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Mid Cheshire Hospitals
NHS Foundation Trust

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Compiled by John Gale

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Contents

General Healthcare Education	4
Multiple choice questions – do you really need five?.....	4
Using Facebook™ to engage students.....	4
Training peer teachers.....	4
Hackathons: come together, solve a problem	5
Inter-professional Education.....	5
Ganging up on the fatties	5
Medical Education	6
On the fast track to medicine.....	6
Getting more people into O&G.....	6
X-rays and E-learning.....	7
Are final-year medical students fit to be released into the wild?	7
Being kind to cadavers.....	7
Do medical students want to save the world?	8
Motherhood and medicine.....	8
Saving the health system money – is it an age thing?.....	9
Are you yodelling clearly? Medical communication in Switzerland	9
Midwifery Education	9
Helping midwives stop OASIS.....	9
Nurse Education.....	10
What makes nurses trust their lecturers?	10
Getting to the bottom of dropping out	10
Concept-based learning and concept mapping.....	11
What’s the best way of giving feedback?	11
Analysing students’ reflections.....	12
HIV testing – learning by experience in Taiwan.....	12
Can you learn people skills from simulations?	13
Can you learn end-of-life care from simulations?	13
Coming across child abuse. How do student nurses feel about it?	13
Teaching medication safety. How much do we really know?.....	14

Compassion in nursing – a wilting flower or flourishing bloom?	14
How do nurses really give out drugs?.....	15
What do nursing students know about stroke care?	15
Pharmacy Education.....	15
Going own-brand in Greece.....	15
Physiotherapy Education	16
Bridging the gap between research and patients	16

General Healthcare Education

Multiple choice questions – do you really need five?

Source: BMC Medical Education

In a nutshell: Five is traditionally the number of options for multiple-choice questions in exams. Rather like Piers Morgan's television career, or Madonna's musical one, nobody knows why this has happened. Why not 17, nine or four for instance? In this study Nicolette Fozzard, from Griffith University in Australia, led a team of researchers comparing the effectiveness of multiple-choice questions with four answers to those with five. The researchers found that five-option questions were not superior to four-option ones and that reduction to four options made little or no difference to students' overall performance, particularly when multiple-choice questions were used together with other types of assessments such as short-answer questions and practical or laboratory assessment.

You can read the whole of this article [here](#).

Using Facebook™ to engage students

Source: Computers & Education

In a nutshell: If there's one set of lecturers one might expect to go in for re-designing their courses it's ones who lecture about architecture. In an attempt to turn the pedagogical equivalent of the Arndale Centre into King's College chapel a team of lecturers led by Isaiah T. Awidi, from Edith Cowan University in Australia, looked into the effectiveness of re-designing a course to include a Facebook group in an effort to improve students' levels of engagement. The students found that students were likely to report satisfaction with elements of their experience when concerns about posting on Facebook were well managed; a sense of community was experienced and they felt encouraged to learn through their engagement with Facebook.

You can read an abstract of this article [here](#).

Training peer teachers

Source: BMC Medical Education

In a nutshell: Peer teaching might sound like an educational programme for members of the House of Lords but actually involves older medical students – or junior doctors – teaching younger ones. In this study Annette Burgess and Deborah McGregor, from the University of Sydney, reviewed the research on how students are taught to carry out peer teaching. They found 19 articles which met their quality criteria most of which were 'uni-disciplinary,' faculty-led, non-compulsory programmes aimed at people in the last years of their training. Medicine was dominant and other professions were under-represented. Common programme

content included the foundations of education theory, teaching methods and techniques, and providing feedback. However a comparison between the different programmes was difficult due to inconsistencies and gaps in reporting, while the evaluation of the programmes remained largely subjective.

You can read the whole of this article [here](#).

Hackathons: come together, solve a problem

Source: BMC Medical Education

In a nutshell: Hackathons might sound like a gathering of smokers first thing in the morning, a gathering of journalists or a bunch of teenage boys sitting in their bedrooms trying to launch a missile strike against North Korea. It can also mean a group of people – many, but not all, of them sporting beards and carrying laptops – from various different spheres getting together to solve a technical problem. As well as actually solving problems hackathons are a great way for students to learn about other topics and learn how to work with other professionals. In this article Jason K. Wong, from Stanford University, led a team of researchers looking into Stanford University’s first healthcare hackathon, held in November 2016. 587 people applied to take part in the hackathon and 257 eventually did. Participants came from a range of academic backgrounds, age groups and areas of expertise. From 50 clinical needs presented 40 teams were formed and projects tackled web applications (13), mobile applications (13), tools based on artificial intelligence (6) and medical devices (3). 111 students answered a survey about the hackathon *post facto* and they noted a positive impact on their ability to work in multidisciplinary teams, learn from people from different backgrounds and address complex healthcare challenges.

You can read the whole of this article [here](#).

Inter-professional Education

Ganging up on the fatties

Source: BMC Medical Education

In a nutshell: It’s not much fun being fat. Apart from the obvious drawbacks you can’t go within half a mile of a medical professional without getting a lecture on mung beans and being made to do 20 star jumps before breakfast. In this study Diana C. Sanchez-Ramirez, from the University of Manitoba in Canada, led a team of researchers looking at the effectiveness of a one-day “inter-professional educational activity,” on health professionals’ ability to tackle obesity. 67 people took part in the study which found that the event increased people’s skills at assessing weight, addressing weight-management issues, teaching and motivating people about exercise, using behaviour-modification techniques and dealing with family issues. The participants also felt more educated and competent about obesity management, learned where to refer patients, were more comfortable in discussing obesity, were

less likely to avoid the topic and felt less frustrated with the low success rate which usually accompanies such efforts. It's not recorded whether the participants agreed to meet behind the bike sheds and give Billy Bunter a Chinese burn but it's surely only a matter of time ...

You can read the whole of this article [here](#).

Medical Education

On the fast track to medicine

Source: BMC Medical Education

In a nutshell: Some people go straight from school to study medicine over five years while others have done another degree first before taking an accelerated four-year course. In this study Paul Garrud, from the University of Nottingham, and I.C. McManus, from University College London looked at the kind of people who embarked on both courses and how successful they were at completing them. The study compared 1,445 people taking four-year courses with 1150 taking five-year ones. There was no significant difference in completion rates between the two types of course but those who did the four-year course were less likely to be Asian and had lower HESA (Higher Education Statistics Agency) scores although they did score more highly on the UKCAT (UK Clinical Aptitude Test) and GAMSAT (Graduate Medical Schools Admission Test) than people doing the five-year course. Higher GAMSAT scores, being from an ethnic minority and being younger were 'independent predictors of successful completion of medical school.'

You can read the whole of this article [here](#).

Getting more people into O&G

Source: BMC Medical Education

In a nutshell: O&G might sound like an Italian fashion house but is in fact the rather less glamorous – although some might say more important – world of delivering babies and dealing with 'women's troubles.' In 2005, faced with a shortage of doctors wanting to go into O&G the American College of Obstetrics and Gynecology [sic] launched a strategy designed to attract more people into this branch of medicine. More people have applied to work in O&G since then but little is known about which methods were effective in producing this change. In this study Isabel Green from the Mayo Clinic led a team of researchers who interviewed 10 students who had recently decided to go into O&G. Intrinsic motivations included: the potential for a meaningful job in women's health; advocacy for women; and empowerment of women. Extrinsic motivations included positive impressions during their clinical clerkships and welcoming teams.

You can read the whole of this article [here](#).

X-rays and E-learning

Source: BMC Medical Education

In a nutshell: Anyone who's ever had a look at a baby scan will know that it can be – quite literally – hard to tell their arse from their elbow. Medical students don't always learn enough about radiology and in this study S. Wentzell, from the University of Limerick, led a team of researchers looking into the effectiveness of an “innovative e-learning module,” on chest x-ray interpretation of the heart. 87 first-year medical students took part in the study which found that it led to improvements in the students' performance on tests, although their performance in diagnosis remained poor. However, the students who gave feedback about the e-learning said they would recommend it for improving one's interpretative skills.

You can read the whole of this article [here](#).

Are final-year medical students fit to be released into the wild?

Source: BMC Medical Education

In a nutshell: Along with property, ‘antiques,’ and cookery a mainstay of the TV schedules is moderately-successful thespians visiting animal sanctuaries where various fauna are being trained to cope when they're released into the wild. No soap stars are involved in the similar process for final-year medical students but the underlying principles are the same. In this study Till Johanne Buhaj, from the University of Heidelberg, led a team of researchers videoing students and assessing their competence at history taking, physical examination, IV cannulation and case presentation. 24 final-year medical students took part in the study which found that the students' performance improved significantly during their clinical rotations. However, “their task performance was not rated as sufficient for independent practice in most cases.”

You can read the whole of this article [here](#).

Being kind to cadavers

Source: BMC Medical Education

In a nutshell: In some universities medical students cut up dead bodies to learn about anatomy in the flesh, so to speak. What this does to people psychologically – as opposed to pedagogically – is a moot point and in this study Hyung-Joo Chang, from Korea University College of Medicine, led a team of researchers talking to students about their experience and asking whether memorial services for the people who had donated their bodies made any difference to the students' attitudes. 37 students in two consecutive academic years took part in the study and the researchers found that the students described their apprehension and anxiety during their first encounter with a corpse that diminished through gradual exposure. However, their positive

emotions of gratitude and responsibility also declined under the pressures created by excessive workloads and frequent exams. Memorial ceremonies – both large-scale events and daily rituals – prevented the decline of students’ responsibility and respect during the dissection course.

You can read the whole of this article [here](#).

Do medical students want to save the world?

Source: BMC Medical Education

In a nutshell: Opinions differ as to whether medicine is about squeezing in a few private patients between rounds at the golf club/bar, helping people who come through the door or changing the world (or at least banging on about changing the world at great length to all and sundry). In this study Sarah Larkins, from James Cook University in Australia, led a team of researchers studying the practice intentions of medical students in high- and low-income settings as they started and left university. 3,346 students from eight medical schools in six countries took part in the study which found that students from rural (think Crocodile Dundee rather than Midsomer Murders) and disadvantaged backgrounds were more likely to say they wanted to work in underserved areas, both at the start and end of their courses. Rural and low-income background and regional location of medical school were the most important predictors of intent to practice in a rural location. For medical schools in the Philippines and Africa intention to emigrate was more likely for respondents from high income and urban backgrounds.

You can read the whole of this article [here](#).

Motherhood and medicine

Source: BMC Medical Education

In a nutshell: Combining work with motherhood is difficult. Junior doctors are no exception, particularly as the most intensive part of their training occurs at what are – biologically speaking at least – the best years for having children. In this study Cindy Kin, from Stanford University School of Medicine in California, led a team of researchers asking 435 junior doctors (60% of whom were women) about their views on having children. The study found that women were more often worried about the negative impact of having children and taking parental leave on their professional reputation and career. Most of the women said they were worried about the potentially negative effects of the physical demands of their jobs while they were pregnant. Among parents, women were more likely than men to be the main caregivers on weeknights and to need weekday childcare from a non-parent.

You can read the whole of this article [here](#).

Saving the health system money – is it an age thing?

Source: BMC Medical Education

In a nutshell: Virtually every treatment or test a doctor recommends costs someone, somewhere some money. But are medical students more or less likely to care about this than qualified doctors? In this study Andrea N. Leep-Hunderfund, from the Mayo Clinic in Minnesota, led a team of researchers comparing the attitudes of qualified doctors and medical students to reducing costs in medicine. 2,556 doctors and 3,395 students took part in the study which found that it was the students who were most likely to agree that cost to society should be important in treatment decisions and that physicians should sometimes deny beneficial but costly services. Students were less likely to agree that it is unfair to ask doctors to be cost-conscious while prioritising patient welfare. The students were more likely to say that it was down to hospitals and health systems to reduce costs while the doctors were more likely to give responsibility to lawyers and patients. The study took place in the US so it would be interesting to see how different answers were in the fairer but more cash-strapped UK health system.

You can read the whole of this article [here](#).

Are you yodelling clearly? Medical communication in Switzerland

Source: BMC Medical Education

In a nutshell: It's hard not to think about Switzerland without calling to mind Harry Lime's quote from *The Third Man* – "In Switzerland, they had brotherly love, and they had 500 years of democracy and peace, And what did that produce? The cuckoo clock." Notwithstanding this, as well as making bird-related timepieces and eating Alpen, the Swiss also run a few hospitals and in this study N. Junod Perron, from the University of Geneva, led a team of researchers who examined what Swiss medical students were taught in the way of communication skills. 16 lecturers and 389 medical graduates took part in the study which found that – over the course of a medical degree between 60 and 200 hours were dedicated to communication, primarily in small group and "experiential," formats. Assessment of communication skills was done using multiple-choice questions and people pretending to be patients. Most of the training occurred in the first three years of medical school and continuity of communication-skills training during doctors' clinical years remained a challenge.

You can read the whole of this article [here](#).

Midwifery Education

Helping midwives stop OASIS

Source: BMC Medical Education

In a nutshell: According to taste Oasis were one of the great bands of the 1990s Britpop scene, pub rockers who got lucky or living proof that chimpanzees could be taught to play musical instruments. Less pleasurable OASIS also stands for obstetric anal sphincter injuries which can lead to anal incontinence, dyspareunia (pain when having sex) and perineal pain. In this study Hadil Ali-Masri, from the Palestine Medical Complex in Ramallah, led a team of researchers who looked into the effectiveness of two different ways of teaching a technique called bimanual perineal support which can prevent OASIS developing. The researchers compared self-directed electronic learning using an animated video with the video plus face-to-face learning. The researchers concluded that the animated e-learning video had a positive impact on reducing the incidence of OASIS and that this reduction was enhanced by the use of the blended-learning programme combining both the e-learning and face-to-face training.

You can read the whole of this article [here](#).

Nurse Education

What makes nurses trust their lecturers?

Source: Nurse Education Today

In a nutshell: Depending on one's point of view the idea of students trusting lecturers can be as counterintuitive as gazelles trusting lions to examine their sore hooves or as blindingly obvious as the Von Trapp family trusting Maria to teach them the rudiments of harmony. In this study Lynn M. Varagona and Judith L. Hold, from Kennesaw State University in Georgia, held 11 focus group – comprising a total of 77 students – asking students what made them trust their lecturers. Three core themes emerged from the focus groups which were:

- Giving of oneself
- Being competent
- Having integrity

You can read the abstract of this article [here](#).

Getting to the bottom of dropping out

Source: Nurse Education Today

In a nutshell: Students dropping out of their courses is a common problem in higher education and nursing courses are no exception. In this study Greet Van Hoek, from the University of Antwerp, led a team of researchers who looked at 554 nursing students from six local colleges in an attempt to get to the bottom of the problem. The researchers found that lower resilience; more destructive – and less

positive – stress-reducing activities; attempting to commit suicide in the past; studying in a densely-populated area; and starting as a regular student were all significantly linked to higher intentions to leave whereas higher resilience significantly predicted academic success.

You can read the abstract of this article [here](#).

Concept-based learning and concept mapping

Source: Nurse Education Today

In a nutshell: In this study Imad Alfayoumi, from Isra University in Jordan, looked into the effect of combining concept-based learning and concept-mapping on nursing students' clinical-reasoning abilities. 40 students took part in the study which found that – despite requiring extensive preparation time – concept-based learning and concept-mapping allowed the students to move away from a content-laden approach “towards constructing criteria against which various patients' encounters were reflected.” The study “documented enhancement in students' independence in clinical-reasoning and clinical judgement as they learned to take command of the elements of their clinical reasoning.”

You can read the abstract of this article [here](#).

What's the best way of giving feedback?

Source: Nurse Education Today

In a nutshell: Several millennia ago some bright spark came up with the idea of writing, superseding pictures, talking and grunting – at least in certain people's book. A few thousand years later somebody else came up with YouTube and emojis and people went back to talking, pointing and grunting again albeit via the medium of a computer screen. In this study Clare Killingback, from Bournemouth University, led a team of researchers who looked at students' perceptions of alternative ways of giving feedback such as audio, video, podcast and screencast. The researchers reviewed the literature on this topic and found 10 studies which met their quality threshold. They identified five themes which were:

- Belonging
- Greater comprehension from non-verbal aspects of communication
- Individualised and personal
- Technical/practical technology aspects
- Circumstances and context

The researchers concluded that alternative feedback modes help students achieve a greater level of comprehension of feedback, with feedback that was more personalised.

You can read an abstract of this article [here](#).

Analysing students' reflections

Source: Nurse Education Today

In a nutshell: Narcissus and Snow White's stepmother both came to sticky ends spending too much time examining their reflections although Socrates thought that an unexamined life wasn't worth living. Taking the latter approach nursing students are encouraged to engage in self-reflection after their work placements and in this study Nataša Mlinar Reljić, from the University of Maribor in Slovenia, led a team of researchers analysing students' self-reflections after their first clinical placement. Three main themes emerged from a study of the reflections which were:

- Emotional experience
- Interpersonal relationships
- Learning

You can read the abstract of this article [here](#).

HIV testing – learning by experience in Taiwan

Source: Nurse Education Today

In a nutshell: There's nothing like going through something oneself to teach you how a certain situation feels. In this study a team of researchers led by Piao-Yi Chiou, from the National Taipei University of Nursing and Health Science, applied this to HIV testing. 30 nursing students took an HIV test and were then interviewed to see how they felt about the experience. Before they took the test the nurses recalled possible risk factors for HIV infection; decided whether to do the test alone or ask for someone to accompany them and endured "emotional fluctuations," just before the test. While they were waiting for the results they felt isolated from the outside world. Some of them started to question the accuracy and safety of the test. After the test some of the nurses reported being uncertain about the results. The nurses said they had been left with a greater understanding of the personal impact of HIV testing and revealed their need for support. "Some identified a sense of loss and linked this to the rapid and direct delivery of test results."

You can read the abstract of this article [here](#).

Can you learn people skills from simulations?

Source: Nurse Education Today

In a nutshell: Simulation is often used to teach people clinical skills and procedures but can it teach people non-technical skills as well? In this study Monica Peddle, from La Trobe University in Australia, led a team of researchers who interviewed 71 nursing students about this topic. Overall the students said that their interactions with virtual patients had developed their knowledge and skills across all categories of non-technical skills including communication, situation awareness, teamwork, decision-making skills and duty, advocacy and empathy.

You can read the abstract of this article [here](#).

Can you learn end-of-life care from simulations?

Source: Nurse Education Today

In a nutshell: Nowhere are communication skills more necessary than when looking after someone coming to the end of their life. In this study Amanda J. Kirkpatrick, from Creighton University in Nebraska, led a team of researchers studying the effectiveness of a simulation exercise at improving nursing students' palliative care. 75 senior nursing students took part in the study 93.3% of whom had previous experience of looking after someone who was dying. Although the students with previous experience had higher self-awareness and knowledge before the simulation there were no significant differences between them and the less-experienced students after it. Scores for self-awareness, knowledge and performance were all high after the simulation had taken place.

You can read the abstract of this article [here](#).

Coming across child abuse. How do student nurses feel about it?

Source: Nurse Education Today

In a nutshell: Students going into paediatric nursing might be expected to encounter the odd case of child abuse but those going into adult nursing might not expect to. In this study Julie Tweedlie and Sharon Vincent from Northumbria University interviewed nine adult nursing students who had come across cases of child abuse while out on their clinical placements. The students had – according to the researchers, at least – undergone a process of transformational learning after encountering perceived child abuse and neglect. They found the initial experience disorientating because it challenged their pre-conceived ideas about families and communities and they experienced a range of negative emotional responses including anger and judging the families. However, the students' 'frames of reference,' changed as they began to think about their experiences and they were able to recognise that they had enhanced their knowledge and learnt from the experience. Their understanding of the role of the adult nurse changed and they recognised that they had an important role to play alongside other professionals in safeguarding children.

You can read the abstract of this article [here](#).

Teaching medication safety. How much do we really know?

Source: Nurse Education Today

In a nutshell: Giving the wrong drugs to the wrong people, or the right drugs in the wrong amounts is one of the most common errors in hospitals; it's easy to get a decimal point in the wrong place when beeps are going off, Elsie in bed 8 has wet herself and you haven't had anything to eat for nine hours. In this study Seung Eun Lee and Brenna L. Quinn, from the University of Massachusetts Lowell, reviewed the literature on how medication administration safety was taught to nursing students. The researchers found 12 articles which met their quality criteria. There were three main methods of teaching students about giving out medicines: simulation; technology aids and online learning modules. Most of the studies had been carried out in North America but the use of different interventions and different outcome measures made comparing the research difficult and there was a lack of information about the psychological tests used during the studies.

You can read the abstract of this article [here](#).

Compassion in nursing – a wilting flower or flourishing bloom?

Source: Nurse Education Today

In a nutshell: Compassion is usually thought of as one of the most important qualities a nurse can have but it's not really known which factors increase or reduce it in practice. Does it wilt in the heat of the wards or bloom watered by the tears of grateful patients? In this study Dutch researchers Alke Nijboer led a team of researchers who interviewed 14 Dutch nurses with between nought and five years practical experience. Four themes emerged from the interviews which were:

- The nurses saw compassion as part of their professional identity
- Balancing between positive and negative environmental influences and their own perceptions
- Various strategies such as rebellion and conforming to the ideas of the workplace helped nurses to do so in daily practice. If nurses succeeded in dealing positively with various influences a professional development was perceived over time
- If the nurses' strategies were successful their awareness of compassion and professional identity increased. If they weren't they felt insecurity, job dissatisfaction and were more likely to leave their jobs

You can read the abstract of this article [here](#).

How do nurses really give out drugs?

Source: Nurse Education in Practice

In a nutshell: What nursing students get taught about how to give out medicines doesn't always correspond to what goes on on the wards. Universities use different philosophies, theories and models; healthcare contexts are increasingly complex and clinical environments can be unpredictable. To try and get a better match between what students are taught and how medicines are administered in practice Julie-Anne Martyn from the University of the Sunshine Coast, and Penny Paliadelis from Federation University (both in Australia) interviewed 20 qualified nurses about their experiences giving out drugs. The nurses explained how they assessed patients' needs and implemented strategies to administer medications safely. "They presented their actions as being underpinned by a desire to do 'the right thing for the patient,' despite their practice going beyond traditional procedural frameworks and not reflecting organisational protocols." The nurses had developed common strategies to enhance safe medication administration and described using clinical reasoning and patient-centredness during the process.

You can read the abstract of this article [here](#).

What do nursing students know about stroke care?

Source: Nurse Education Today

In a nutshell: As the average age of the population increases and more people are fatter for longer the number of people having strokes is set to increase in the future. In this article Jagoba Zarandona, from the Vitoria-Gasteiz Nursing School in Spain, led a team of researchers who analysed exam answers from 126 third-year nursing students in an attempt to find out what they knew about looking after people who had had a stroke. The researchers found four areas in which the students' knowledge was lacking which were:

- Limitation of the neurological assessment to the level of consciousness and the use of the Glasgow coma scale
- Association of haemorrhagic stroke with hypovolaemia
- Justification of the need for appropriate patient positioning and postural changes based solely on preventing pressure ulcers
- Assertion that strength exercises can improve spasticity

You can read the abstract of this article [here](#).

Pharmacy Education

Going own-brand in Greece

Source: BMC Medical Education

In a nutshell: Buying own-brand rather than branded goods in supermarkets is one of people's favourite ways of saving money. In medicine this approach takes the shape of prescribing cheaper, generic medicines rather than branded ones although – label notwithstanding – the medicines are otherwise identical. In Greece - where their version of austerity - makes ours look like chocolate fountains with biscuit boats this is particularly pertinent and in this study Philippe J. Domeyer, from the Hellenic University in Patras, studied the attitudes of Greek students' towards generic medicines. The study found that knowing more about generic medicines was linked to a greater recognition of the fact that generic medicines were just as good and a lot cheaper. Pharmacists had a superior knowledge of generic medicines, were happier with the information they received about them and strongly believed in using them rather than branded medicines. However, compared to other professions pharmacists also “indicated substantial differences between branded and generic medicines more often,” and “argued to a greater extent that generic medicines were invented and promoted to resolve the financial crisis of social security institutions.”

You can read the whole of this article [here](#).

Physiotherapy Education

Bridging the gap between research and patients

Source: BMC Medical Education

In a nutshell: Comic books are full of stories in which mild-mannered librarians or janitors by day change into action-packed superheroes at night. Similarly in medicine some people double up as mild-mannered physiotherapists in one part of their lives and dynamic researchers in another (or *vice versa*). One advantage of this – at least in theory – is that new ideas and techniques move more quickly from research into practice. In this study Esther E. van Dijk, from Utrecht University in the Netherlands, led a team of researchers who interviewed five clinician-scientists and 14 of their clinical colleagues in attempt to find out how this transfer of knowledge occurred in practice. Everyone reported clinicians learning informally by being told about the evidence for new tests and treatments, by an increased understanding of the research process and by an increased awareness of an “academic reflective approach to care.” Learning took place mainly though knowledge sharing and, to a lesser extent, through role modelling or joint implementation.

You can read the whole of this article [here](#).