

Understanding the Gains from Lean

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2nd Lean Healthcare Forum
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Motorcycle Museum

What have we done so far?

In 1997: Patients waiting

– ‘We need more resources!’

Increased NHS resources

- £48 Billion to £97 Billion

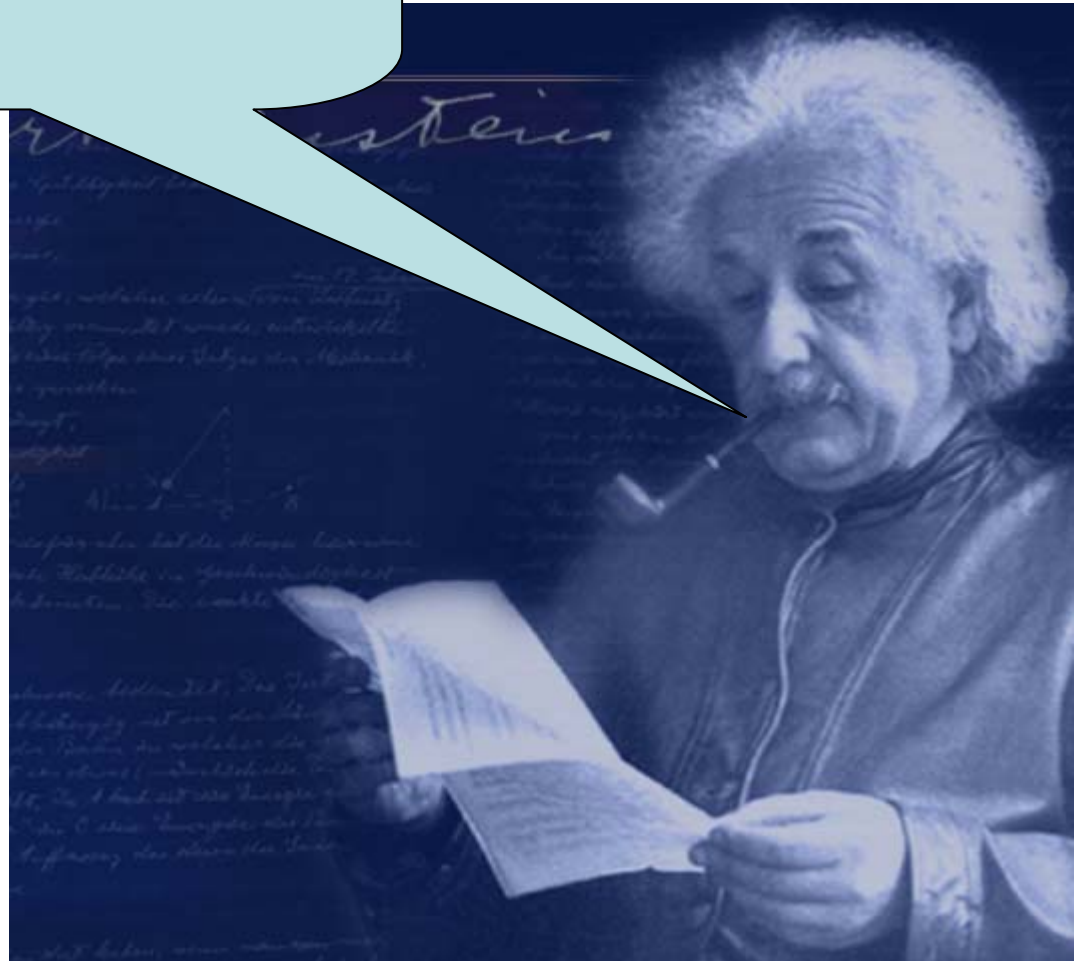
In 2006:

- Patients still waiting:
 - 18 weeks from referral to treatment
- £7 Billion deficit by 2010
(Economist 22nd April 2006)

The gains we want

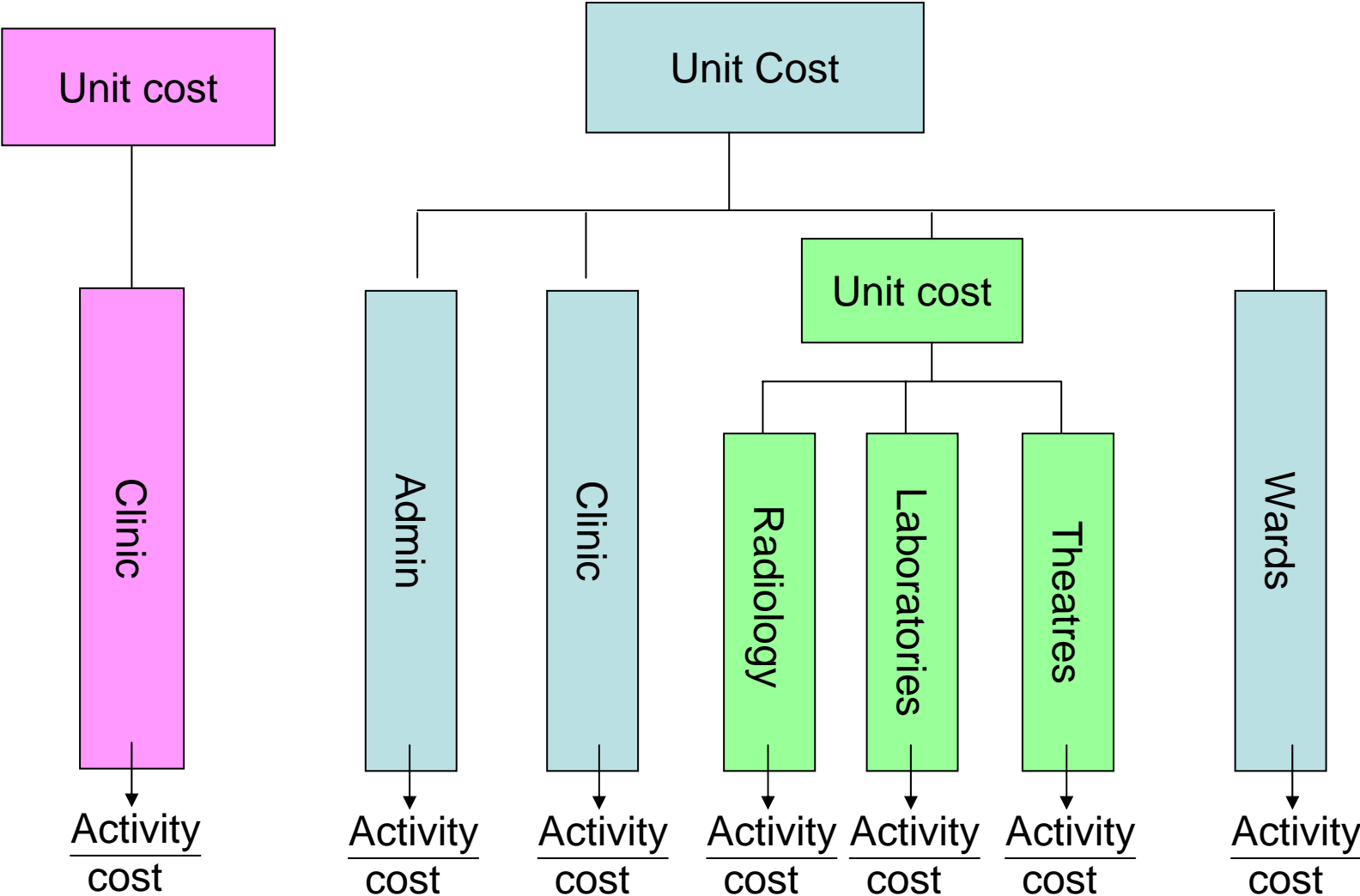
- Timeliness
 - Why do we have to wait 18 weeks?
 - Choose and Book when we want it
- Value for money
 - Productivity “more’ patients treated for less or same money’(?)
 - Cost efficiency (?)
- Quality
 - Clinical outcome
 - Service experience
 - Patient and Staff morale

You will never solve the
problem with the mindset
that created it



Albert Einstein

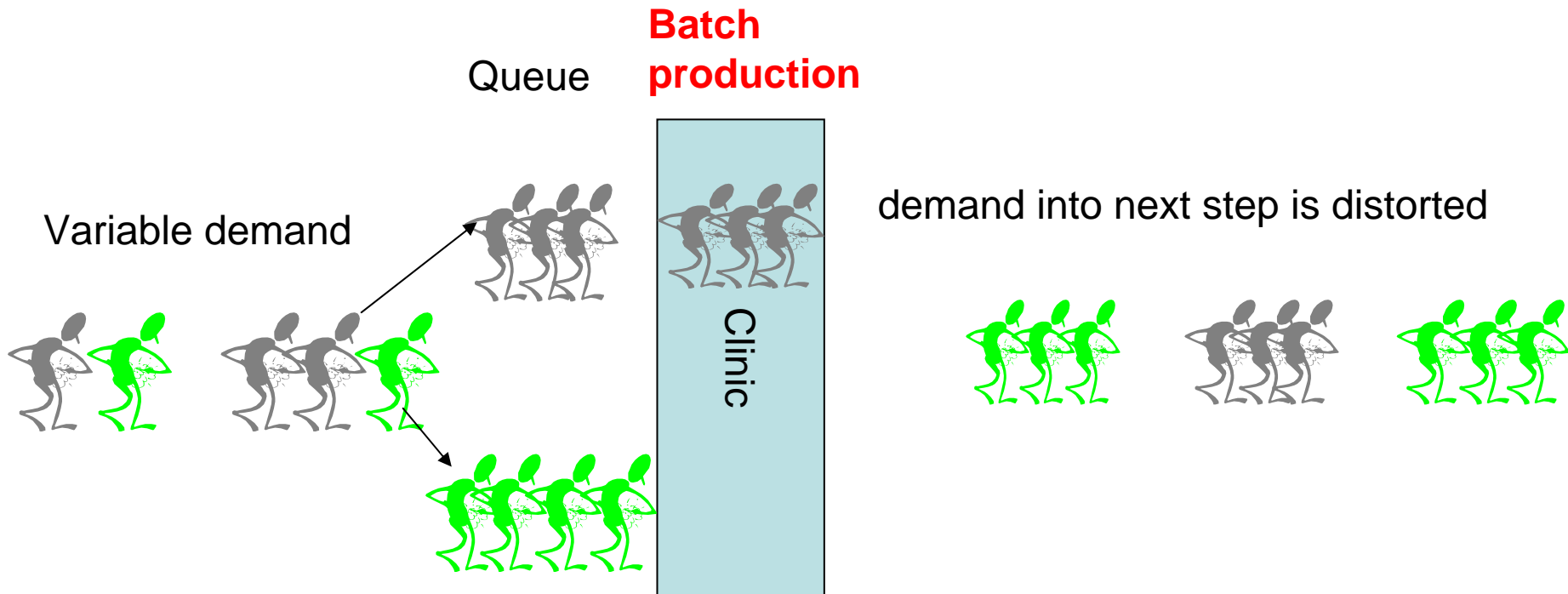
Functional Mindset



Behaviour:

- More activity
 - Waiting list to keep resources utilised
 - (batch production)
 - ('create' demand?)
- Less cost
 - Reduce staff
 - Technology (IT)
 - Cheaper suppliers
 - 'Quality costs money'
 - Private sector?
 - Bulk purchasing

'Keep activity high & unit cost low'



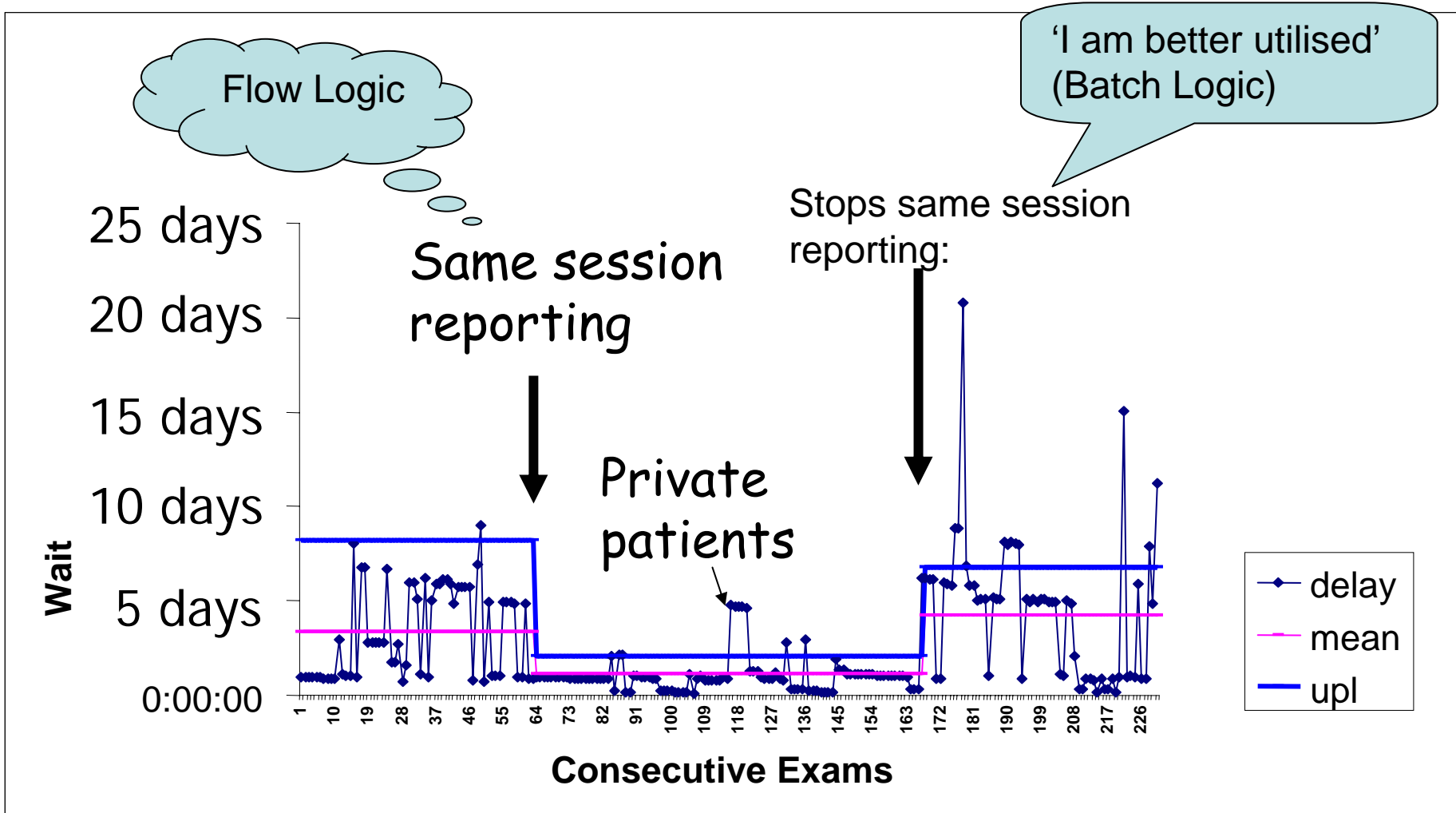
Utilisation of capacity = 100% = unit cost is low = 'clinic is efficient'

BUT: patients wait
cost of storing queue?
cost of managing the queue?
cost of deterioration in the queue?
cost of downstream capacity?

Not my department
/ organisation
= not my problem

SPC Control Chart

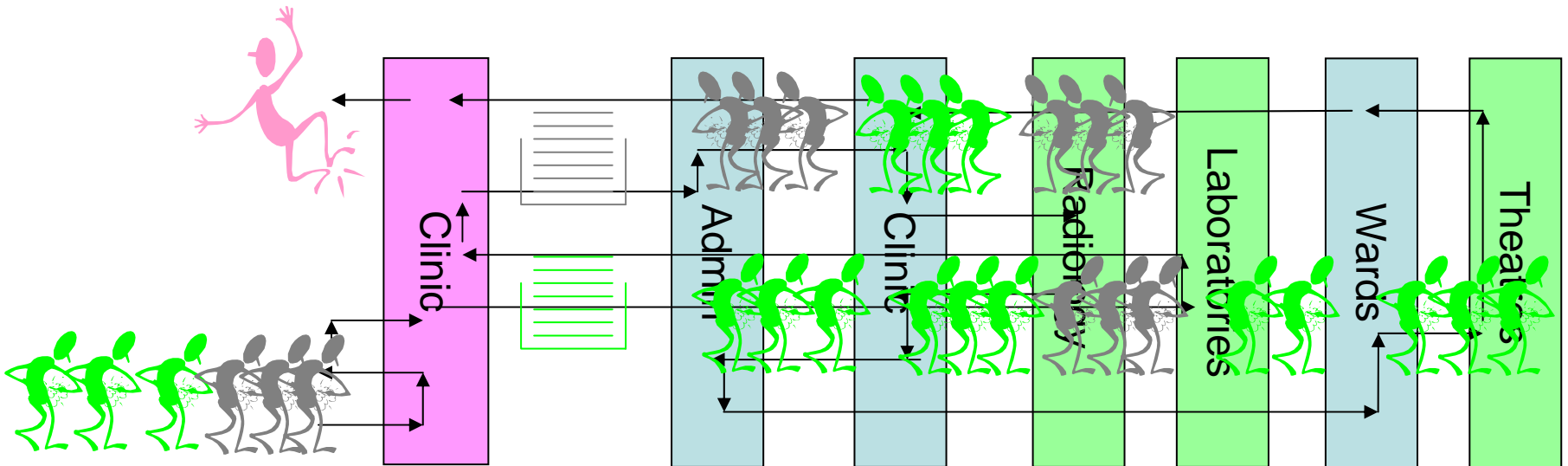
Wait- between CT Exam time and CT Report printed



Impact on total process cost = 5 days @ £125/day x 10% of 195 admissions = £12,000 per week

Impact of behaviour on flow?

- Process View



Queues = 100s of extra steps

Doctor requests 'test'
Porter picks up request
Porter delivers request to dpt
Clerk logs request
Clerks puts request for prioritisation
Consultant for prioritises request
Consultant returns request
Clerk files request in priority order
Clerk draws request from file
Clerk makes appointment
Clerk sends appointment by post (>6 steps)
Patient receives appointment
Patient travels to hospital
Patient finds car parking slot
Patient finds X-ray department
Patient checks in at reception etc



Value?

Waste!

(approx £175,000 p.a.?)

Impact on Quality

Probability of Performing Perfectly

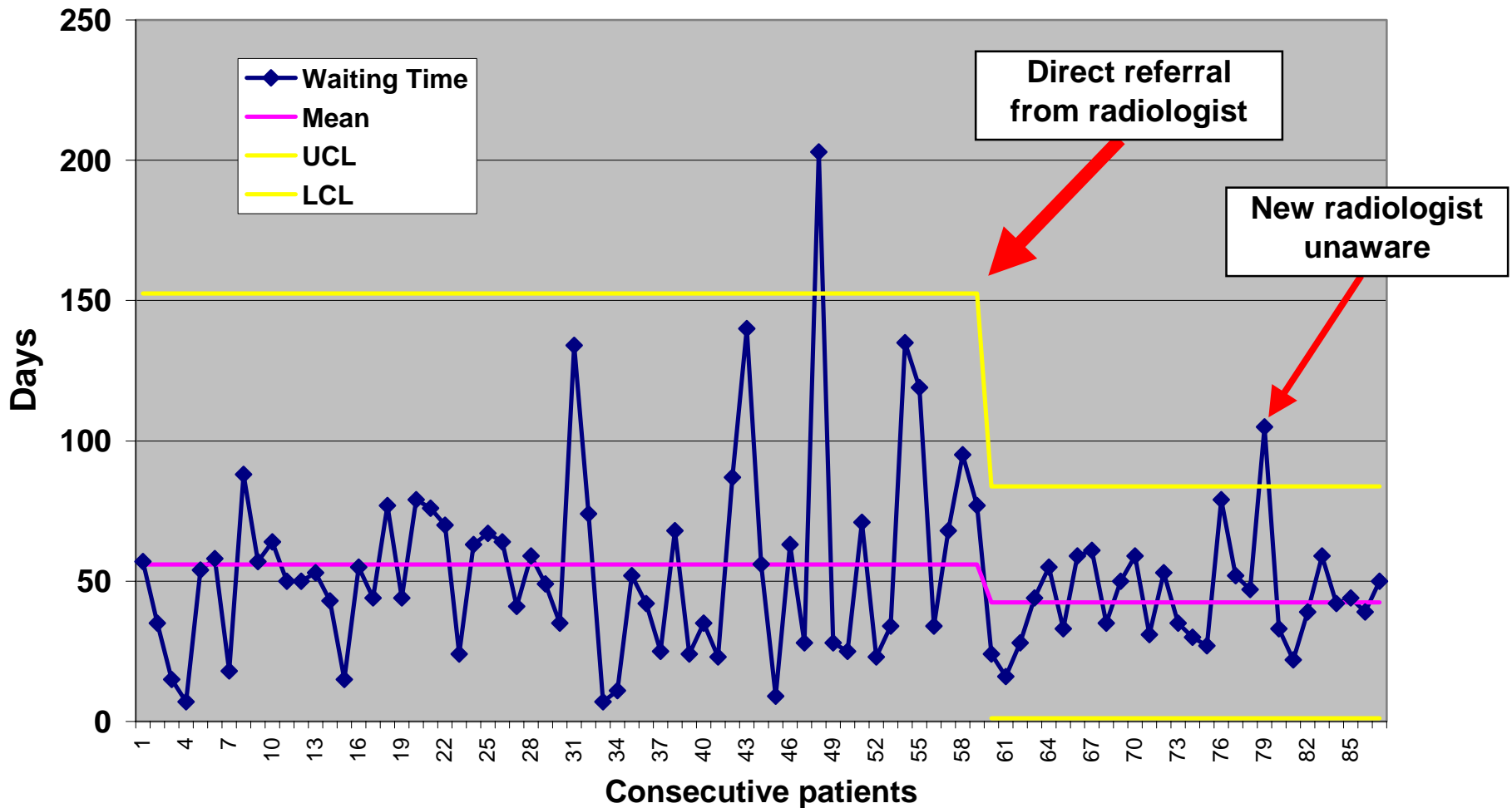
No. process steps	Probability of Success, Each Process Step			
	0.95 	0.990	0.999	0.999999
1	0.95	0.990	0.999	0.99999
25 	0.28	0.78	0.98	0.998
50	0.08	0.61	0.95	0.995
100	0.006	0.37	0.90	0.99

Improve the quality of each step

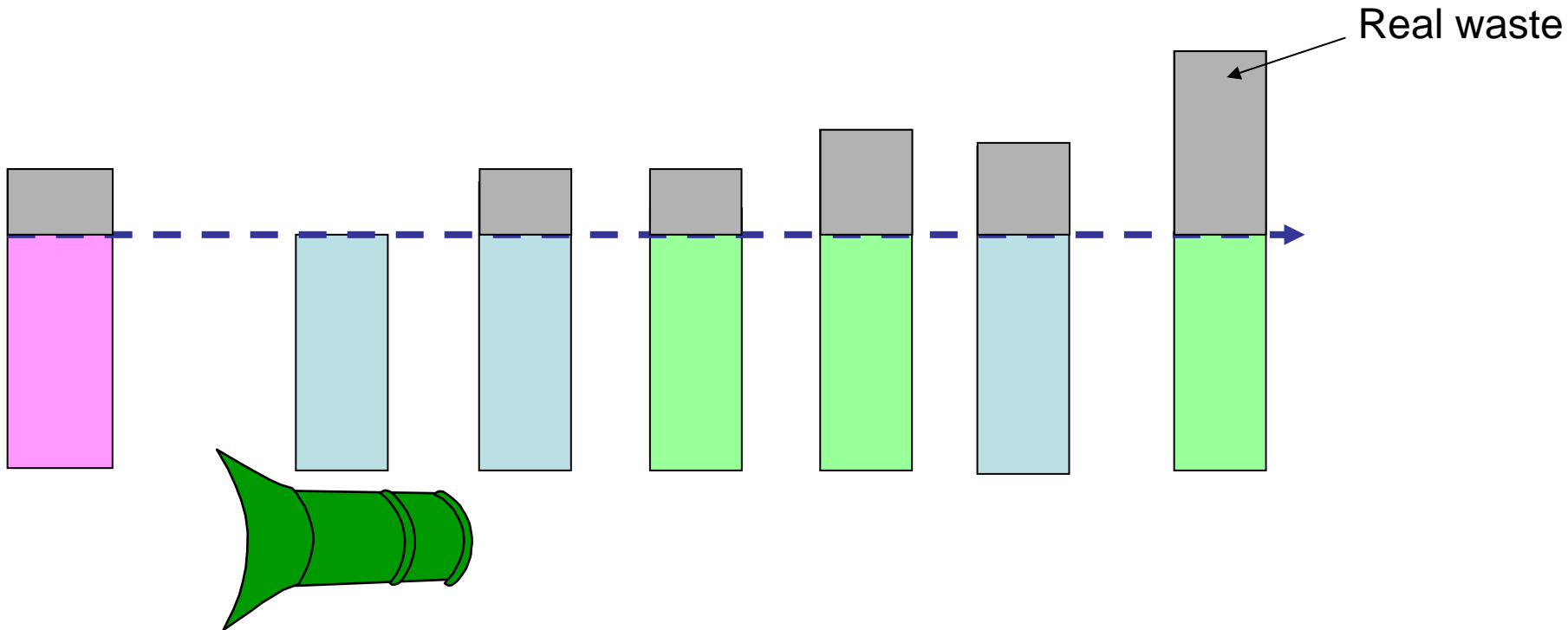
Remove the steps....

Impact of taking steps (waste) out

Referral to 1st Treatment
- Lung Cancer patients



Process view reveals the real waste



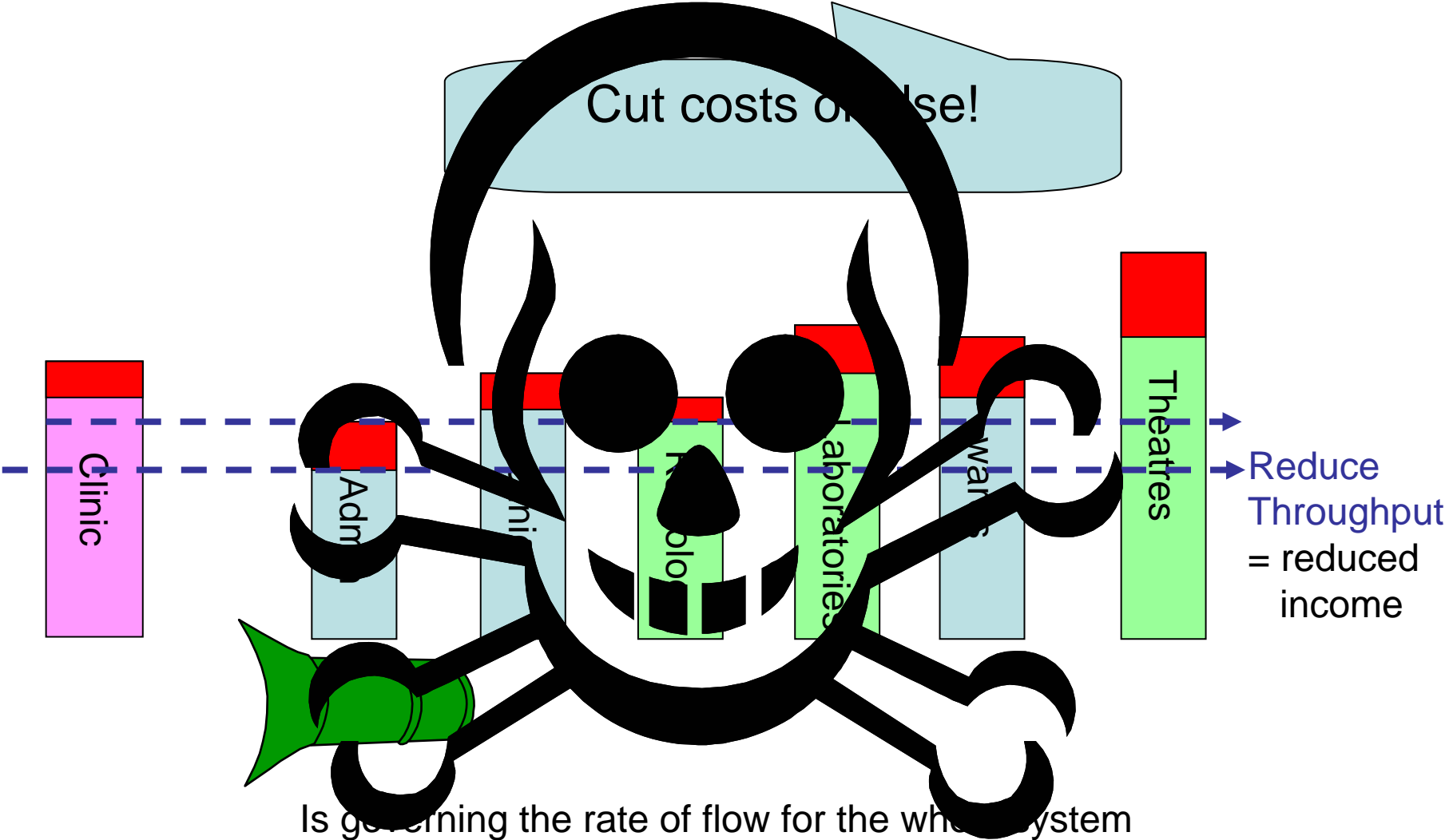
Is governing the rate of flow for the whole system

To get the gains from Lean

- Mindset change
 - function to process
 - batch logic to flow logic
- Value:
 - only deliver what the patient & your customer expect
 - right first time, on time
 - reduce variation, release capacity
 - reduce waste
- Quality saves time, money and lives

Healthcare organisation are in
grave danger.

What do desperate managers do?



So let's get Lean!

- Lean = no fat
- Fat = waiting lists
 - (waste of over production)
- Concentrate on eliminating waiting lists
- 'Do today's work today!'