Interprofessional training at Hull York Medical School 2007 - 2010

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Plan for this presentation

Share our experience of interprofessional training

'Got a lot more insight into the world of the wards today; A little lost to start with, mostly because we never really do much apart from clerking a case for your own learning; Got to wake people up, clean, wash, hoist, feed, fill in charts, drug rounds, chat, examine, just generally 'look after' without dishing out prescriptions. Surprising how much the ward isn't really about the doctor's role.' **Student reflection**

Hull York Medical School (HYMS)

- A collaboration: University of Hull, University of York, local National Health Service (NHS) Trusts, Post Graduate Medical Deanery
- One of four new medical schools established in the past decade to meet anticipated workforce needs
- First students admitted 2003
- Undergraduate 5 year course
- Problem based learning
- 50:50 experience in primary care : hospitals
- 108 students, Year 5/2007 cohort; 116 in 2008; 126 in 2009 cohort.

HYMS interprofessional training model

Influences: General Medical Council(!); St George's Medical School, London; Scandinavian schools; WHO

Senior students from different healthcare disciplines work alongside each other and with trained staff to care for patients

- Share their own skills
- Understand what other healthcare professionals do – **and what they don't do……**
- Understand how different skills work together to provide best care for patients & best use of resources

Result: Trained professionals capable of working skilfully in the multidisciplinary team (MDT)

Senior students = final year students in our model

What did we need?

- Funds – HYMS allocated funding
- A base – rehabilitation or orthopaedic unit
- Permissions / approvals
- Interprofessional training facilitators
- Collaborators – nursing, healthcare therapies
- A placement plan
- Outcomes measurement

Organising what we needed I

- A base – Ward 2, Goole & District Hospital
  - 18 bed Specialist Rehabilitation Unit; 10 Day Care places; Falls Clinic
  - Nursing care; Medical care; Physiotherapy; Occupational Therapy; Speech & Language Therapy; Nutrition
- Permissions
  - Local NHS executive; Board of Governors
- Interprofessional training facilitators
  - All the Ward 2 staff were facilitators – training workshops
  - Designated profession-specific facilitators from Ward 2 staff – HYMS funded backfill staffing costs
  - Me – Placement lead & HYMS link for the Ward 2 staff

Organising what we needed 2

Collaborators

- Nursing – from 2007: Faculty of Health & Social Care, University of Hull
- Therapies – from 2008: York St John University

Placement plan

- Outcomes to be achieved
- Duration: 2 weeks for every student
- Practicalities – how do we permit 100-odd students to constructively & enjoyably provide safe hands-on care for sick patients on a working ward & while they're at it, learn about other professions?

Placement Plan: Four 'generic' outcomes

- Respect, understand and support the roles of other professionals involved in health and social care
- Demonstrate a set of knowledge, skills competencies and attitudes which are common to all professions and which underpin the delivery of quality patient/client–focussed services
- Deal with complexity and uncertainty
- Collaborate with other professionals in practice

We mapped profession-specific outcomes to these four generic outcomes – so we all spoke a common language when working together & reflecting

Placement Plan: Work schedule

Constraints

- HYMS Year 5 (final year) overall schedule – all placements had to be completed between Mid-October & Mid-March
- Collaborator schedules – it was *incredibly* difficult to have students from all professions available to be on Ward 2 together – we did manage though, but not for every group

Working it

- Groups of 10-12 medical students/ 2-week placement working in three smaller groups doing 7-day-a-week shift-work plus, when schedules permitted, 1-2 nursing students & 1 therapy student
- Shift pattern: Late (13.00-21.00): Early (07.20-15.00): Day off.

This prolonged exposure time (for medical students accustomed to in/out ward visits) provided amazing insights on the life of the ward. The 'late' followed by 'early' shift pattern permitted some continuity in care – the time off was ok too....

Some details

- Student work rota
- Placement handbook
- Day 1: Induction (ground rules), tour/introductions, accommodation, manual handling training, first late shift begins work
- Daily constants: Morning handover; 1.30pm tutorial; 2pm Early to Late student shift handover; 9pm handoff.
- Final Friday: Discussion, reflection, overview

'The multi-disciplinary team on this ward works exceptionally & both ourselves and the medical students have been welcomed into the team & felt valued for our contribution'

Student reflection

What did the students do?

Everything.....

07.20 - 21.15hrs, seven days a week

.....October-May..... **with supervision**

… Two student shifts/day..... 3-4 students/shift

Each student paired with a nurse/care assistant

Roster: Late / Early / Day off

... 13.30-15.30 Tutorial / Handover / Reflection

'Drug round: 'I was surprised at just how easy it was to make a mistake when handing out drugs.

It highlighted to me the importance of writing clear drug charts when prescribing medications'.

Student reflection

OUTLINE OF DAILY TIMETABLE

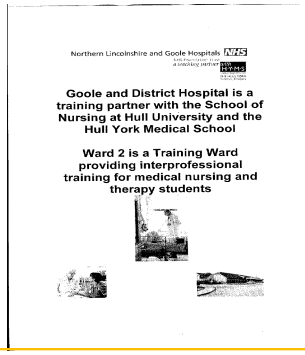
EARLY SHIFT

TIME	ACTIVITIES
07.20	Student sign in. Handover from the night shift.
07.35	Prepare patients for breakfast.
08.00	Give out breakfast and assist patients with feeding as required. If not eating breakfast, offer dietary supplement as necessary. Record food intake. Collect dishes. Tray cleaning. Bed making. Patient care, washing, dressing. Clinical observations. Morning medication round.
09.00	Tea/Coffee meeting to review overnight events, attended by multi-disciplinary team – Handover; Planning for the day. OTs and Physios decide priority order of patients needing therapy. Agree student attendance at therapy/home visits. Agree student medical tasks (eg blood tests, clinical examinations). Shared patient care and profession-specific clinical work; Documentation / patient notes to be completed. 15 min break to be taken during this time.
11.30	Escort patients to dining room for lunch. Assist with feeding as necessary. Collect dishes. Record food intake.
12.00–13.00	Student lunch to be taken in 2 groups. 12.00 – 12.30 and 12.30 – 1.00
13.00 – 13.30	Prepare for handover and complete any outstanding tasks. Ensure nurses aware of any changes/developments in patients' care to facilitate their taped handover to incoming staff.

LATE SHIFT

TIME	ACTIVITIES
13.30 – 14.00	Daily tutorial – check schedule for topic. Students organise their teams for late shift.
14.00 – 14.45	Handover – led by students – facilitator and available MDT members attend. Medication round at 14.00
14.45-15.20	Reflection period for early shift – facilitator attends.
14.45 – 16.30	Late shift students sign in. Provide shared patient care on the ward. Complete any outstanding tasks and/or clinical work from morning shift handover. Review any investigation results. Review of each patient in your care from your professional perspective. Update patient clinical notes. Liaise with staff doctors regarding any outstanding medical issues. Check & update draft patient discharge summaries. Prepare patients for tea – shared care activity. 15 min break to be taken during this time.
17.00 – 20.00	Give out tea and assist patients with feeding If not eating, provide dietary supplement as necessary. Collect dishes. Record food intake. Medication round. Evening therapy to be undertaken with patients able to participate.
17.00–18.00	Student tea to be taken in 2 groups. 30 minutes each.
20.00 – 21.15	Patient family/visitor contact time for update/ discussion as needed of patient progress. Evening clinical observations – shared care. Review and update patient records and draft discharge summaries as needed. Assist patients into bed as necessary. Medication round.
21.15	Night staff – 15 min handover. Student sign out.

On physician ward rounds, students are to present the patients in their care, update physician on progress, discuss any queries, and agree plans.


Northern Lincolnshire and Goole Hospitals NHS

Goole and District Hospital is a training partner with the School of Nursing at Hull University and the Hull York Medical School

Ward 2 is a Training Ward providing interprofessional training for medical nursing and therapy students

On Ward 2: We told patients, families, visitors, other staff, NHS officials – EVERYONE - that we were a training unit.

'Expect to see students providing patient care'

'……we spend so much time learning about the condition, how to diagnose it, what management to give, that I have never really thought about whether (patients) can wash & feed themselves' **Student reflection**

'Appreciated the amount of work/effort involved in getting patients out of bed & providing pressure relief; long term implications of this for discharge; medically fit v MDT fit.' **Student reflection**

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'… handing over patients was a skill that I learnt.
The handover meetings often involved discussion with many members of the rehabilitation team & when you gave out information, you had to tailor it for the member of the team you were talking to..'
Student reflection

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'Nutrition! Seeing what patients eat (or don't eat) on a daily basis has opened my eyes'. **Student reflection**

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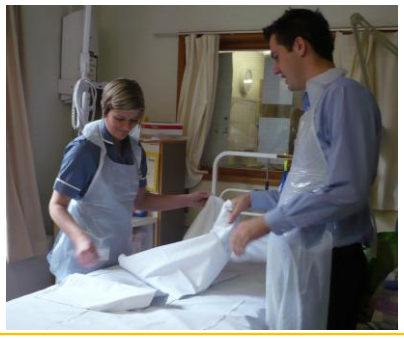

'It amazed me how long it actually took to get one bay of four patients washed, dressed, and out of bed. (It) gave me a huge respect for the hard work (of nursing care)'
Student reflection.

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'When the physios were working with the patient, it looked easy –when I helped it was quite tiring, quite quickly. Although watching what they did looked easy. It wasn't!' **Student reflection**

Not everyone was pleased - but saw some gain

Today's handover involved my own take on the situation with each patient as opposed to passing over info given to me. I feel more settled in this new role.

I'm surprised by the amount of protocol. I think I found it hard to find things to do because I was looking at what *needed* doing as a medical student but there is just a set of tasks to be done every day, regardless of indication.

As a medic, I appreciate having obs to hand for a quick glance to check the condition of the patient. But having to do obs on a regular basis just because that is what you do is frustrating. My handover was better for knowing the patient having spent time doing these obs though.

Student reflection

Could / should the experiences have been gained elsewhere?

'….. the Goole experience adds nothing further in terms of knowledge to most people. Prior to medical school I worked in a nursing home doing the duties which we are made to do in Goole. I don't believe doing this again aids my knowledge or will make me a better doctor.'

Essay comment 1

Insight deficit was uncommon..

But it existed:

'So you are left with a fantastic choice of awkward boredom or engaging in activities that you never ever imagined would be part of the medical degree and you have no desire whatsoever to perform.'

Essay comment 2

And balance existed too:

'So… in conclusion. I hated washing bums. I hated the 7.15am starts. I hated going to Goole and having to spend a Friday or Saturday night over in dead-town. But I liked the opportunities given to me. My advice to other people would be- it won't be brilliant. You'll hate it (perhaps), but it does serve a purpose- it gives you some idea of what Medicine is all about (if you hadn't figured it out already..)'

Essay comment 3

Outcomes

How many students 'did Goole'?

Year 1: August 2007 - March 2008
- 107 Final Year medical students: 2 weeks each, 8-10 students/placement
- 4 Final Year nursing students: 12 weeks each

Year 2: October 2008 – April 2009
- 116 Medical students, 10-12 students/placement
- 10 Nursing students

Joined by York St John University, February 2009
- 2 Final Year Physiotherapy students
- 3 Final Year Occupational Therapy (OT) students

Year 3: October 2009 – May 2010
- 126 Medical students
- 4 Physiotherapy students
- 4 Occupational Therapy students
- 8 Nursing students

TOTAL: 384 STUDENTS

The primary business of Ward 2, patient care, was the dominant the focus of all activity.

How did 'doing Goole' work for patients, staff and students?

'It is quite strange to actually feel part of the team, rather than just being the 'spare part' student who just seems to get in the way'.

Student reflection

Ward 2 Patients

Qualitative overview
- Patient consent required for medical student care
  - No withdrawals; three refusals
  - Patients liked student involvement
  - Families/ visitors liked student interaction
- No increase in adverse events on ward
- No complaints about student care
- Length of stay unchanged
- Timeliness of discharge letters improved

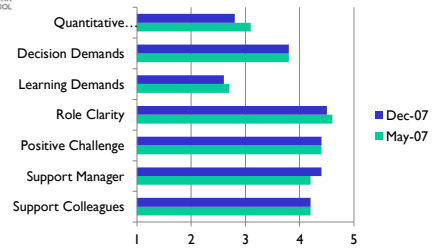
Patient fell during drug round..... made you realise that one event can have knock on effects on provision of care: patients late receiving meds; handover meeting had to be cancelled; patients not dressed when they normally would have been. Appreciate that though things may appear normal, an incident or difficult patient earlier can disrupt ward organisation & hence things may not have been done.
Student reflection

Ward staff

- Many studies have looked at student reactions and patient views, fewer have looked at staff
- Questionnaire for Psychological and Social factors at work (QPSNordic) https://www.qps-nordic.org/en/index.html

We were interested in how students on the ward would alter the work environment (or not) for the staff

Ward 2 Staff: QPSNordic



No significant differences between pre/post scores

Ward 2 Staff

Focus groups -what did they say?

One hour focus groups; team members from all professions; manager not present; transcribed and analysed for main themes

- **Pre-placements focus group (May 2007)**
  - Enthusiasm – let's do it!
  - Apprehension
    - Are we 'up' to the task?
    - Disruption to good patient care
    - Disruption to Ward 2 team relationships
  - Trust
    - Strong team
    - Opportunity to learn, improve patient care

Ward 2 Staff

Post-placements focus groups (April 2008, June 2010)

- **Enjoyment – mostly**
  - More fun than expected
  - Staff able to spend more time with patients
- **Hard work**
- **Two-way information-learning exchange**
  - Staff had major amount of information & skills to share with & teach to students
  - Students shared in turn
  - Easy to ask questions / discuss issues with students
  - Unexpected learning opportunities
- **Pride in Ward 2 performance**
  - 'we are good'
  - Felt patient care benefited from student presence

Students: Within placement evaluations and reflections

- Readiness for interprofessional learning survey (RIPL), pre- & post-placement
- Self assessment & student reflection on each of the four placement outcomes
- Placement survey
- Daily end-of-shift reflection (morning team)
- Final Friday group reflection
- Reflective essay

'From the first day, I had to deal with complexity and uncertainty like I had never done before.....

I also had to deal with death in a way I never had to before.

I have never nursed/cared for a patient in their last hours of life – until this placement. ...

Student reflection

Readiness for Interprofessional Learning Survey (RIPLS)

Three domains:

-Teamwork – 13 statements, e.g. Shared learning will help me understand my own limitations

-Professional Identity – 5 statements, e.g. I would feel uncomfortable if another health care professional knew more about a topic than I did

-Patient Centredness - 5 statements, e.g. I like to understand the patient's side of the problem

Ref: Reid *et al.* Medical Education 2006; 40:415-22

'I feel that this placement has enlightened me on the roles of other professionals, particularly the medical students, & I will be able to take this into consideration in my future practice'.

Student reflection

Outcomes

Readiness for Interprofessional Learning survey (RIPLS)

- More positive attitudes toward working with other professions
  - Nursing, OT, Physio students entered placement with high teamwork scores already
  - Scores for all student groups increased during placement
- 'Professional Identity' decreased = lessening of 'professional silos'
  - Medical students appeared less keen than nursing & therapy students to surrender their professional identity within the team
- Patient Centredness was high among all groups, 22-23 / 25 at entry

RIPL survey: Teamwork Domain. High score best

Teamwork Domain Min 13; Max 65 High best	Pre-placement score Mean (SD)	Post-placement score Mean (SD)	Pre – Post difference p value
Med students 2007-2008 N=101	55.0 (7.8)	58.0 (7.3)	<0.001
Med students 2008-2009 N=107	53.0 (6.8)	57.0 (6.8)	<0.0001
Nursing, OT, Physio students 2008-2009 N=10	59.6 (4.2)	62.9 (1.7)	0.01
Med students 2009-2010 N=125	52.9 (6.2)	56.4 (6.4)	<0.0001
Nursing, OT, Physio students 2009-2010 N=14	55.6 (4.1)	60.2 (2.7)	0.002

RIPL survey: Professional Identity Domain. Low Score best

Professional Identity Domain Min 5; Max 25 Low best	Pre-placement score Mean (SD)	Post-placement score Mean (SD)	Pre – Post difference p value
Med students 2007-2008 N=101	10.4 (2.7)	9.2 (3.0)	0.001
Med students 2008-2009 N=107	11.0 (3.2)	9.3 (3.4)	0.001
Nursing, OT, Physio students 2008-2009 N=10	9.6 (1.6)	6.4 (1.3)	<0.001
Med students 2009-2010 N=125	10.7 (2.9)	10.29 (3.0)	NS
Nursing, OT, Physio students 2009-2010 N=14	10.4 (1.9)	8.1(1.3)	<0.005

Student surveys, self assessment, reflections

Placement survey
- Every year, >90% said the placement was a valuable experience
  - 97 % when last group completed well before written exams
  - 92% when last group completed between written & practical exams

Self assessment on the 4 generic outcomes
- On the whole, realistic & grounded assessments

Students' reflective writing indicated positive, transformative experiences, much 'private' learning, very few negative views (& our students were not shy...) (*project in progress*)

Support activities

- Stakeholder review 2008 – staff, patient groups, community, NHS Trust, external academics
- Annual review with staff to present survey results, troubleshoot, amend model & plan the next year
- Staff focus groups
- Student Year 5 reviews

  - Independent facilitators
  - Outcomes informed next year model
- General Medical Council curriculum reviews
- Strengths, Weaknesses, Opportunities, Threats (SWOT) report
- My open door, regular cakes, Kleenex as needed

By Year 3, we had fine-tuned our model

The Goole placement no longer runs.... Why?

SWOT report 2008 identified the main practical issues

- Placement capacity - Economics
  - Increasing student numbers
    - » 108 →116 →126 →142 for 2010-2011
  - So we needed a second placement ward & associated funding
  - (*ward staff backfill, student accommodation & travel, HYMS facilitator*)
- Commitment from nursing, therapy schools
  - Institutional colleagues in nursing & therapy supported the placement strongly but it was never an integral part of curricula
- Excessive dependence on a single individual to lead the placement

More importantly.....

What is the evidence that hands-on interprofessional training has tangible benefit for subsequent multi-disciplinary team-working and patient care outcomes?

- Limited literature
- No systematic rigorous evaluation

→ no good evidence

Consider healthcare training models

- Nursing & therapy training in the UK has (at least until now) required students to work extensively as team members
- Though not labelled 'interprofessional', this is certainly an aspect of that hands-on training
- That practical team-working experience most likely accounts for the RIPLS score differences observed between nursing & therapy students & the medical students

So in fact
- Rather than being a 'special' placement, interprofessional working should be embedded & highlighted in all aspects of healthcare (medical) training
- This may require more change from the teaching professionals themselves than from students, even though it is (presumably) how the teachers operate in their own clinical lives.....

Seeking evidence

How do medical graduates perform in the multidisciplinary team (MDT) when they are working as doctors?

- Ubiquitous focus on 'effective MDT working' implies there is a means of measuring ...
- BUT - We found no instrument to assess how individuals performed in the MDT, though attitudes and team outcomes have been assessed
- So we have created an instrument to assess individual performance in the MDT, using repertory grid technique from personal construct psychology.

work in progress.....

In Summary

- It is possible to run a hands on interprofessional training placement
- On standard outcomes measures, Goole 'worked'
- Qualitatively, it was hugely rewarding for students, patients & staff

But

- Does hands-on interprofessional training impact on subsequent real-life performance?
- Should the concept of interprofessional training not be embedded in every placement that healthcare students undertake?
- Though our numbers were small, the findings from nursing & therapy students suggest their more 'doing' profession-specific training also permits concomitant interprofessional training
- A message for medical schools? Or a question?

'... Surprising how much the ward isn't really about the doctor's role.'

Thank You for listening

Acknowledgements

- The Ward 2 staff, who together facilitated student learning with good humour, great skill, and endless patience and enthusiasm……
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Questions?

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