

Patient safety in health care professional educational curricula: Examining the learning experience

Some initial findings

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On behalf of the Patient Safety Education study Group



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Background

Education, *be it formal or informal*, is the 'key' to how health care professionals think about, talk about and write about mishaps, errors and keeping patients safe.

Pre-qualification education has a central role in enhancing patient safety *but* we need to develop a better understanding of the formal and informal learning which takes place.



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The study

NPSA funded

Two and a half years

5 partner institutions exploring undergraduate education for 4 health care professions :

Medicine, Nursing, Physiotherapy, Pharmacy

- **Newcastle University** (Revd Dr Pauline Pearson - PI)
(Dr Alison Steven – Lead researcher)
- **University of East Anglia** (Professor Amanda Howe)
- **University of Edinburgh** (Professor Aziz Sheikh)
- **University of Manchester** (Dr Darren Ashcroft)
- **University of Surrey** (Professor Pam Smith)

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The study aim

To study the formal and informal ways pre-qualification students from a range of healthcare professions learn about keeping patients safe from errors, mishaps and other adverse events (broadly known as Patient Safety).

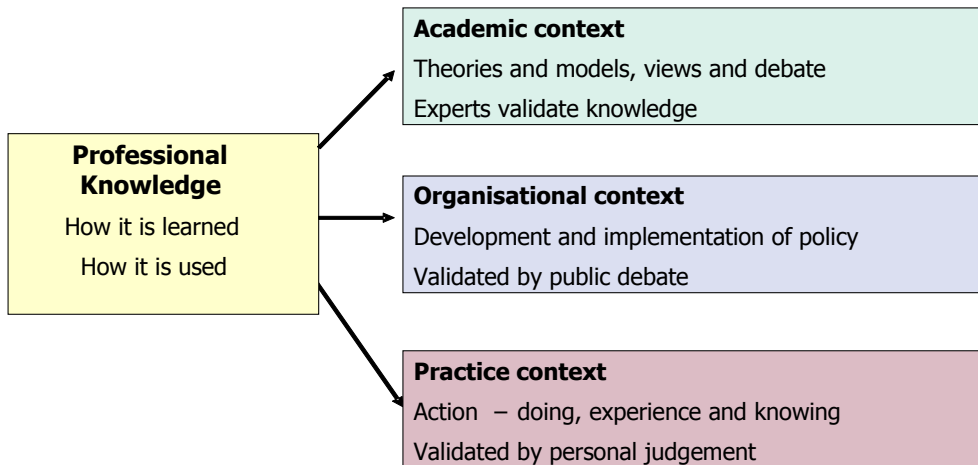


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Theoretical framework

Knowledge contexts

(Stewart 2006 Drawn from Eraut 1994)



Stewart J. Asking for senior intervention: conceptual insights into the judgement of risk by doctors . PhD thesis, *Newcastle University, Newcastle, UK*, 2006.

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The study design

Phased by context:

•1 Academic context

(Course content as planned and delivered)

- *Part 1 Curriculum analysis and exploration (13 courses)*
- Part 2 focusing down on 8 case study courses

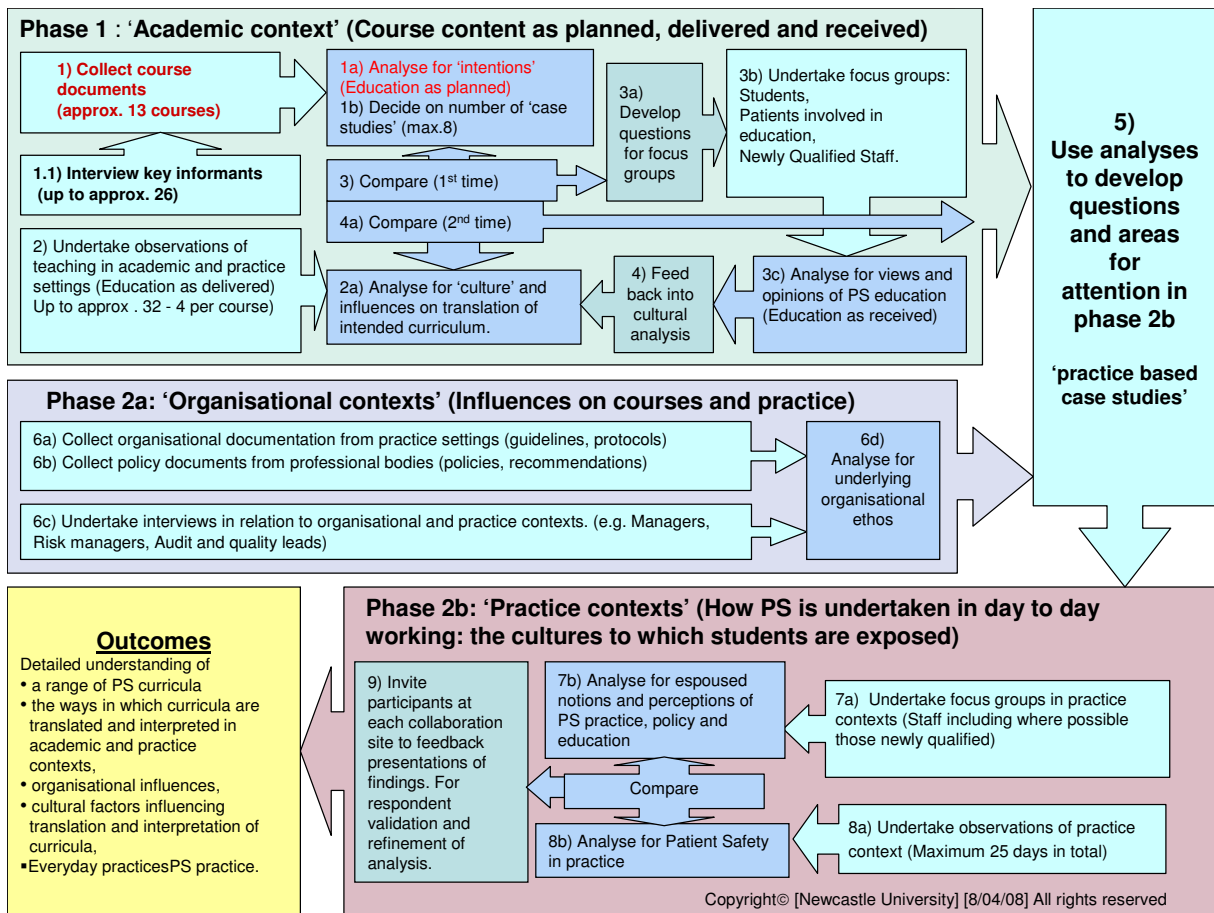
•2a Organisational context

(Influences on courses and practice)

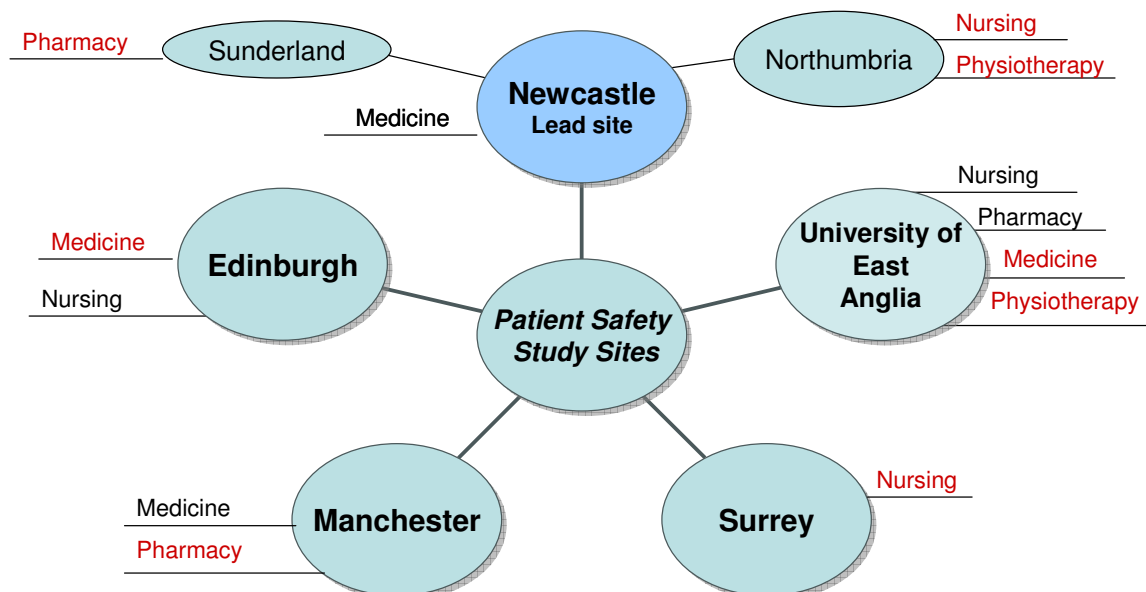
•2b Practice context

(The cultures to which students are exposed)





Who and where



Red = Case study sites

Curriculum analysis: Documents collected

Course / site	Documents					
Medicine C	Handbooks years 1-5	Curriculum mapping to Tomorrows Doctors	IPE	Website outlines	Review of PBL cases	
Medicine B	Degree programme handbook	Personal and professional development handbooks 1-4	Terminal outcomes grid		Learning agreement 2005/6	
Medicine A	Electronic Medical Curriculum			Website		
Medicine D	Validation documents	Student handbook	Paper for GMC	Web based course structure and outcomes	Unit documents on Blackboard	
Nursing D	Validation documents	Student handbooks	Concept maps (paper and electronic)			
Nursing E	Validated curriculum submission document	Student handbook	Module handbooks (9)			
Nursing A	Overall programme handbook	Course handbooks (21) (3 others not available)	Course overviews	Website: course description	Programme specification 2006	Student recruitment and admissions information sheet
Nursing B	Programme specification	Module handbooks from website	Learning and Teaching Strategy 2004-7			
Pharmacy D	On line prospectus	Unit outlines and learning outcomes (electronic)	Placements Induction Handbook (electronic)	Lecture notes (electronic)		
Pharmacy C	Accreditation document RPSGB	Module handbooks	Programme handbooks years 1-4	Website outlines		
Pharmacy B	Web based course description	Module descriptors				
Physio D	Revalidation submission 2001	Student handbook years 1, 2 and 3	Placement educators' handbook			
Physio B	Programme specification / course handbook	Module descriptors	Supplementary document presented at validation			

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Findings

Curriculum analysis : Exploring the micro

Specific words and concepts:

Adverse events,
 Critical incidents
 Error
 Failures
 Harm
 Mishaps
 Mistakes
 Near misses
 Negligence
 Risk (risk assessment)
 Safety (safety cycles)
 Safe practice
 Serious events
 Significant events



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Findings

Curriculum analysis : Exploring the micro

Courses Words	Medicine (4)						Nursing (4)						Pharmacy (3)					Physiotherapy (2)				Tot.
	A	C	B	D	Tot	Mean	A	B	E	D	Tot	Mean	C	B	D	Tot	Mean	B	D	Tot	Mean	
Adverse	4		2	7	13	3.2					0	0	15	1	4	20	6.9			0		33
Critical Incidents					0	0		6	1		7	1.8				0	0			0		7
Error	7		10	2	19	4.7		2	1		3	0.7	14	3	4	21	7			0		43
Failure				2	2	0.5					0	0				0	0			0		2
Harm	1		1	9	11	2.8		1	1		2	0.5			1	1	0.3			0		14
Mistakes			10		10	2.5					0	0			1	1	0.3			0		11
Near misses	3		2		5	1.2					0	0	1		1	2	0.6			0		7
Negligence	1	1		2	4	1			2		2	0.5			1	1	0.3			0		7
Safe	26	9	9	19	63	15	8	6	33	27	74	18.1	15	3	13	31	10	13	18	31	15	199
Serious				1	1	0.2					0	0				0	0			0		1
Signif. events	2			1	3	0.7					0	0				0	0			0		3
Risk	14	5	6	31	56	14	3	13	10	10	36	9	6	4	4	14	4.8	2	9	11	5.5	117

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Findings

Curriculum analysis : Exploring the meso

Courses Topics	Medicine / 4						Nursing / 4						Pharmacy / 3					Physiotherapy / 2				Total
	A	C	B	D	Total	Mean	A	B	E	D	Total	Mean	C	B	D	Total	Mean	B	D	Total	Mean	
Risk assessment	4	1			5	1.25	1	3	4	8	16	4	2	1	3	6	2	1	5	6	3	33
Communication	8	4	2	4	18	4.5			2	3	5	1.25	2		1	3	1	1		1	0.5	27
Patient handling	1			1	2	0.5	1	2	4	5	12	3				0	0	2	4	6	3	20
Infection control					0	0		3		5	8	2				0	0		1	1	0.5	9
Medicines /prescribing/ dispensing/ administering	11	2	3	8	24	6		3	2	11	16	4	43		9	52	17.3			0	0	92
Blood	4	2	1	1	8	2				4	4	1				0	0			0	0	12

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Findings

Curriculum analysis : Exploring the meso

Personal and professional development and skills

1. Management of self and others to facilitate safe systems of working practice
2. Clinical judgement
3. Competence in the safe and effective application of a range of skills (including communication)
4. Risk assessment, tools and prevention
5. Implementation of safe, effective (evidence based) and efficient treatment

Organisational structures and processes

6. Clinical governance including audit, risk, patient safety, error reporting
7. Compliance with health and safety procedures / legal requirements / regulations /ethical principles
8. Threats to safety / causes of error

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Findings

Curriculum analysis : Exploring the macro

Overarching dimensions:

Clinical skills

- issues about procedures, use of equipment, interpretation (closely linked to decision making), communication with patients (incorporating complaints, explanations, apology, openness and respect) and dealing with contingencies.

Prescribing

- linked to key words in the vocabulary used in thinking about patient safety – adverse, effective, safe, error, harm - and also considering both the behaviour and its function.

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Findings

Curriculum analysis : Exploring the macro

Overarching dimensions:

The individual,

- their actions or omissions and decisions, and their relationship with the health care system and its assumptions and responses to error or accident.

Ethics and the law,

- incorporating the balance of benefit and harm, autonomy and risk.

Finally there is a dimension which balances patient and professional, and their expectations and choices.

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Issues arising from this data set

- **Limitations of data**
- **Definitions of 'patient safety'**
- **Curriculum delivery**
- **Professional vocabularies**

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Next steps

- **Part of a much larger study**
- **Some of the issues highlighted are explored in subsequent data collection**
- **Study ongoing**
- **Due to finish Dec 2008**

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