

2<sup>nd</sup> Nordic Conference on Research in Patient Safety & Quality  
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# Is Standardised Care a Solution to Safety & Quality Issues?

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standards are great  
that's why we have so many of them

everyone wants standards  
to make somebody else do something

# the one idea

standardisation is not standard

# overview

disclaimer and biases

two opposing views on standardisation

complex of issues

- benefits

- specificity

- non-neutrality

- heterogeneity

- miscellaneous

a possible way to make sense of standards?

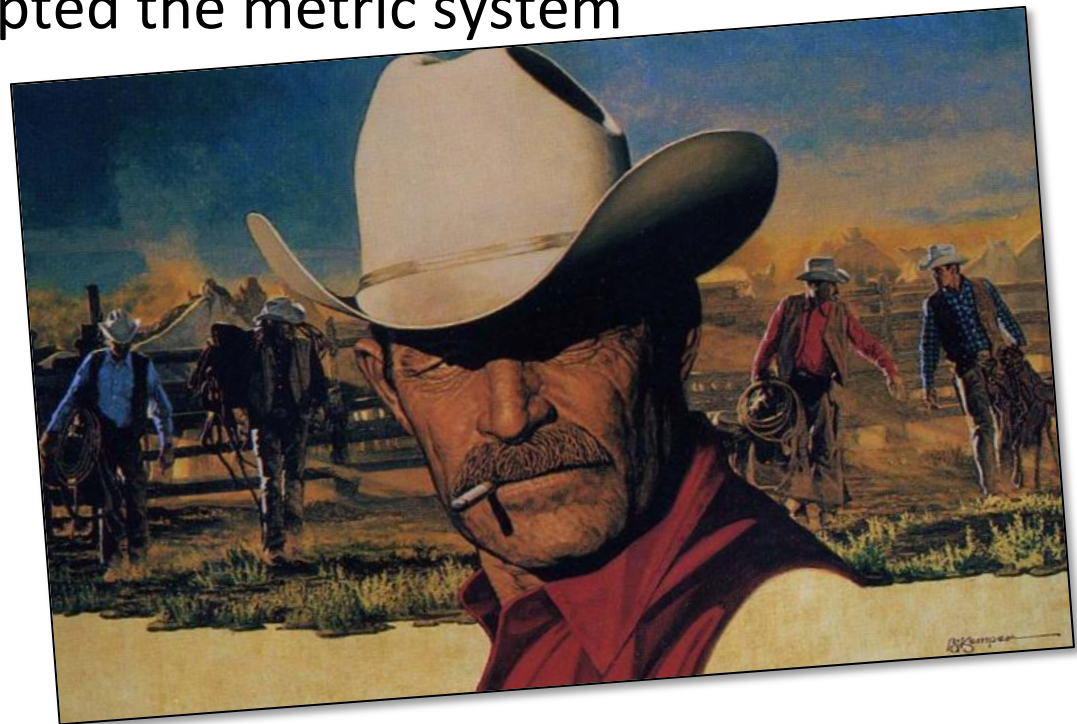
# disclaimer and biases

american

rugged individualism / egalitarianism

“marketplace professionalism”

hasn't even adopted the metric system



# disclaim

emergency department  
major point of entry  
120 million visits, ~ 7





# one view of standardisation

program of technical rationality

order, reason, reproducibility

technical, not socio-political

*“Rationalizing Medical Work”*

managing complicatedness, ?complexity?

self-evidently obvious benefits

opponents deluded, irrational, Luddites

## Creating a System to Facilitate Translation of Evidence Into Standardized Clinical Practice: A Preliminary Report

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**Alexander Trott, MD**  
**Christopher J. Lindsell, PhD**  
**Carol Smith, RN**  
**W. Brian Gibler, MD**

**Study objective:** The Institute of Medicine, through its landmark report concerning errors in medicine, suggests that standardization of practice through systematic development and implementation of evidence-based clinical pathways is an effective way of reducing errors in emergency medicine. The specialty of emergency medicine is well positioned to develop a systematic approach to quality improvement, incorporating best practice guidelines, audit and feedback, and practitioner feedback mechanisms to reduce errors. This article reviews the construction of a standardized clinical pathway within the emergency department at a large, urban, university-based hospital.

The ultimate goal of this process is to obtain complete compliance with standardized care, exceptional circumstances notwithstanding. The audit process is primarily designed to evaluate existing care against the objective criteria defined within the guidelines and protocols. This process then assesses the changes in care brought about by the implementation of care standardization is considered a means of identifying practice patterns that must be addressed with further educational intervention. In addition, the audit process provides

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SEE EDITORIAL, P. 78.

### INTRODUCTION

In 1999, the Institute of Medicine published *To Err is Human: Building a Safer Health Care System*.<sup>1</sup> This groundbreaking report estimated that up to 100,000 hospitalized patients each year die of medical errors and poor-

quality medical care. Although the number of deaths has been disputed, the report galvanized health care stakeholders to action.<sup>2</sup> The White House, Congress, industry, hospitals, and medical professionals were compelled to respond to the indictment, and many actions have been taken to address medical errors. This focus on errors has led to a consideration of the overall quality of care. In 2002, the Joint Commission





# alternative view of standardisation

program of social control

Taylorist power grab by technocrats, managers, non-clinical bureaucrats

real agenda is cost reduction, not improvement

ultimately impossible to standardise

“the art of medicine”

*Ashby's Law of Requisite Variety*

opponents are anti-professional, mindless technocrats

# complexities of standardisation

where have there been benefits?

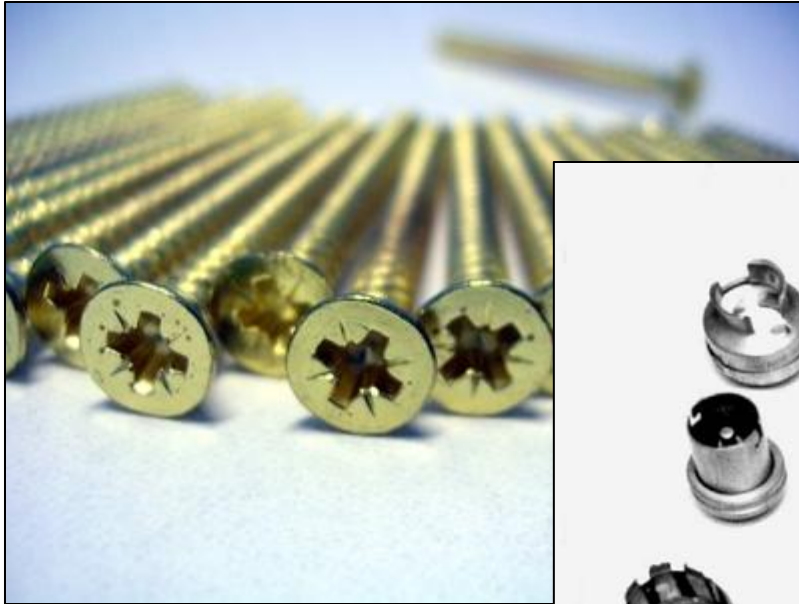
what, exactly, do we mean by 'standardisation'?

non-neutrality

heterogeneity

a few miscellaneous issues

# clear benefits



# specificity

what to standardise on?

even after picking subject area ...

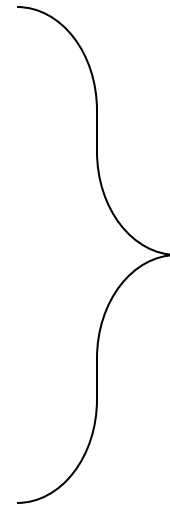
design (structure)

terminology

performance (results, outcomes)

procedures

content



level

HERE'S ANOTHER ONE FROM OUR CROSS-COUNTRY DRIVING TRIP... I BELIEVE THIS IS OKLAHOMA... NO WAIT-ARKANSAS!.. OR MAYBE GEORGIA... PERHAPS VIRGINIA?.. OHIO?.. ACTUALLY, THIS MIGHT BE FROM... BEFORE WE LEFT....





# non-neutrality

presented as technical act, can be done by a committee  
but social / political in two ways:

- construction / adoption involves political negotiations /  
conflict among stakeholders

- standardization claims the common good, but different groups  
have different views about what is the common good

- use restructures the environment

- relations among users change

# our standards writing team



# non-neutrality example

## ACLS / CPR

renders the dying process under medical jurisdiction  
(instead of, for example, under religion)

preserves a power hierarchy via partial delegation

first responder < EMT < paramedic < nurse < ED doctor

# non-neutrality example

procedural sedation by non-anaesthetists

bottom-up standards enacted by ED doctors

(extending their practice, “turf”)

conflicted with top-down standards from anaesthetists

# heterogeneity

the bane of positivist research / practice

a nuisance to be averaged, controlled for, or bounded out

‘the messy details’ an impediment to understanding

the joy of interpretivist research / practice

the object of research / practice

‘the messy details’ the target of understanding

# problem of monocultures

difficulty adapting to the unexpected  
impoverishment of thinking

“when all think alike, no one thinks very much”





# a problem w/ standard procedures



# scope creep

heterogeneity in the world means  
standards are always underspecified

attempts to resolve that under-specification result  
in additions, never subtractions

*Il semble que la perfection soit atteinte non quand il n'y  
a plus rien à ajouter, mais quand il n'y a plus rien à  
retrancher*

# scope creep

US Air 1549 Hudson River ditching, 15 January 2009

flight procedures



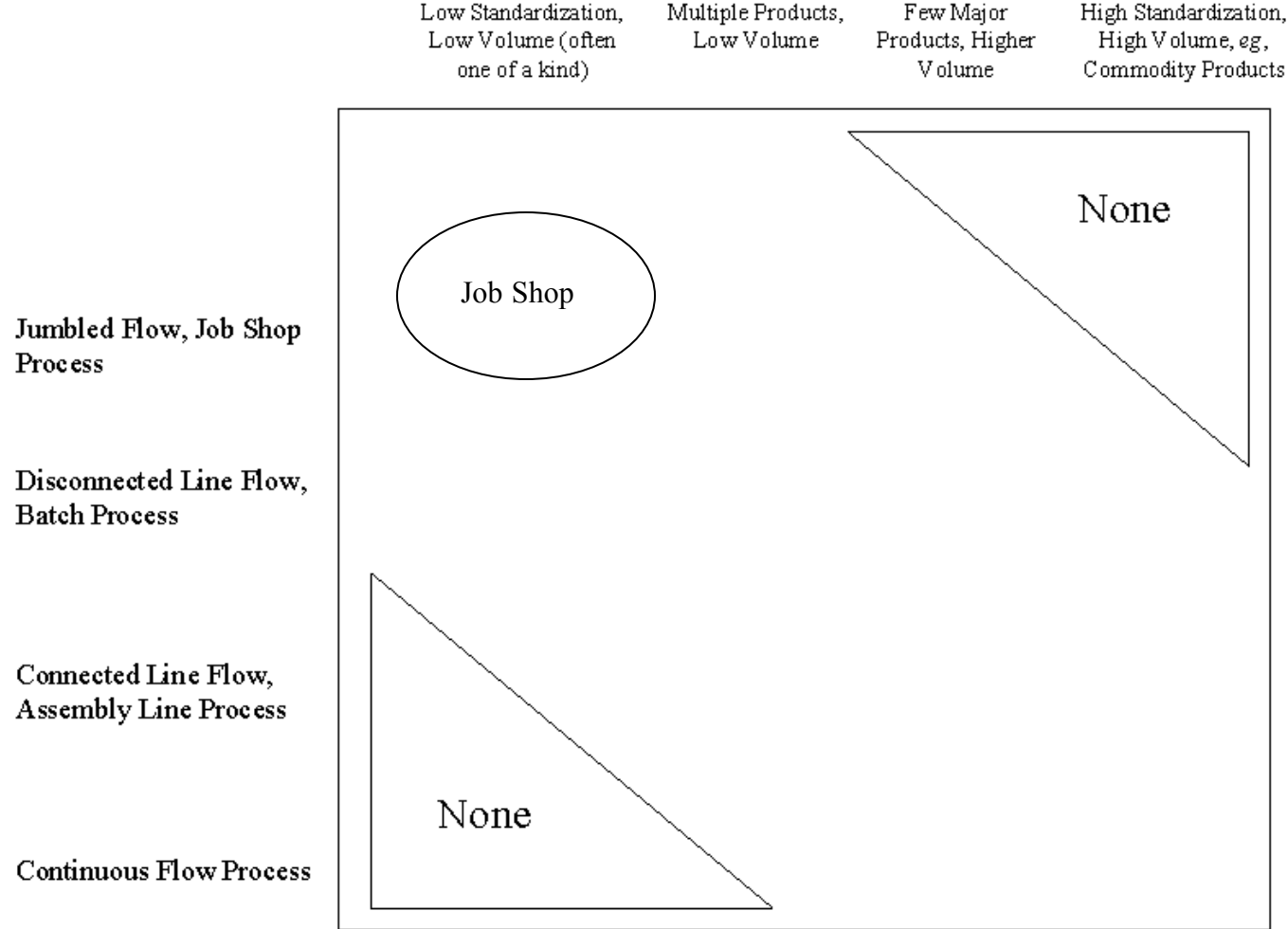
# process-product matrix\*

assembly line metaphor common in healthcare  
organisations

impoverishment of views

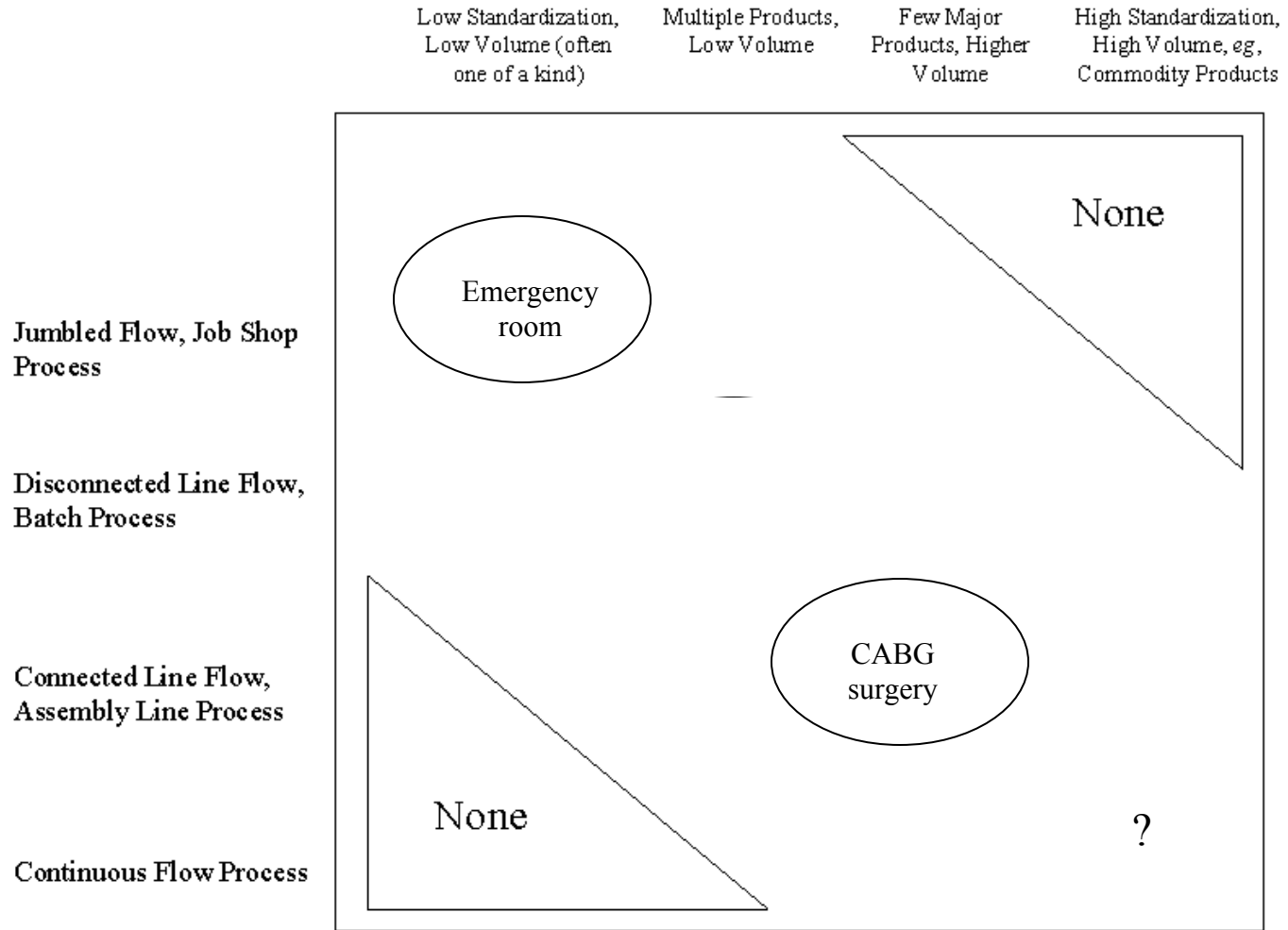
\*Hayes & Wheelwright, *HBR* 1979

**Figure 1. Process–product matrix with archetypical examples**





# Process-product matrix – healthcare examples





# the regulatory cascade

1. regulatory guidance pronounced at a very high level

1. “ensure good communication at shift change”

# the regulatory cascade

1. regulatory guidance pronounced at a very high level

2. translated into more specific terms by field operatives (CYA)

1. “ensure good communication at shift change”

2. “shows use of effective handoff procedures”

# the regulatory cascade

regulatory guidance pronounced at a very high level

“ensure good communication at shift change”

translated into more specific terms by field operatives (CYA)

“shows use of effective handoff procedures”

translated again by organizational representatives (CYA)

“everyone must sign the handoff sheet, or else”

*the very high levels express surprise and protest that's not at all what they meant*

*regulations appear misguided, ineffective, “busy work” in the work context and lose legitimacy*

# miscellaneous issues

premature fixation

west african myths about the corn  
(maize) god

brought corn to the people near the beginning of  
the world

which must have been around 1500



# miscellaneous issues

US Air 1549

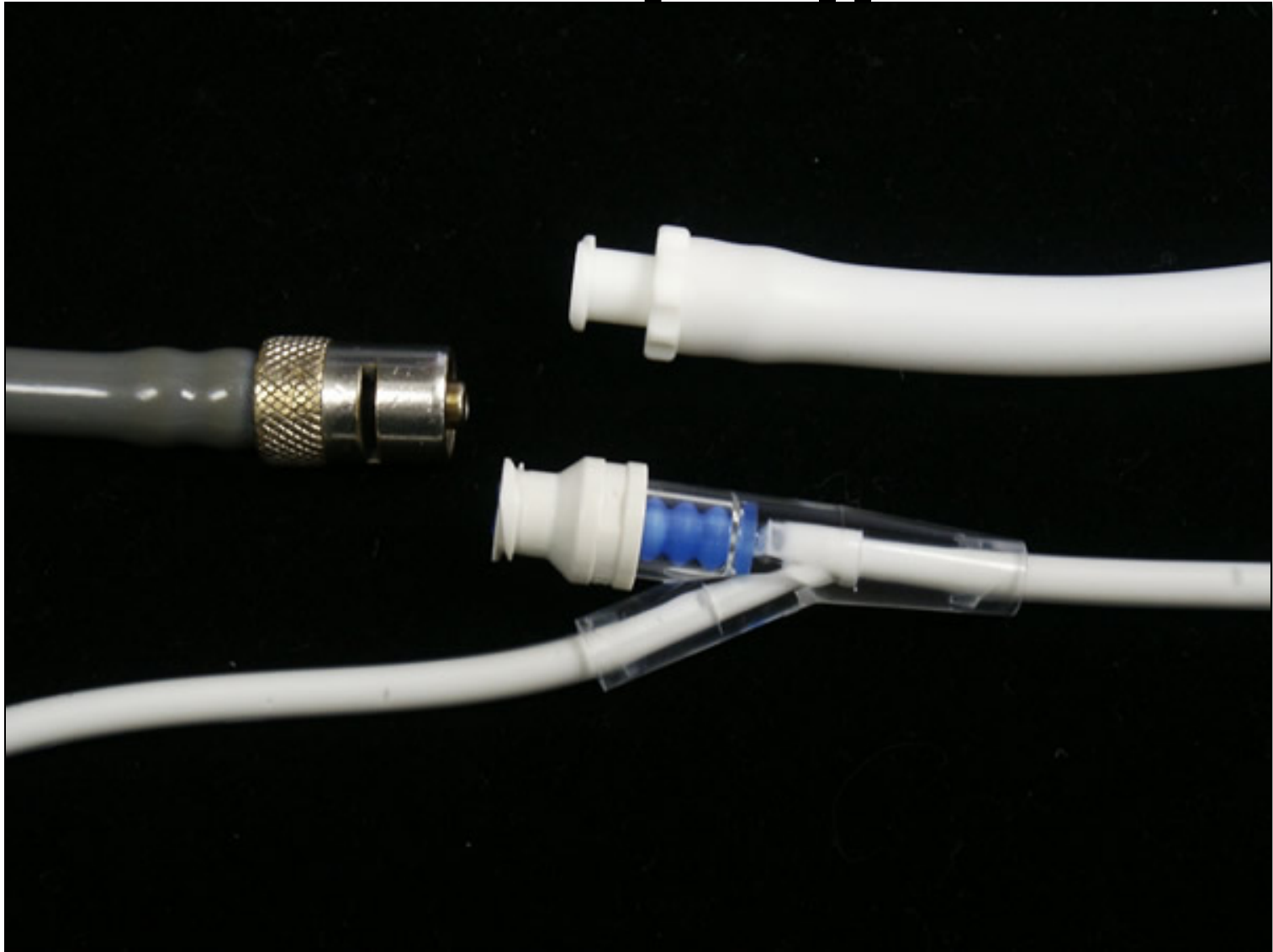
engines met FAA bird strike standards

~1.8 kg chickens, shot at ~100 km / hr

Canada geese 4-5 kg, struck at ~ 208 km / hr



# standardisation feeds





# ecological fallacy

standardised care presumes average results  
will be available to everyone

but medicine is largely about the tails,  
not the central tendency

# THE NEW YORKER

MEDICAL REPORT

## THE HOT SPOTTERS

*Can we lower medical costs by giving the neediest patients better care?*  
by Atul Gawande

JANUARY 24, 2011

If Camden, New Jersey, becomes the first American community to lower its medical costs, it will have a murder to thank. At nine-fifty on a February night in 2001, a twenty-two-year-old black man was shot while driving his Ford Taurus station wagon through a neighborhood on the edge of the Rutgers University campus. The victim lay motionless in the street beside the open door on the driver's side, as if the car had ejected him. A neighborhood couple, a physical therapist and a volunteer firefighter, approached to see if they could help, but police waved them back.

"He's not going to make it," an officer reportedly told the physical therapist. "He's pretty much dead." She called a physician, Jeffrey Brenner, who lived a few doors up the street, and he ran to the scene with a stethoscope and a pocket ventilation mask. After some discussion, the police let him enter the crime scene and attend to the victim. Witnesses told the local newspaper that he was the first person to lay hands on the man.

"He was slightly overweight, turned on his side," Brenner recalls. There was glass everywhere. Although the victim had been shot several times and many minutes had passed, his body felt warm. Brenner checked his neck for a carotid pulse. The man was alive. Brenner began the chest compressions and rescue breathing that should have been started long before. But the man who turned out to be a Rutgers student, died soon afterward.



*In Camden, New Jersey, one per cent of patients account for a third of the city's medical costs. Photograph by Phillip Toledano.*

# a possible way forward

two ordered situations

simple

complicated

two disordered situations

complex

chaotic

# simple situation



causes / effects observable, repeatable, well understood & accepted by all

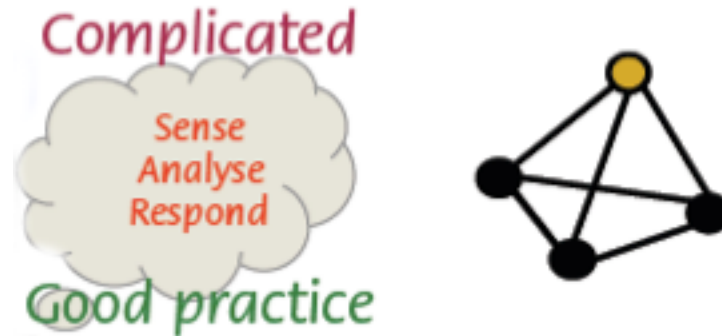
top-down, prescriptive command & control is reasonable

single 'best practice' exists so business process re-engineering so methods like 6  $\Sigma$ , TQM, Lean, *etc*, can be applied

processes are invariant & constantly repeatable

auto assembly lines

# complicated situation



cause / effect not fully understood, but in principle capable of being understood (needs expertise, analysis)

legitimate use of analytical frameworks and multiple 'good practices' (learning organization, systems modeling, *etc*)

can be several good practices (no 'one best practice')

stable problems for short periods of time, danger of lagging

# complex situation



cause / effect not repeatable since system & actors co-evolve  
people adapt to changes in system, creating new system states  
reciprocal determinism; task-artefact cycle  
cannot return the system to previous state  
actions control nothing, but influence (and are influenced by)  
everything

“hindsight does not lead to foresight”

complex socio-technical change



# some guidance

standardisation is not a goal, but a means

benefits and harms can only be assessed case by case

different stds distribute benefits and harms differently

have you made the front-line worker's job simpler?



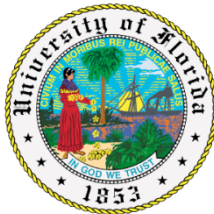
# contact information

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TEST



LEFT WING DOWN

RIGHT WING DOWN

NOSE LEFT

NOSE RIGHT

RUDDER

STAB TRIM

FLT DK DOOR

OVRD  
NORM



UNLKD DENY



# standards can mislead

