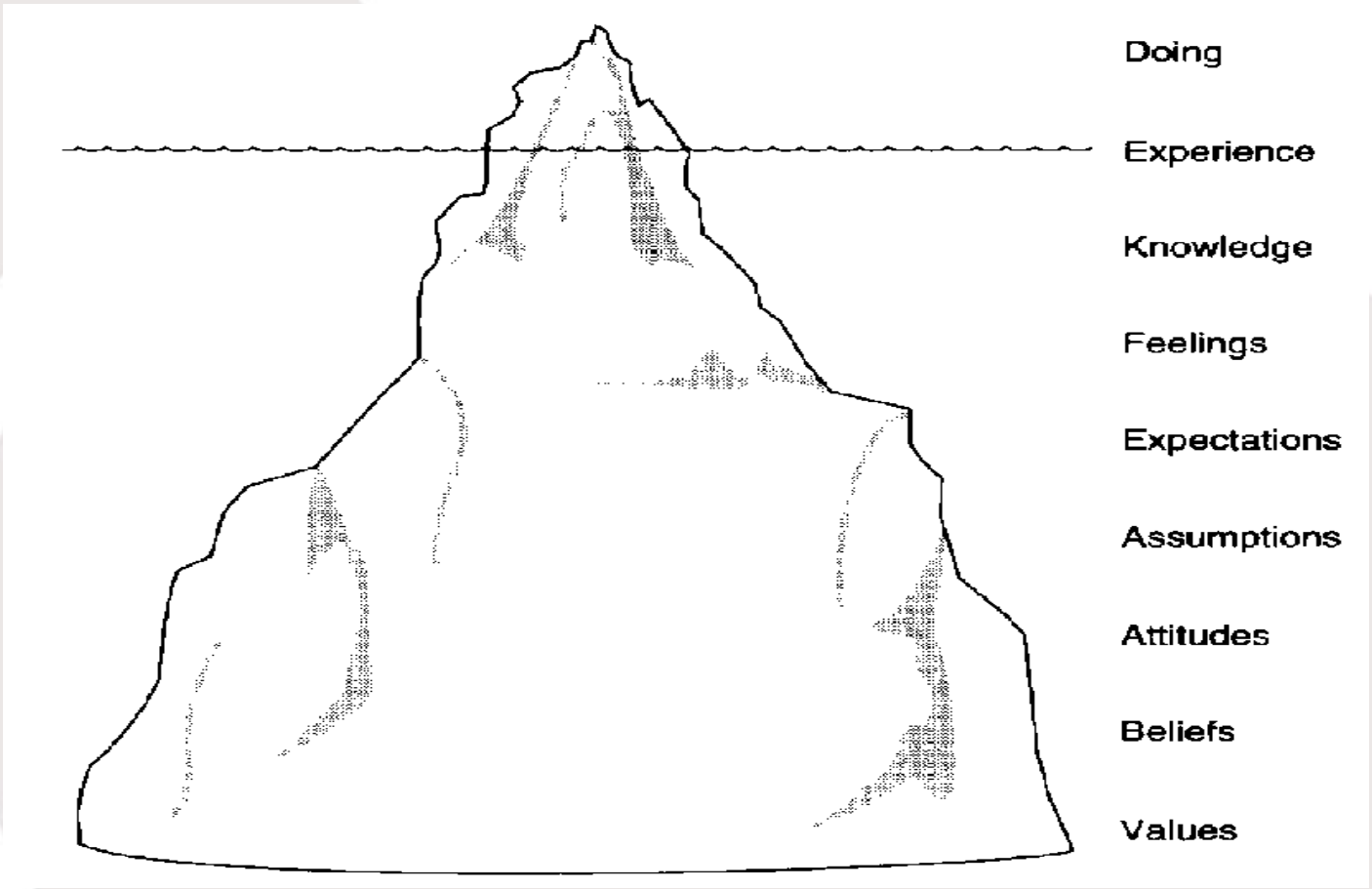

Application Form
Part 1. General Information
Please review all questions carefully before preparing your
Application Type (Check all boxes that apply to you):

- Knowledge is power
- A curriculum = knowledge + skills + attitudes

# “The Iceberg of Practice” (Fish & Coles, 2008)

- People can’t see:
  - why you do something
  - nor what other alternatives you considered
  - what you meant
- Behaviour change is possible
- Re-setting the culture of what is normal is also possible

# The Iceberg of Professional Practice - Fish & Coles, 1998




The trainee can't see: - What you are thinking

- Why you did something

# Knowledge is power!

(or at least knowledge gives you the power to put things into perspective)

# Skills

MOST doctors qualifying are NOT confident.
We need to improve this.
Stick to basics.

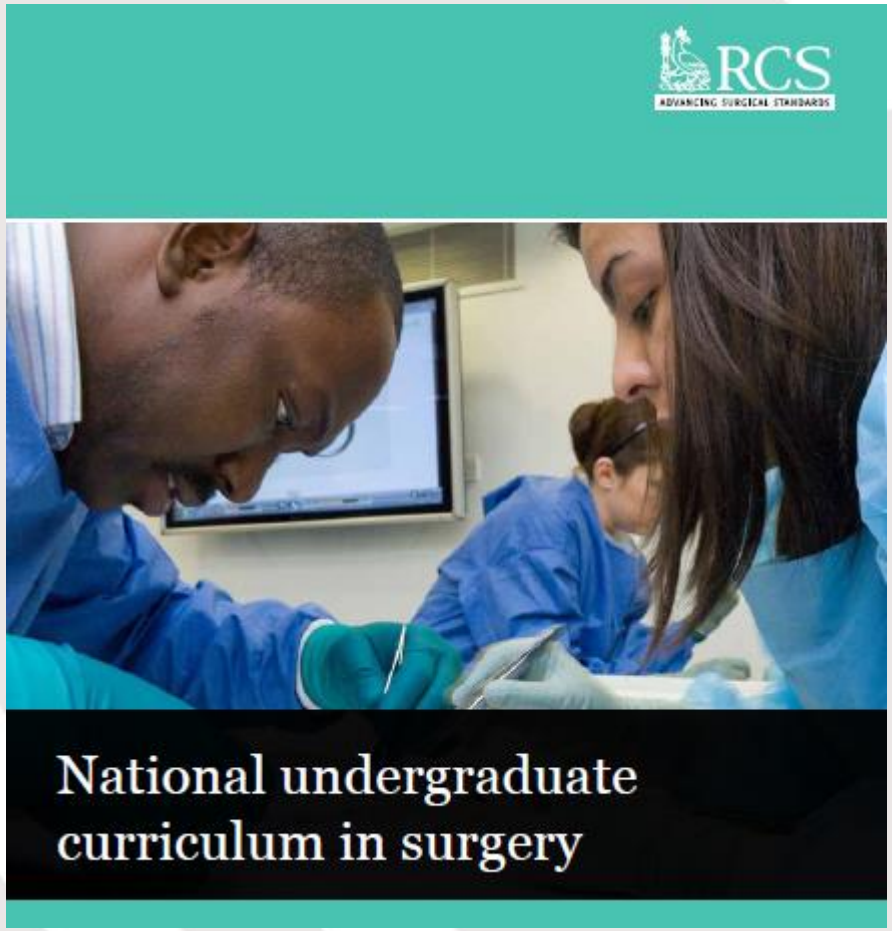
| Interventional procedures: | % of newly qualified doctors confident in these procedures | % NOT confident |
|---|---|---|
| **Use of local anaesthetics** | **7%** | **93%** |
| **Skin suturing** | **11%** | **89%** |
| **Hand washing including surgical 'scrubbing up'** | **17%** | **83%** |

Original research

## Surgical and procedural skills training at medical school – A national review

Christopher R. Davis [a,*], Edward C. Toll [b], Anthony S. Bates [c], Matthew D. Cole [c], Frank C.T. Smith [d,e]

# For EVERY future doctor




- To feel confident in considering surgical diagnoses
- To be able to manage conditions
- To refer appropriately
- To manage complications
- To be able to talk to patients

https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/national-undergraduate-curriculum-in-surgery/ 2015 version 1 !

# Who's it for?

- For curriculum planners
- For surgeons who teach
- For other staff in surgical teams
- For surgical trainees who may teach
- For students to learn from

- Students who are going to be surgeons AND ALL other doctors

# Focus

- When in urology – do these things…
- When in Orthopaedics do these things
- If you are not doing Plastics, you need to do this…

- Check the RCS surgical curriculum to see if there are some items never covered, then find a way to fit them in.

# SET the RULES: Our new guide

## so ALL staff help students / trainees


### The patient's journey

Here is a typical "patient journey" for elective or planned surgery:

- G.P. referral: the patient's General Practitioner decides that the patient has a condition that may require surgery and refers the patient to the hospital (usually a few days or weeks later).
- Outpatient clinic: the patient comes to the clinic where s/he sees a Consultant Surgeon, or another doctor or nurse in the team. The "history" is taken, the problem part examined and some test may be requested. If the decision is made that an operation might help, the risks and benefits are discussed with the patient, and the doctor fills out a "waiting list card" and signs a "consent form" with the patient.
- Pre-Assessment clinic: the patient attends a clinic to see a doctor or nurse, to check

### If you are invited to scrub:

- Try to meet the patient first. Aim to follow them up, in recovery and back on the ward.
- Practice scrubbing and gowning in advance, before you have to do it for real
- If given instruments to pull, pull with exactly the tension you are given
- Say if you are going to move.
- Keep a logbook if training (you should not keep confidential information unless registered)

https://www.rcseng.ac.uk/-/media/files/rcs/careers-in-surgery/learning-in-operating-theatres-2016-v3.pdf?la=en

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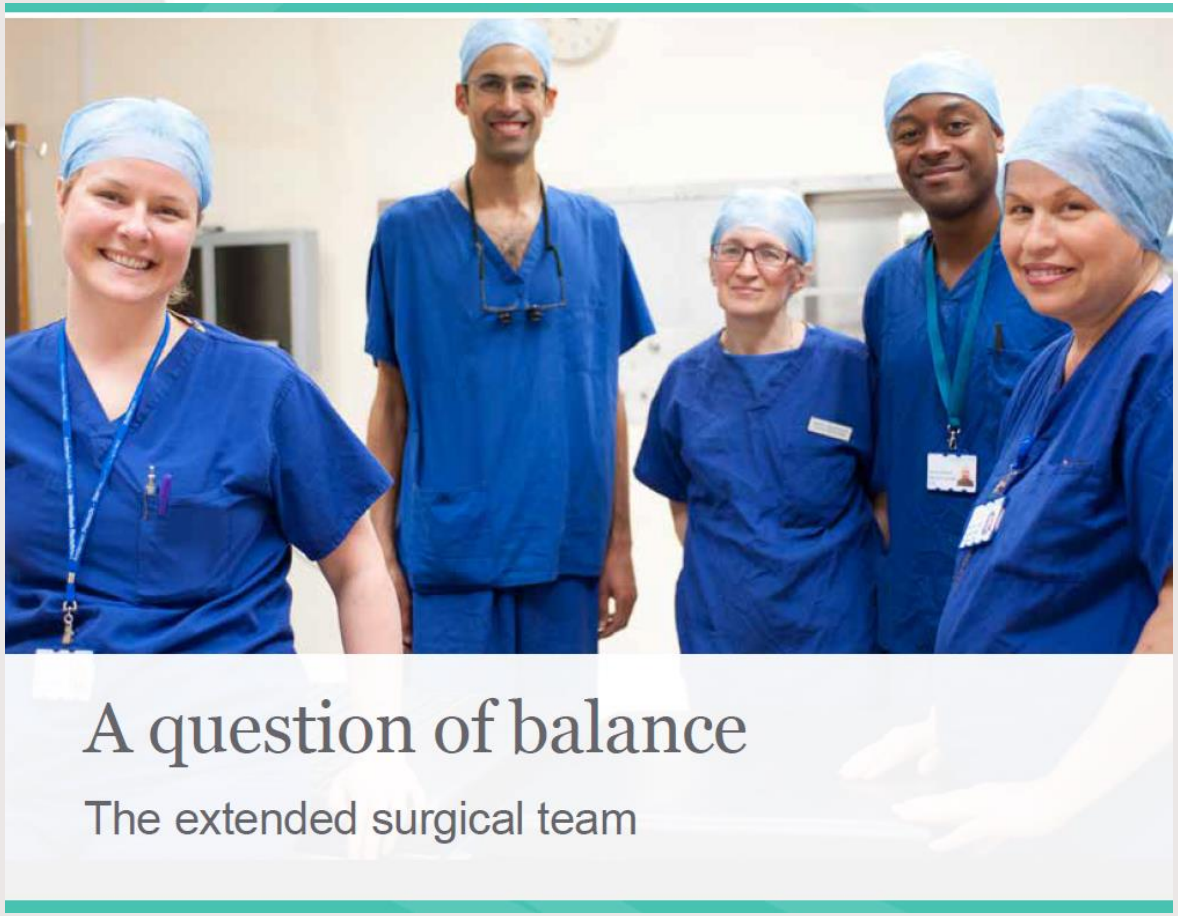
    **a. Get timetable right**
    **b. Get support right**

# It may be worth using time better for learning

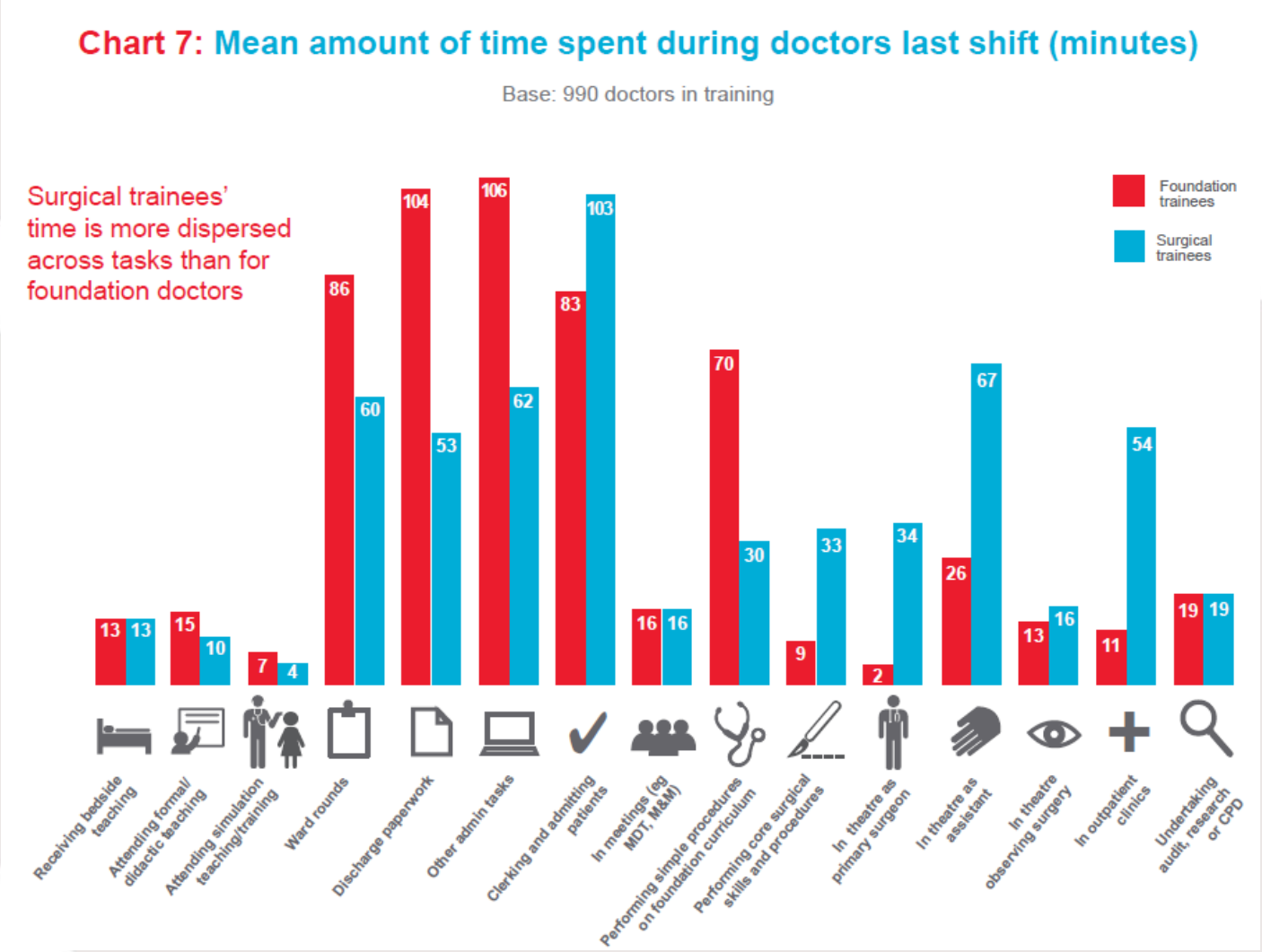
# We are all busy

- We all get 168 hours a week
- Plan ahead
- Move the talking / reading / deciding to a sensible time
- Be nice

# We need to make training better



# 40 – 80% of trainees' time on admin or non-educational




Extended surgical team (May 2016) https://www.rcseng.ac.uk/-/media/files/rcs/news-and-events/est_2016_web.pdf

# Administrative support

In this report, we give attention to practitioners who provide clinical expertise to the surgical team. It should also be noted, however, that administrative staff play a crucial role in supporting the surgical team.

Other work conducted by the RCS has identified units that have introduced a model whereby several 'Doctors' support workers' undertake administrative tasks 8am–8pm, 7 days per week. These workers are Band 3 or Band 4, and usually working towards an NVQ (National Vocational Qualification) or apprenticeship. Other units have a hybrid clinical and administrative role at Band 3 or Band 4. These staff usually come from a healthcare assistant background and perform basic clinical duties and administration. The benefits include helping doctors in training.

The mid-point on the pay-scale for Band 3 is £17,000 and for Band 4, £20,000. So these roles are significantly cheaper to the service than the clinical roles featured elsewhere in this report.

A further advantage is that recruitment can often be achieved at a local level without depleting senior clinical staff from the team. Staff starting on Band 3 or Band 4 are limited to simple tasks, but require only a few weeks' initial induction and thereafter development on an NVQ or apprenticeship basis (with training days, for example). These staff can only ever act as assistants. They cannot work at night, be on call or deal with uncertainty or risk.

Extended surgical team (May 2016)
https://www.rcseng.ac.uk/-/media/files/rcs/news-and-events/est_2016_web.pdf

# Doctors' Assistants

- I am starting a project to put six Doctors' Assistants into acute areas.
- Up to 9pm every day: Saturdays and Sundays (no nights)
- 2 week induction
- Band 3 (£18,000 per year)
- Hybrid admin + basic clinical

- At East Sussex Healthcare NHS Trust
- Starting November
- Six-month secondment
- Existing HealthCare Assistants (HCAs)
- We have been successful on getting £80,000 from HEE-KSS
  - for six Doctors' Assistants: (3 on MAU, 3 on SAU) for six months

We will do more to advocate the better use of other roles in the surgical team, such as surgical care practitioners. We appreciate there are fears by some that these roles are being used to replace doctors. But the evidence so far suggests they complement, not undermine, medical staff. They improve training opportunities for surgeons as well as patient care – for example by allowing doctors in training to leave wards more frequently to attend theatres or teaching.

RCS England Council

Open letter, Sept 2016

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# Equality vs. Diversity

**Equality**

Being equal at the point of selection/ exam

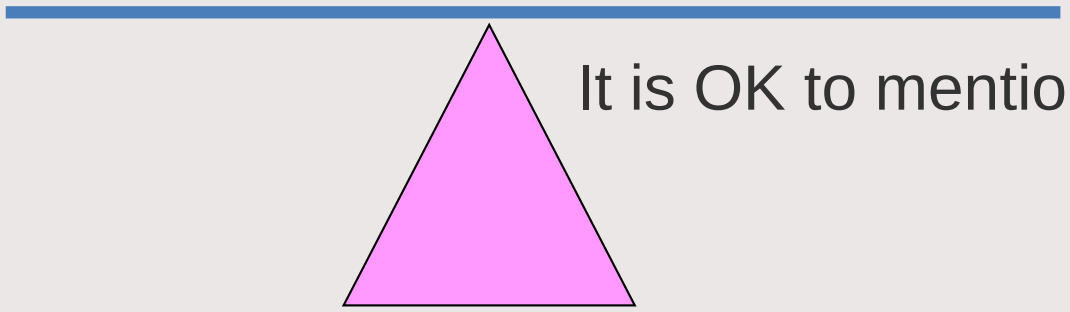
**Diversity**

Embracing difference;

asking what else is needed;

how to get the individual to be the best that they can be.

Eg if you are their supervisor



It is OK to mention they are different!


**Mentoring:** New RCS guide

www.rcseng.ac.uk "publications"

OR:

https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/mentoring-good-practice/

# SAMPLE MENTORING CONTRACT

*Mentor:*_____

*Mentee:*_____

*Frequency of meetings:*_____

*Duration of meetings:*_____

*End date/ Duration of mentoring:*_____

*Cancelling meetings:*_____

_____

_____

*Communication between meetings :*_____

_____

_____

*Purposes of relationship, including mentee goals:*_____

_____

_____

_____

_____

**Content and boundaries:**

- *Confidentiality*_____
- *Will clinical advice be given? Yes/ No*
- *Will mentor act as referee? Yes / No / Not yet certain*

| **Agreement and contact details** | | | |
|---|---|---|---|
| *Mentor name:* | | *Mentee name:* | |
| *Job role:* | | *Job role:* | |
| *email address:* | | *email address:* | |
| *Telephone:* | | *Telephone:* | |
| *Other telephone:* | | *Other telephone:* | |
| *Other contact:* | | *Other contact:* | |
| *Signature:* | | *Signature:* | |
| *Date:* | | *Date:* | |

## The GROW model

This is another model encouraging a step-by-step identification of goals and realistic assessment of how to achieve them.

| | |
|---|---|
| Goal | Clarify and agree a realistic and motivating outcome |
| Reality | Work through the reality of what is happening now and where blocks might be |
| Options | Stimulate ideas and choices about new ways of doing things |
| What next | What is the first step? And then? |

Everyone needs to realise that we need the best possible surgeons for the changing future care our patients need.  This may mean changing our attitudes about what is normal and what is needed to do the job.

# “Attracting” surgeons also means:

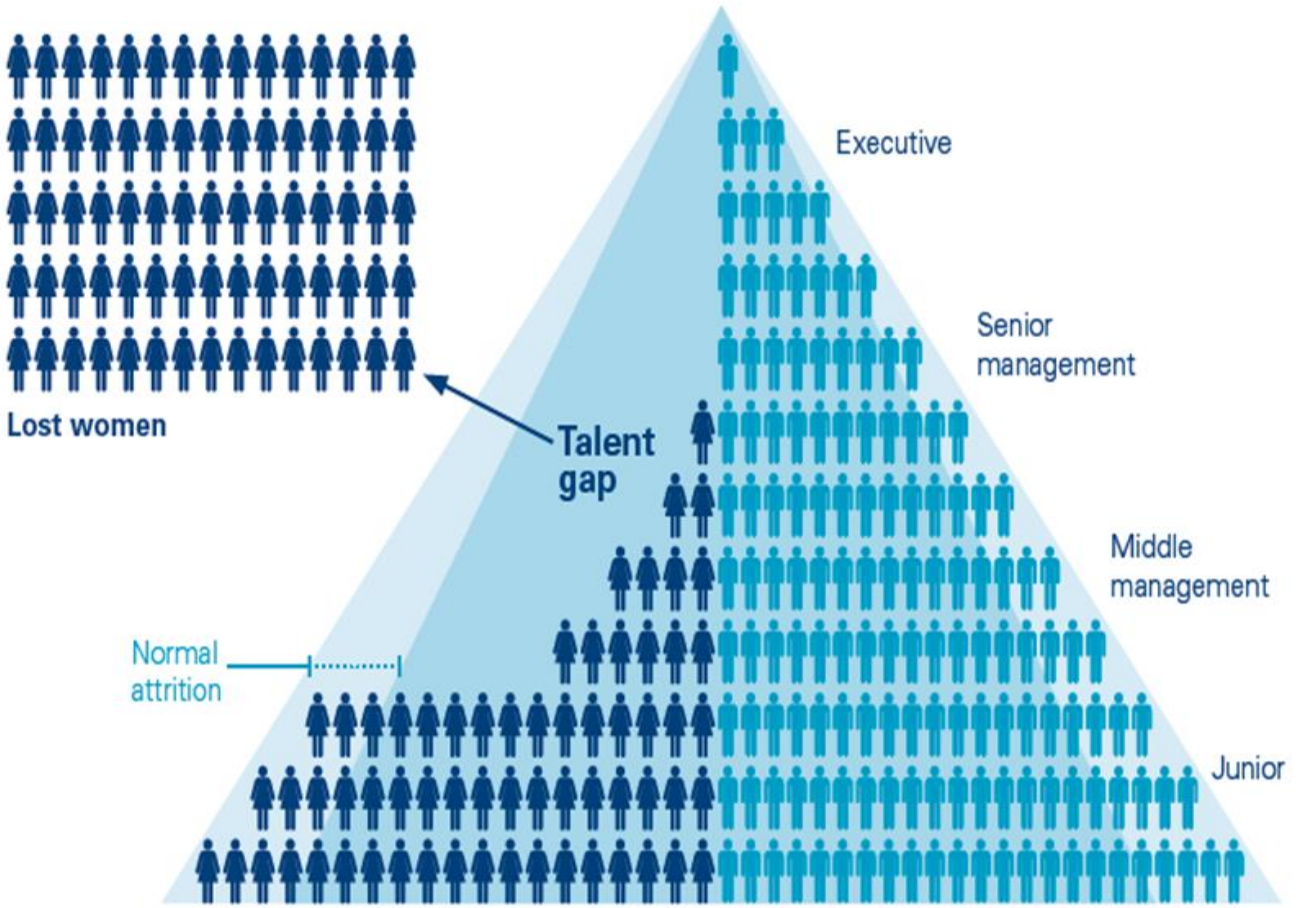
1. Attracting medical students into surgery
2. Attracting doctors into surgery
3. Supporting medical students considering surgery
4. Supporting doctors considering surgery
5. Stopping medical students being put off surgery
6. Stopping doctors being put off surgery
7. Changing society so that surgery is seen as a possible career

# Support for SAS surgeons and others not in training


http://www.aomrc.org.uk/publications/reports-guidance/sas-charter-1214/

https://www.rcpe.ac.uk/sites/default/files/files/RCPE-SAS-Charter-FINAL-June-2013.pdf

## Figure 5:
## The talent gap



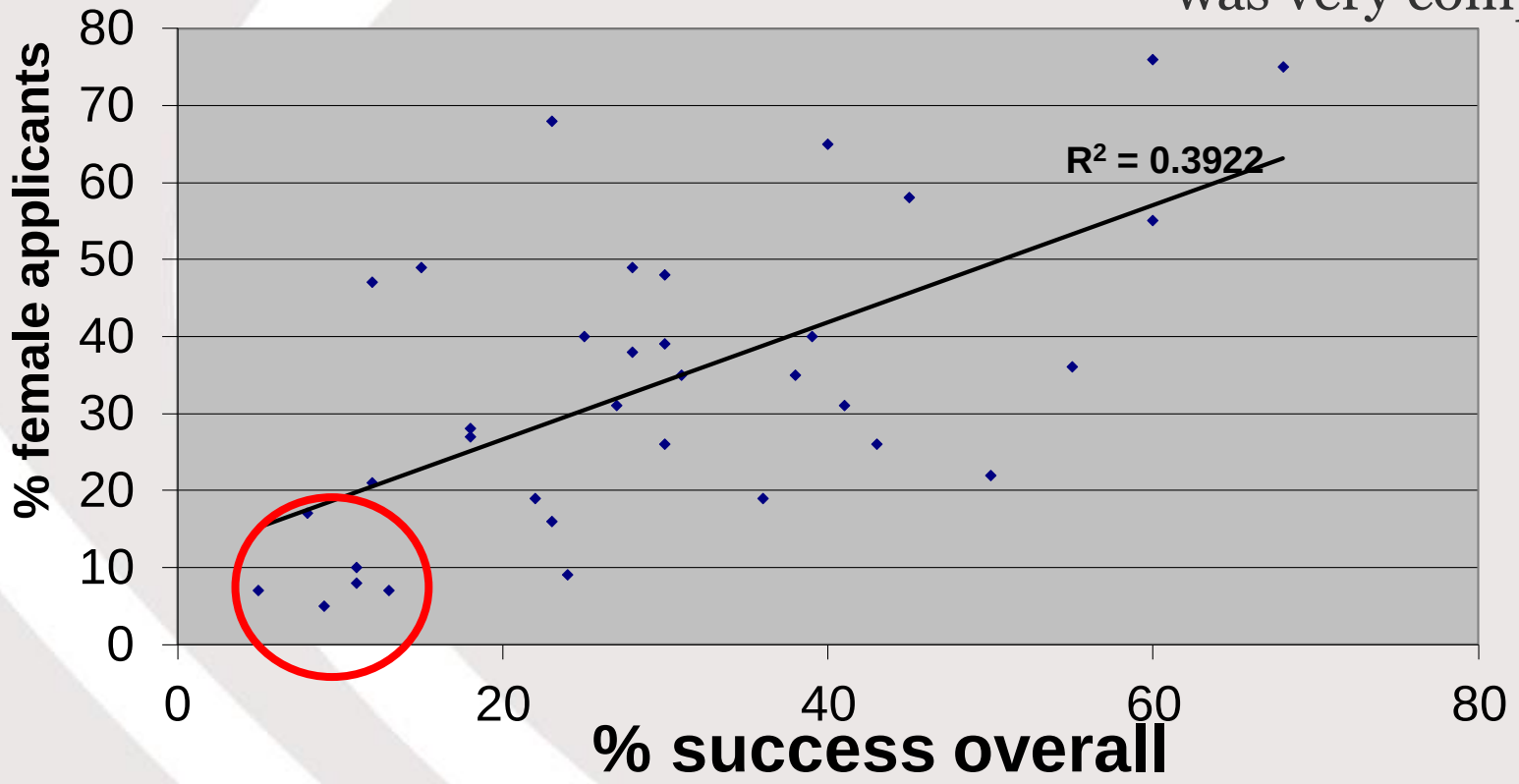

*Source:*
*Your Loss: How to Win Back your Female Talent, 2010*

# Competition ratios for different specialties and the effect of gender and immigration status

Scarlett A McNally

Consultant Orthopaedic Surgeon; Visiting Fellow, Eastbourne District General Hospital, King's Drive, Eastbourne BN21 2UD, UK and University of Brighton, UK. E-mail: scarlett.mcnally@esht.nhs.uk

Surgery is highly competitive
McNally, 2008, JRSM 101:489-492
(2005 data)
Senior surgeons today are from a time when it was very competitive (red circle)



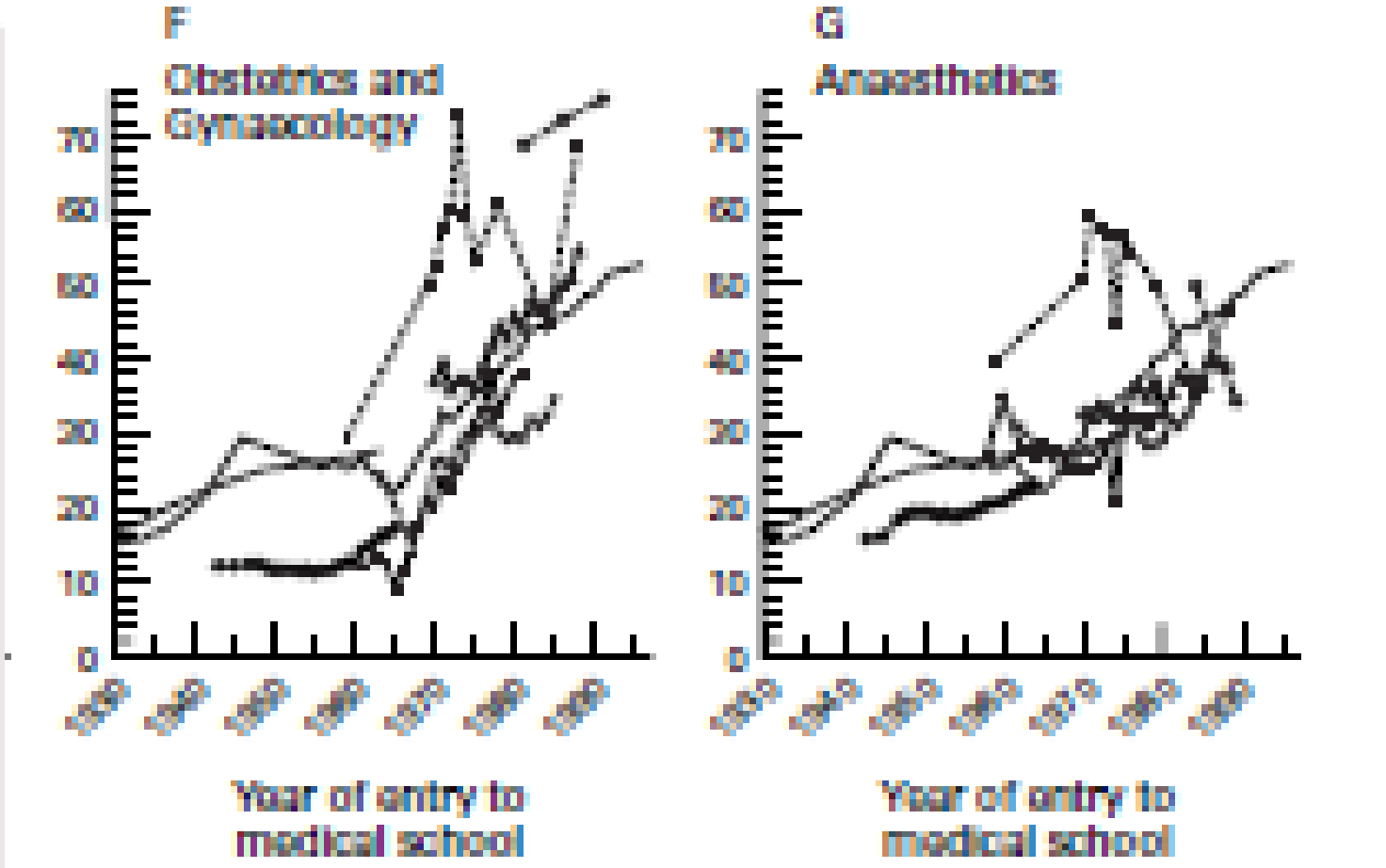

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2586870/

# Other specialties - Dog-leg in % female

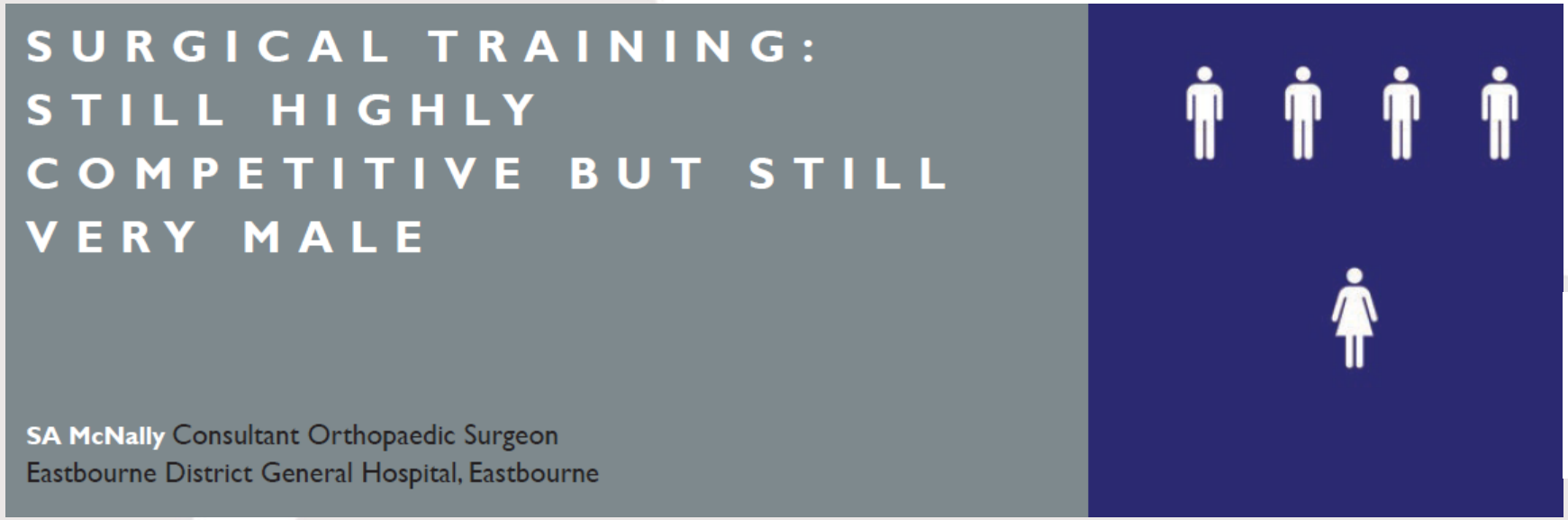
McManus & Sproston, 2000

Other specialties changed their gender ratio over a very short time.

Especially when competitiveness changed (?so people had to be nice)



# No discrimination against women at *selection*




*Ann R Coll Surg Engl (Suppl)* 2012; **94**: 53–55

- The women who applied statistically significantly more likely to be appointed.
- 25% applying to core women;15% applying to Higher women. ?attrition (2008 and 2009)
- Mentoring may allow discussion or support on an individual basis.
- It is likely that sought-after specialties had not seen a need to change or adjust to be more welcoming to women.
- Now, 31% of surgical trainees are women

http://publishing.rcseng.ac.uk/doi/abs/10.1308/147363512X13189526438675

# RCS work

- Structures /influencing
- Communication
- Packages / projects
- Encouragement and support

# Challenges for you (please):

1. Get the medical student to do a bit of the operation

2. Find your local medical school surgical society

| | |
|---|---|
| Aberdeen | ogston.org.uk |
| Barts and London | blsurgical.co.uk |
| Birmingham | uobmedsoc.com |
| Brighton and Sussex | bsms-surgsoc.com |
| Bristol | scrubs.org.uk |
| Cambridge | surgsoc.soc.srcf.net |
| Cardiff | cardiffsurgicalsociety.co.uk |
| Dundee | facebook.com/dundeesurgsoc |
| Durham | facebook.com/durhamsurgsoc |
| Edinburgh | edsurgicalsoc.com |
| Exeter | exetersurgsoc.co.uk |
| Glasgow | facebook.com/Glasgow-University-Surgical-Society |
| HYMS | http://www.hyms-surgsoc.co.uk/ |
| Imperial College London | union.ic.ac.uk |
| Keele | sites.google.com/keelesurgicalsociety |
| Kings College London | http://www.kclsurgicalsoc.co.uk/ |
| Lancaster | |
| Leeds | cuttingedge.leedsmedics.org.uk |
| Leicester | leicesterscrubs.com |
| Liverpool | surgicalscousers.co.uk |
| Manchester | scalpelmanchester.com |
| Newcastle | http://www.nusu.co.uk/activities/societies/society/7549/ |
| Norwich | http://www.ueastudent.com/groups/norwich-undergraduate-surgical-society |
| Nottingham | nottinghamscrubs.co.uk |
| Oxford | http://hughcairns.org/ |
| Penisula College Med & Dentistry | exetersurgsoc.co.uk |
| Queens Belfast | http://www.qubsu.org/ClubsSocieties/Categories/Academic/Scrubs/ |
| Sheffield | rcssheffield.co.uk |
| Southampton | surgicalsoc.com |
| St Andrews | uosss.weebly.com |
| St Georges London | sgsu.org.uk |
| Swansea | susurgsoc.org.uk |
| Univ College London | uclsurgicalsociety.co.uk |
| Warwick | warwick.ac.uk |

# Surgical societies in all UK medical schools

- Go to www.rcseng.ac.uk/career to find yours
- Or contact RCS Opportunities team
- ois@rcseng.ac.uk

# NEW downloadable launch slides… Draft version 1…

Royal College of Surgeons
ADVANCING SURGICAL CARE

National Undergraduate Curriculum in Surgery

Royal College of
Surgeons of England

**NAME**

**DATE**

- This set of slides is to introduce the national undergraduate curriculum in surgery.
- This slide set is designed so any surgeon can give this talk. Most slides are for illustration only – most points are not to be covered.
- This is a minimum standard for ALL doctors.
- Those who wish to be surgeons can follow the extra links.

# National Undergraduate Curriculum in Surgery

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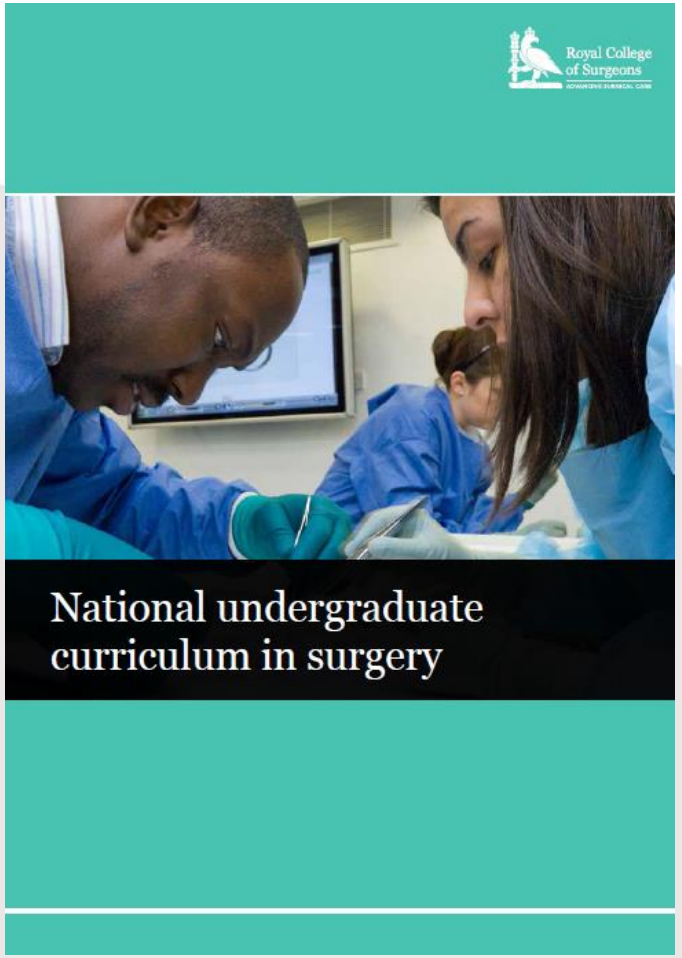



- www.rcseng.ac.uk (publications section)

# What is it?

**Curriculum** = Knowledge (the syllabus) + Skills + Attitudes

Defines minimum standard required of every graduating doctor

So that they can recognise and understand:

- Common surgical conditions
- Emergency surgical presentations
- Treatment possibilities (including non-operative)
- Principles of pre-operative optimisation
- Post-operative complications
- How to explain in general terms to a patient the implications of a common surgical diagnosis
- What a surgical career might be like

# Why do we need it?

**Every doctor should:**

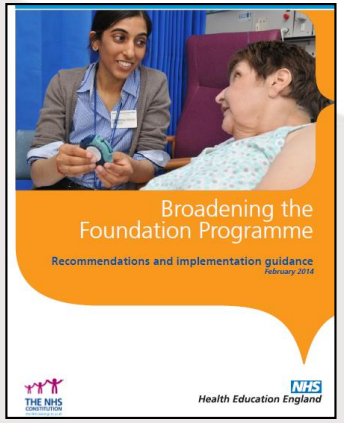
- feel confident in considering surgical diagnoses
- be able to manage conditions
- refer appropriately
- manage complications
- be able to talk to patients

A significant proportion of elective and emergency referrals and consultations are for surgical conditions

Surgical principles are relevant to all aspects of medicine and surgical thinking

# Why do we need it?

- There is less opportunity to learn surgery **after** qualifying
- There are fewer Foundation posts in surgery
- Those who do surgical posts may not actually see much surgery




- Specialist centres and reconfigurations may reduce other doctors' exposure to surgery

**Learning must be focused and cover the right things**

# How we wrote it

## Background:

- Many reports showing variable confidence:

Perceptions of UK medical graduates' preparedness for practice: A multi-centre qualitative study reflecting the importance of learning on the job

Jan C Illing[1*], Gill M Morrow[1], Charlotte R Rothwell nee Kergon[1], Bryan C Burford[1], Beate K Baldauf[2], Carol L Davies[3], Ed B Peile[3], John A Spencer[4], Neil Johnson[3], Maggie Allen[3] and Jill Morrison[5]

Original research

Surgical and procedural skills training at medical school – A national review

Christopher R. Davis [a, *], Edward C. Toll [b], Anthony S. Bates [c], Matthew D. Cole [c], Frank C.T. Smith [d, e]

## Actions:

- Looked at "gaps"
- Dissected GMC "rules"
- Asked many experts

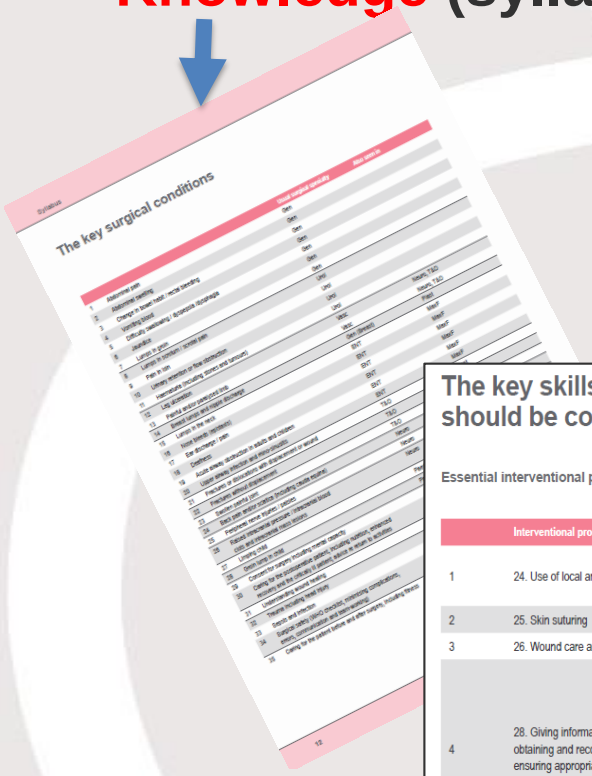
- We wrote the syllabus (edited to minimum conditions)

- Learning objectives (populated by students, surgeons and trainees)

Curriculum

# Curriculum Contents = 3 sections:

**Knowledge (syllabus) + Skills + attitudes/ ways of learning**


The key surgical conditions

## The key skills and interventional procedures that should be covered

Essential interventional procedures, as mandated by the GMC

| | Interventional procedure and GMC – learning objectives 24–31 from *Tomorrow's Doctors* | |
|---|---|---|
| 1 | 24. Use of local anaesthetics | Safe use of drugs that produce numbness and prevent pain, either applied directly to the skin or injected into skin or body tissues. Awareness of toxic doses. Ability to deal with anaphylaxis. Understanding of allergy, including to latex. |
| 2 | 25. Skin suturing | Closing wounds in the skin by inserting stitches. |
| 3 | 26. Wound care and basic wound dressing | Providing basic care of surgical or traumatic wounds and applying dressings appropriately. |
| 4 | 28. Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare procedure. | Awareness of the risks and benefits of procedures and possible alternatives. Ability to communicate in a variety of ways to individualise the discussion with the patient or their supporters. Recognition of the barriers to communication inherent in a hospital/ clinic setting with which patients are not familiar, including heightened stress levels for the patient, which often impedes communication. Understanding of the importance of written documentation. Being clear in the observations required and communicating with those involved in aftercare, including handover. |
| 5 | 29. Hand washing (including surgical 'scrubbing up') | Following a sequence to ensure clean hands and gloving without contamination. |
| 6 | 30. Use of personal protective equipment (gloves, gowns, masks) | Following a sequence to fit mask, scrub, gown and gloves without contamination. Behaviour while using equipment. Appropriate doffing procedures to avoid contamination of self or environment. |
| 7 | 31. Infection control in relation to procedures | Understanding the importance of minimising infection risk. This includes understanding team dynamics, avoiding contamination, commanding respect and adhering to local protocols. |
| 8 | 32. Safe disposal of clinical waste, needles and other 'sharps' | Ensuring that these materials are handled carefully and placed in a suitable container for disposal. |

Examination and other es

| | Other skills an undergraduate should master, includin |
|---|---|
| 9. | Removal of stitches and staples |
| 10. | Applications of dressings and bandages |
| 11. | Examination of a lump (eg its size, consistency, locatio |
| 12. | Assessment of a wound |
| 13. | Examination for fitness for surgery (chest, heart, neck |
| 14. | Examination of the abdomen |
| 15. | Digital rectal examination |
| 16. | Examination of the groin |
| 17. | Examination of the scrotum |
| 18. | Examination of the soft tissues of the neck |
| 19. | Examination of pulses |
| 20. | Examination of the breast |
| 21. | Examination of the hip |
| 22. | Examination of the knee |
| 23. | Examination of the back |
| 24. | Examination of the ear |
| 25. | Examination of the nose |
| 26. | Examination of the throat |

## Ways of teaching and learning in surgery

**Concepts of surgery**

The practicalities of operations include removing tissue, releasing collections of fluid, unblocking vessels or other tubes, repairing tissue and rearranging anatomy. Every doctor must be able to discuss, in general terms, the risks and benefits of different courses of action and understand complications. For example, obstruction of the ureter may be treated by radiologically guided percutaneous drainage or by surgical endoscopic placement of a stent. There is overlap with other interventional specialties, and surgery is linked with anaesthesia, interventional radiology and emergency medicine.

Surgical placements should provide experience with explanation and/or reflection. The students should understand the clarity of each surgical condition, as listed in the syllabus. They should also understand the discussion behind each decision. The unique role of every doctor is as 'diagnostician […] and handler of uncertainty'.[22]

We encourage surgical trainers to verbalise the options and explanations to their students as well as to their patient, so they understand the 'iceberg of practice'.[23] 'Surgical thinking' is helpful to any future career; this gives the future doctor the ability to explore options and uncertainties, including at which level to investigate or undertake screening depending on possible intervention.[24] A good understanding of surgery encourages a more holistic view of healthcare. This includes placing the fundamental importance of the social determinants of health and the preventable aspects of ill-health across the range of conditions.[14]

**Types of conditions**

We realise that there has to be a realistic number of conditions in the curriculum for it have a practical application. We prioritise conditions according to the following criteria:

1. Important – ie will have a significant detrimental effect on a patient;
2. Frequency – ie how likely will the undergraduate medic come across these conditions.

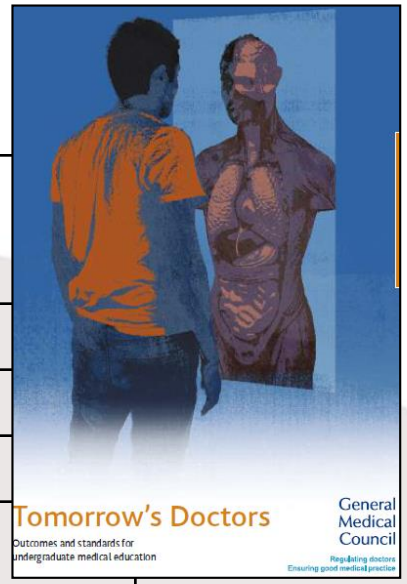
# The syllabus = knowledge and skills

- 35 Key conditions
- with Learning objectives for each condition

- 26 Key skills
- 8 Mandated by the GMC, 18 defined by RCS

# Syllabus – Key Skills: GMC mandated

## (just for illustration – not to go through each)




| | **Interventional procedures: GMC – learning objectives 24-31** |
|---|---|
| 24 | Use of local anaesthetics |
| 25 | Skin suturing |
| 26 | Wound care and basic wound dressing |
| 28 | Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare procedure. |
| 29 | Hand washing including surgical 'scrubbing up' |
| 30 | Use of personal protective equipment (gloves, gowns, masks) |
| 31 | Infection control in relation to procedures |
| 32 | Safe disposal of clinical waste, needles and other 'sharps' |

# Syllabus – Key Skills: RCS considers essential

| | | |
|---|---|---|
| 9 | | Removal of stitches and staples |
| 10 | | Applications of dressings and bandages |
| 11 | | Examination of a lump (e.g. its size, consistency, location, mobility and whether if it is tender, pulsatile or transilluminates) |
| 12 | | Assessment of a wound |
| 13 | | Examination for fitness for surgery (chest, heart, neck and mouth opening) |
| 14 | | Examination of the abdomen |
| 15 | | P.R. examination |
| 16 | | Examination of the groin |
| 17 | | Examination of the scrotum |
| 18 | | Examination of the soft tissues of the neck |
| 19 | | Examination of pulses |
| 20 | | Examination of the breast |
| 21 | | Examination of the hip |
| 22 | | Examination of the knee |
| 23 | | Examination of the back |
| 24 | | Examination of the ear |
| 25 | | Examination of the nose |
| 26 | | Examination of the throat |

# Syllabus – Key Conditions (1)

| | |
|---|---|
| 1 | Abdominal pain |
| 2 | Abdominal swelling |
| 3 | Change in bowel habit / rectal bleeding |
| 4 | Vomiting blood |
| 5 | Difficulty swallowing / dyspepsia /dysphagia |
| 6 | Jaundice |
| 7 | Lumps in groin |
| 8 | Lumps in scrotum / scrotal pain |
| 9 | Pain in loin |
| 10 | Urinary retention or flow obstruction |
| 11 | Haematuria |
| 12 | Leg ulceration |
| 13 | Painful and/or paralysed limb |
| 14 | Breast lumps and nipple discharge |
| 15 | Lumps in the neck |
| 16 | Nose bleeds |
| 17 | Ear discharge / pain |
| 18 | Deafness |

# Syllabus – Key Conditions (2)

| | |
|---|---|
| 19 | Acute airway obstruction in adults and children |
| 20 | Upper airway infection and rhino-sinusitis |
| 21 | Fractures or dislocations with displacement or wound |
| 22 | Fractures without displacement |
| 23 | Swollen painful joint |
| 24 | Back pain and/or sciatica (including cauda equina) |
| 25 | Peripheral nerve injuries / palsies |
| 26 | Raised I.C.P./ Intracranial blood clots / mass lesions |
| 27 | Limping child |
| 28 | Groin lump in child |
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

# How to use it

Who will find it useful:

- Students
- surgeons who teach
- Anyone involved in medical education:
  - curriculum planners
  - other staff in surgical teams,
  - surgical trainees who may teach

# How to use it

Medical schools are overwhelmed with curricula.

It can be challenging to squeeze surgery into a tight timetable.

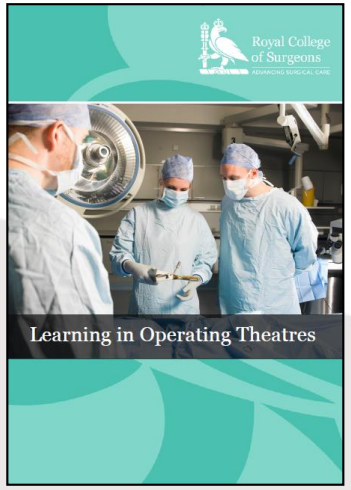
**There are better ways to use time to learn see:**

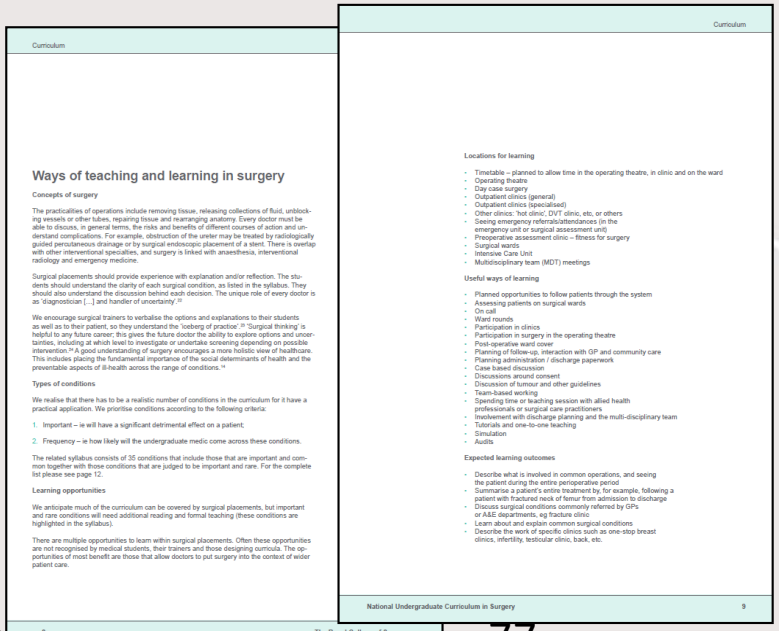
College publications:

- “Learning in Operating Theatres”

- “ways of teaching and learning in surgery” section of curriculum.

– www.rcseng.ac.uk publications section




Curriculum launch slides...

# How to use it: Syllabus

- Identify key conditions and which can be learnt in each specialty (e.g. “when in urology cover xyz”)
- The following slides (15-19) illustrate this
- If you’re not going to a specialty, make sure you cover those conditions elsewhere
- General principles learnt in surgery:
  - Large numbers of cases are or could be surgical
  - Surgery is excellent training environment for future doctors
  - Interventions:

“All doctors need to understand the challenges for patients and doctors of diagnostic and therapeutic interventions, including how they should be planned, discussed, agreed and delivered”

# How to use it: Syllabus

## Generic Conditions (across specialties)

| | |
|---|---|
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

# Syllabus: Conditions - General surgery

| | | |
|---|---|---|
| | 1 | Abdominal pain |
| | 2 | Abdominal swelling |
| | 3 | Change in bowel habit / rectal bleeding |
| | 4 | Vomiting blood |
| | 5 | Difficulty swallowing / dyspepsia /dysphagia |
| | 6 | Jaundice |
| | 7 | Lumps in groin |
| | 14 | Breast lumps and nipple discharge |
| | 26 | Raised I.C.P./ Intracranial blood clots / mass lesions |
| | 28 | Groin lump in child |
| Generic (in grey) | 29 | Consent for surgery including mental capacity |
| | 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| | 31 | Understanding wound healing |
| | 32 | Trauma including head injury |
| | 33 | Sepsis and infection |
| | 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| | 35 | Caring for the patient before and after surgery including fitness |

# Syllabus: Conditions – Trauma & Orthopaedics

| | |
|---|---|
| 12 | Leg ulceration |
| 13 | Painful and/or paralysed limb |
| 21 | Fractures or dislocations with displacement or wound |
| 22 | Fractures without displacement |
| 23 | Swollen painful joint |
| 24 | Back pain and/or sciatica (including cauda equina) |
| 25 | Peripheral nerve injuries / palsies |
| 27 | Limping child |
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

# Syllabus: Conditions - Urology

| | |
|---|---|
| 8 | Lumps in scrotum / scrotal pain |
| 9 | Pain in loin |
| 10 | Urinary retention or flow obstruction |
| 11 | Haematuria |
| 7 | Lumps in groin |
| 28 | Groin lump in child |
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

# Syllabus: Conditions – ENT

| | |
|---|---|
| 16 | Nose bleeds |
| 17 | Ear discharge / pain |
| 18 | Deafness |
| 19 | Acute airway obstruction in adults and children |
| 20 | Upper airway infection and rhino-sinusitis |
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

# Example of learning objectives

## Condition 21

Fractures or dislocations with displacement or open wound

1. State the general principles of fracture management.
2. Describe and classify different types of fractures.
3. Describe radiological principles in fracture diagnosis.
4. List complications from fractures.
5. Describe the basic surgical management fractures, including femoral neck fractures.
6. Describe the management of a dislocated joint.
7. Explain the management of open fractures and soft-tissue injury necessitating reconstructive surgery.

# How to Use It - Curriculum

**Concepts**

- Global surgery
- Health promotion and prevention of disease including surgical conditions
- Consent, ethics, risk and clinical judgment
- Team-based working and avoiding bullying behaviour
- Embracing diversity and careers in surgery
- Ways of teaching and learning in surgery
- Concepts of Surgery
- Types of Conditions
- Learning Opportunities

# How to Use It - Curriculum

**Every Doctor Should Learn:**

- Attitudes (surgical thinking)
- Competence: doctors should know things, be able to do things
- Patients are complex
  - People don't present tidily with a single condition, articulate, wanting "choice".
  - Surgeons don't just do the cutting up
- Working with other doctors
  - Eg understanding their decisions re. screening
  - Doing tests without thinking if it will change the outcome…

# Curriculum Topic: Global Surgery

- 15 % of the world's disability is due to surgically treatable conditions.
- Injuries alone cause 5.7 million deaths yearly, much more than the 3.8 million deaths caused by malaria, HIV/AIDS and tuberculosis combined.
- Economic – millions cannot work or function due to conditions for which the treatment has been known for decades.
- Surgical treatment has been identified as a cost effective intervention in resource-poor settings, in level with vaccination programs

# Curriculum Topic: Health Promotion

Example – exercise reduces the risk of common surgical conditions

| Condition | Exercise (5 x 30mins/week) reduces risk by: |
|---|---|
| Dementia | 30% |
| Stroke | 30% |
| Diabetes type 2 (amputations, ulcer) | 50% |
| Obesity | 10% |
| Breast cancer | 25% |
| Bowel cancer | 45% |
| Low back pain | 40% |
| Osteoarthritis | 50% |
| Falls in elderly | 40% |
| Osteoporosis | 40% |
| Fractures | 50% |

Academy of Medical Royal Colleges (2015) Exercise: the miracle cure and the role of the doctor in promoting it. http://www.aomrc.org.uk/publications/reports-guidance/exercise-the-miracle-cure-0215/

# Supporting More Future Surgeons

- Surgery is now less competitive.  We need to be more attractive to non-traditional applicants
- Some women report being put off surgery due to perceptions of work-life balance.
- All future surgeons want /need a good work-life balance.
- Unless we pick from all trainees, we fish in a small pool
- Medical students and junior doctors are more likely to stick at a career goal of surgery if they see:
  - surgeons having fun and
  - that the topics are achievable

# Supporting More Future Surgeons

Understanding that there is a set of knowledge, skills and attitudes in surgical education is very empowering for learners.

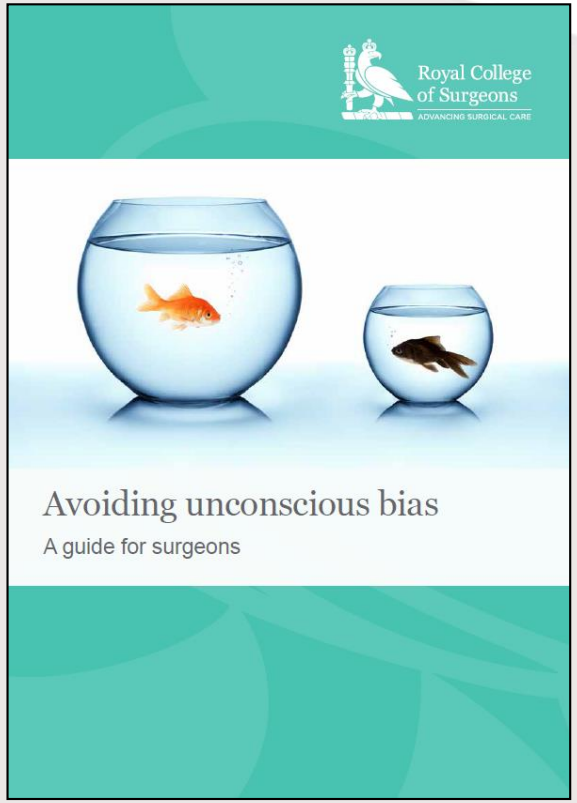
For future surgeons, this is a good grounding

For other doctors, they have better understanding of prevention, appropriateness, when to refer and the ability to treat surgery as part of the patient's whole care pathway.

The curriculum has links for further study

# Supporting More Future Surgeons

- There are documents to support training:
- Mentoring (support outside any training programme)
- Avoiding unconscious bias (how to treat people better)


Curriculum launch slides...

# Summary

- The Undergraduate surgical curriculum is for ALL doctors
- It is based on key conditions and skills
- (Some discipline is needed by surgeons, students and module leaders to ensure no topic is omitted)
- The attitudes are those required of any doctor involved in a patient's care
- This may involve more strategic learning opportunities

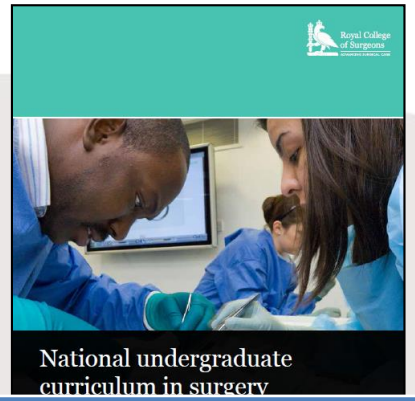
# Next Steps

Surgeons can:

- Tell students about the curriculum
- Tell other surgeons about the curriculum
- Tell theatre staff and department staff about “learning in operating theatres”
- Work with medical school surgical societies (list at: www.rcseng.ac.uk)
- Hold events to “launch” the curriculum
- Teach in a different way
- Read the curriculum
- Encourage students
- Mentor Foundation doctors
- Tell students/Foundation about RCS Affiliate scheme
- Acknowledge that surgical concepts are very powerful

# Contact

- University surgical societies - www.rcseng.ac.uk/career
- Or contact :
  - careers@rcseng.ac.uk
  - 0207 869 6227
  - www.rcseng.ac.uk





| | |
|---|---|
| Learning in op theatres | https://www.rcseng.ac.uk/careers-in-surgery/careers-support/careers-events-and-resources/resources-and-links/ |
| Undergrad curriculum | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**national-undergraduate-curriculum-in-surgery/** |
| Avoiding unconscious bias | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**avoiding-unconscious-bias/** |
| Mentoring | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**mentoring-good-practice/** |

Royal College of Surgeons
ADVANCING SURGICAL CARE

Why surgical thinking is needed in the NHS…

# Me


http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review

Social Determinants of Health – What Doctors Can Do

October 2011

BMA

https://www.bma.org.uk/-/media/Files/PDFs/Working%20for%20change/Improving%20health/socialdeterminantshealth.pdf

Most ill-health is caused by social factors.
The proximate causes are:

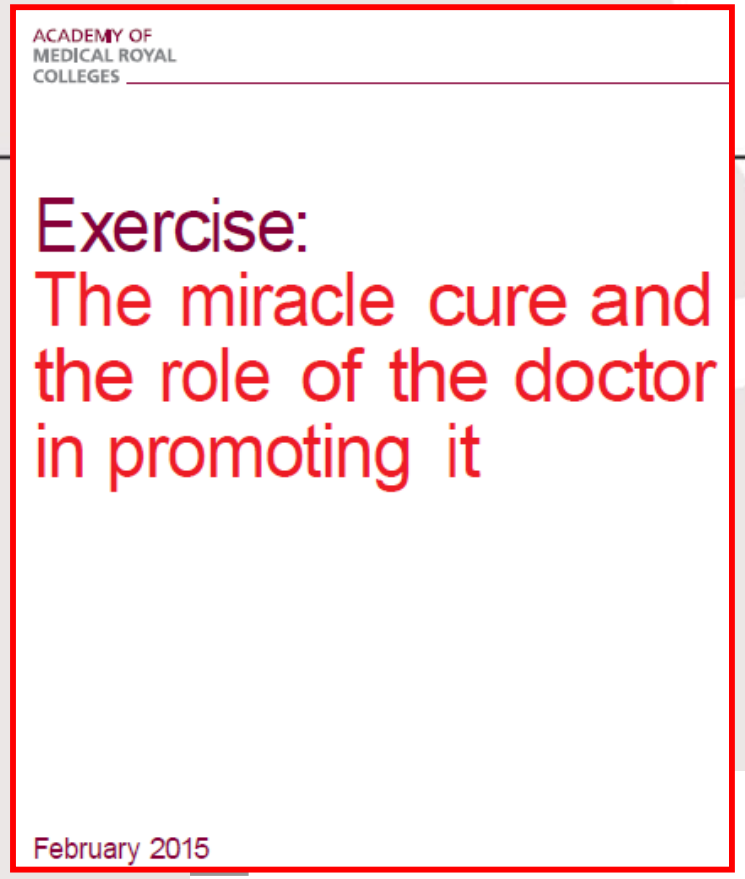
- Smoking
- Nutrition
- lack of exercise
- Alcohol

Learned reports just keep measuring
BUT we can be activists for exercise.
AND environments that allow exercise.
SEE NEXT SLIDE…

# What is the most dangerous activity you can do???

Sitting

Inactivity causes more ill-health than all sports added together




RCS

Exercise 5-times-a-week for 30 minutes a time reduces the risk of

dementia 30%

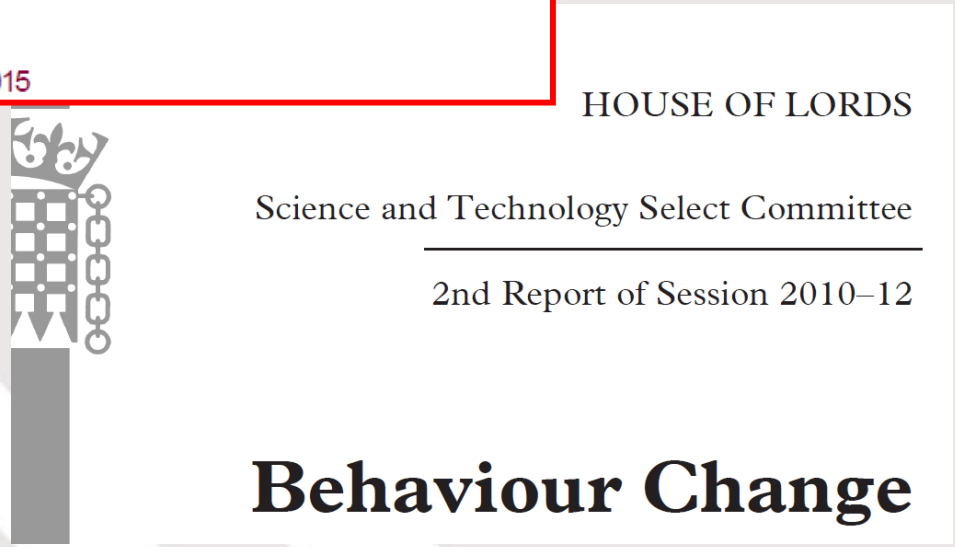
hip fracture 50%

depression 30%

and breast cancer 25%

All this, AND tips on BEHAVIOUR CHANGE

http://www.aomrc.org.uk/publications/reports-guidance/exercise-the-miracle-cure-0215/



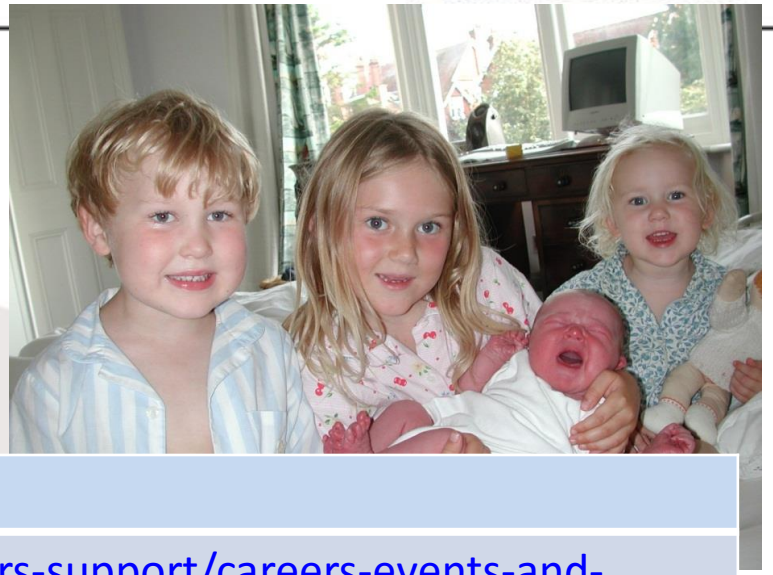

- **Knowledge**
- **Having a reason**
- **Skills or ability**
- **Vision to see your better future**
- **A way to get through when doubting**

# How can we support non-traditional people in and into surgery? (Including women)

1. Be nice
2. Get them doing stuff, especially medical school
3. Be clear about the ACTUAL rules, the actual knowledge needed, the person specification.
4. Acknowledge that pregnancy usually is only 9 months and there are 25 years of career post-babies
5. Get men to take their shared parental leave
6. Better awareness of and support for Less Than Full Time Training
7. Additional funding for Less Than Full Time Training (eg to hospital to back-fill any extra shifts)

# Thank you!

- Value each person: staff, student, patient, yourself
- Identify trigger points and types of people
- Write things down.  Make time to talk
- Careers pages: Students/trainees - JOIN AFFILIATES



| | |
|---|---|
| smcnally@rcseng.ac.uk | www.rcseng.ac.uk Publications and Careers |
| Learning in op theatres | https://www.rcseng.ac.uk/careers-in-surgery/careers-support/careers-events-and-resources/resources-and-links/ |
| Undergrad curriculum | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**national-undergraduate-curriculum-in-surgery**/ |
| Avoiding unconscious bias | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**avoiding-unconscious-bias**/ |
| Mentoring | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/**mentoring-good-practice**/ |
| Exercise: the miracle cure 150 minutes/week | http://www.aomrc.org.uk/publications/reports-guidance/exercise-the-miracle-cure-0215/ |