

INTERPROFESSIONAL COLLABORATION – WHERE THE RUBBER HITS THE ROAD!

Alan Neville

NaHSSA - The 6th Annual Conference – Interprofessionalism: At the Heart of
Healthcare

The Data



The Institute of Medicine Report claims that there are 44,000-98,000 deaths per year from medical error in the USA

| | |
|-------------------------|----------------------|
| Heart Disease | 743,460 |
| Cancer | 529,904 |
| Stroke | 150,108 |
| Pulmonary Disease | 101,077 |
| Medical Error | 44,000-98,000 |
| Motor vehicle accidents | 43,458 |
| Breast Cancer | 42,297 |
| AIDS | 16,516 |

Epidemiology in Hospitalized Patients

| Study | % of patients with AE | % Preventability |
|-----------------------|-----------------------|------------------|
| Canada: Baker-Norton | 7.5 | 36.9 |
| Utah-Colorado: Thomas | 2.9 | NR |
| Australia: Wilson | 16.6 | 51 |
| New York: Brennan | 3.7 | NR |
| U.K.: Vincent | 10.8 | 48 |
| New Zealand: Davis | 12.9 | 37 |

In the U.S., the figures represent 44,000-98,000 deaths per year, or the equivalent of 3 jumbo jets crashing every 2 days
(Leape, 1994).

Putting IPE to Work



Testing the effectiveness of training and developing teamwork behaviours in teaching hospital and community hospital Emergency Rooms to reduce Medical Error



Evaluation Results of the Med Teams Project

A Multicentre Evaluation of Error Reduction in the Emergency Room

Morey et al 2002

Study Design

- Quasi – Experimental – Untreated control design
- Year-long study
- 9 ER's participated; self-selected to experimental or control (6=Experimental, 3=Control)
- Data collected at 3 time points over a year; in experimental group, “training” occurred between the first two time points.
- Study participants were physicians, nurses, technical staff

(Experimental group, n=684, Control, n=374)

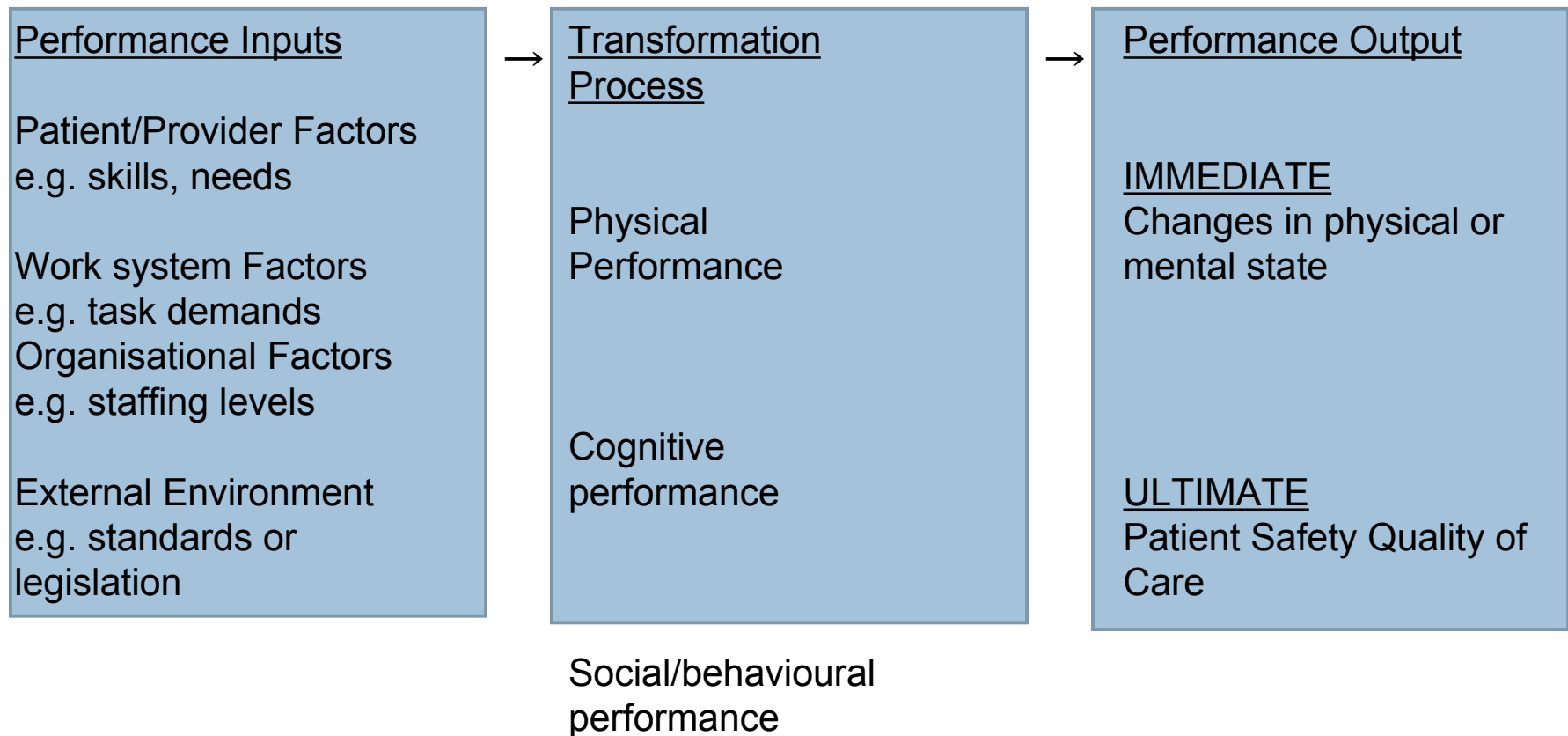
Crew Resource Management

Basic Principles



- Communication and coordination behaviours are identifiable, teachable and applicable to a high-stakes environment.
- These behaviours are not practised reliably without training; they have been identified by observing “high-reliability” teams.
- A TEAM needs to be formally established for teamwork behaviours to be effective.

Human Factors Engineering








After Karsh et al 2006

Emergency Team Coordination Course (ETCC)

Objective 1 – Adapt CRM principles to the E.R.

5 team dimensions

-  Maintain team structure
-  Apply problem-solving strategies
-  Communicate with the team
-  Execute plans and manage workload
-  Improve team skills

Emergency Team Coordination Course



Objective 2 – Evaluate effectiveness of the
intervention

3 outcome constructs:

- a) Team Behaviours
- b) Attitudes and Opinions
- c) ER Performance

Intervention



- Administration of the Emergency Team Coordination Course
- Instructors were physician-nurse pairs from the expert panels who developed the curriculum
- Training conducted with mixed groups of health professionals
- Following training, each ER created a “team-based” staffing pattern
- Classroom instruction and workplace practicum
- 48 concrete team behaviours addressed

Errors



Observed errors = any clinical task that actually or potentially puts a patient at risk; observed by the physician/nurse/pair

Examples of Errors

- ❑ Intern neglects to inform attending during a case presentation that patient's blood pressure is 150/100. Nobody else mentions this or re-checks the BP
- ❑ Nurse did not put Ipratropium in nebuliser as per order
- ❑ Trauma patient wearing oxygen mask transferred from ambulance to ER. Mask left on patient, but tubing not hooked up to oxygen supply

Results (1)



ER's were equally divided according to - :

Military or Civilian

Hospital type

Annual ER Patients visits

Number of ER staff and staff: visits ratio

Reduction of Observed Errors



Clinical error rate decreased after ETCC
intervention

(30.0% → 4.4%; $p = 0.039$)

Additional results



- ER staff positive attitudes to team work increased in the experimental group ($P=0.047$)
- Staff assessments of institutional support also increased ($p=0.040$)

Lessons Learned



- Integration of effective teamwork requires on-going management efforts
- Importance of leadership – need sustained commitment of executive leaders
- Importance of coaching and mentoring
- Teamwork is promoted by physical identification e.g. coloured scrubs
- Physical layout of the workplace is important
- Importance of refresher training



I.P.E. can work!!!