NHS
Midlands and Lancashire
Commissioning Support Unit

"Framing the Challenge: Great pathways and fit for purpose systems"

The role of strategic system redesign in transformation and safe and effective health and care provision.

AKA : Leveraging Agile BI & IT for digital transformation

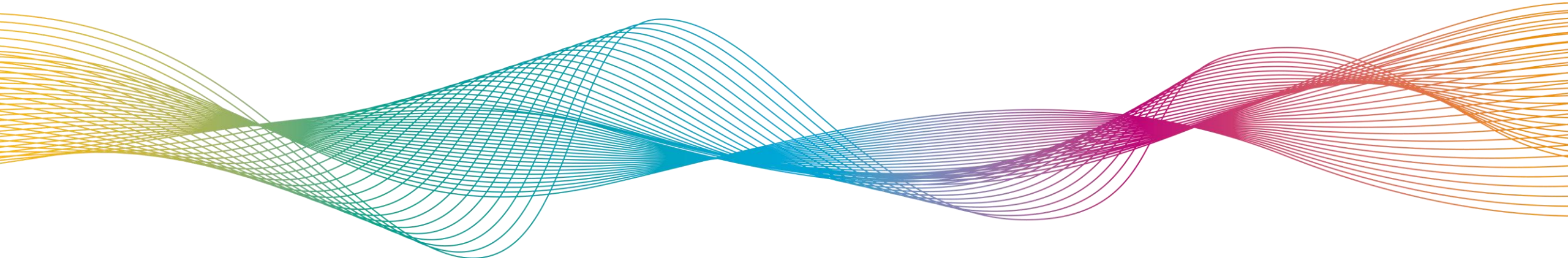
Seamus McGirr, Director of Nursing & Urgent Care,

NHS
Midlands and Lancashire
Commissioning Support Unit

Leveraging Agile BI & IT for digital transformation knowing what your population needs before they do

&

Doing something about it



The backwards looking management style

Internal, departmental competition to secure finance, resource and influence

Unintentional restraint of innovation and entrepreneurialism to meet numerical process targets

Reactive rather than pro-active behaviours and managing by numbers that reflect historical failure rather than future success

Promoting “the way we were”, the status quo,

rather than what we need to be : passengers rather than drivers !

“The older I get, the better I was!”

“Existing management skills are often based on being good in a crisis, it is often more important to be swift and decisive, than to be right.

Isn’t it much better to learn to prevent the crisis happening ?”

Mark Woods, Dragon Slaying : A better way to manage.

The forwards looking management style

The weather, the time of day or day of the week, and whether or not a customer is accompanied may affect the design of an offer.

TESCO

Define shared objectives

Develop analytics capability

Gather relevant data

Know your customer (s)

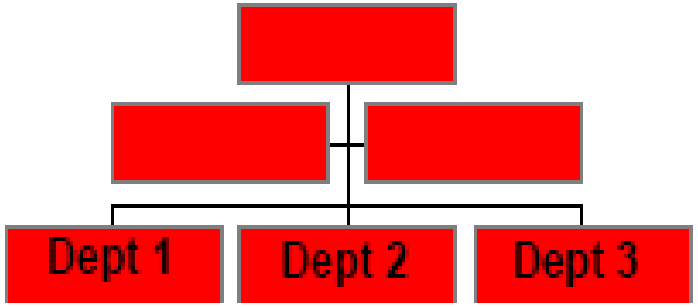
Know your offering

Know the “context”

Analyse & Execute

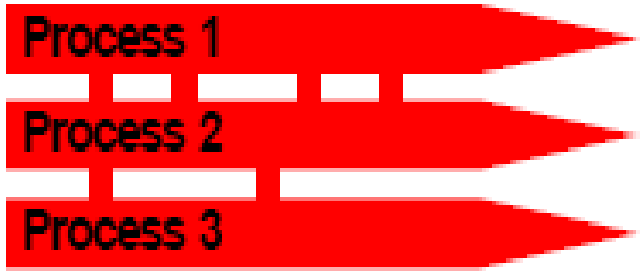
Learn and evolve

Silo thinking "v" systems thinking



Hierarchy/silo thinking

"The whole is the sum of the parts".
Give all parties strict numerical and quality criteria to meet and make sure each party hits its target.



Systems thinking

"The whole is the sum of the parts *plus the product of the inter-actions.*"
Bring all parties together to work on customer & process improvements.

What if We knew and understood….

How a local population is changing,

How populations behave,

How aging affects care & clinical need,

Human factors and workforce needs influence provider behaviours,

The relationship between components of service delivery : volume, timeliness, dependencies

How infrastructure affects provision (right shape, size, timing)

Then we would move from A to B

A) Its all about demand

- We had an unexpected surge !
- It's going to be the worst winter ever…
- Patients are getting more acutely ill.
- Its busier than last year.
- We just need to get our heads down and get on with it.
- That team is great in a crisis…
- It all went wrong about twenty past 2

B) Its mainly about supply

- Mondays are 12% busier than other days and I have allocated resources accordingly
- We expect 2/3 of activity in the last 2 quarters and have adjusted the workforce ***insofar as possible***
- We need to adapt to an older inpatient population & older people have complex needs
- Supply and footfall are in reasonable alignment
- My 2022 workforce plan reflects that 80% of all inpatients will be over 65.

You have the data …

HOSPITAL NHS TRUST

Urgent Care Dashboard

Aug-18

Aristotle Business Intelligence

Ambulance Activity

	July 18-19	Variance June 18-19	Variance July 17-18
999 Conveyances		-	-
999 Conveyances Other		-	-
Handover Delays 30 mins		-	-
Handover Delays 60 mins		-	-

A&E

	Standard Target	July 18-19	Variance June 18-19	Variance July 17-18
4Hour	95.0%	74.6%	0.1%	-4.0%
4Hour Type 1	95.0%	69.6%	0.5%	-3.5%
4-12Hour		25.2%	0.1%	0.7%
>12Hour		2.9%	-0.6%	0.4%

AE Activity

	July 18-19	Variance June 18-19	Variance July 17-18
Type 1	9,954	658	262
Type 2		-	-
Type 3	843	70	843
Type 4		-	-
Total		-	-

Bed Occupancy

	Standard Target	Dec 17-18		Variance Dec 16-17
Occupancy Day	90.0%	84.0%		5.0%
Occupancy Night	90.0%	92.0%		5.0%
Beds Available Day and Night All		67,413		2,179

Unplanned Admissions

	July 18-19	Variance June 18-19	Variance July 17-18
A&E Admission	53.2%	-1.0%	2.6%
Other Admission	46.8%	1.0%	-2.6%
All Admissions	4,608	221	459
<18 Admissions	723	42	39
18-64 Admissions	1,763	65	159
>64 Admissions	2,122	114	261
Zero LOS%	30.9%	-0.1%	1.8%
Non Zero LOS%	69.1%	0.1%	-1.8%
Zero LOS	1,425	63	217
Non Zero LOS	3,183	158	242

Unplanned Bed Days(LOS) by Age

	Average LOS	July 18-19	Variance June 18-19	Variance July 17-18
Total	5.02	23,155	825	188
<18 years (Beddays)	2.01	1,450	33	100
18-64 years (Beddays)	3.82	6,726	516	357
>64 years (Beddays)	7.06	14,979	276	269

	Average XBD	July 18-19	Variance June 18-19	Variance July 17-18
Excess Bed Days	0.11	512.00	97	73
<18 years (Beddays)	0.04	27.00	15	4
18-64 years (Beddays)	0.18	310.00	205	170
>64 years (Beddays)	0.08	175.00	93	245

Delayed Transfers Of Care% of G&A Beds

	Oct-Dec 17-18		
From Social Care	0.31%		
From NHS	1.87%		
From Both	0.63%		
Total	2.82%		

Readmissions

Under Development	July 18-19	Variance June 18-19	Variance July 17-18
30 days PBR rules			
90 Days PBR rules			

Chart to be chosen once data feed established

Urgent Care Dashboard Multi Organisation and Multi Measure

Sum of Value / Row Labels	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
CCG - Unplanned Beddays Total Per 1000 Age >64	32.4	32.0	33.6	33.0	34.7	36.3	36.9	36.7	35.0	32.3	30.1	33.6
CCG - Unplanned Beddays Total Per 1000 Age >64	34.0	37.1	31.3	36.3	37.5	41.1	37.9	41.2	39.7	39.0	37.5	49.1
CCG - Unplanned Beddays Total Per 1000 Age >64	31.8	37.5	34.9	32.7	34.8	44.6	39.6	37.8	38.0	37.4	40.7	44.5
CCG - Unplanned Beddays Total Per 1000 Age >64	32.3	35.8	35.0	36.3	33.4	39.8	37.1	37.3	36.8	36.2	35.2	39.9
CCG - Unplanned Beddays Total Per 1000 Age >64	30.7	29.6	31.6	34.2	35.8	41.5	34.3	39.9	31.1	33.2	32.7	39.1
CCG - Unplanned Beddays Total Per 1000 Age >64	45.2	41.6	47.0	53.1	42.1	54.1	47.3	48.4	53.3	44.6	43.7	57.1
CCG - Unplanned Beddays Total Per 1000 Age >64	43.2	36.2	38.3	43.5	47.8	47.5	40.2	51.2	43.7	44.2	47.5	45.7
CCG - Unplanned Beddays Total Per 1000 Age >64	35.2	37.8	38.0	36.4	38.2	43.0	35.9	37.2	36.8	39.4	33.1	38.2
CCG - Unplanned Beddays Total Per 1000 Age >64	22.3	24.5	30.4	28.7	30.1	37.3	35.9	34.1	34.0	33.0	30.4	34.5
CCG - Unplanned Beddays Total Per 1000 Age >64	33.3	30.9	35.5	35.5	39.7	40.9	35.9	43.4	39.6	41.9	40.6	42.3
CCG - Unplanned Beddays Total Per 1000 Age >64	39.1	37.2	40.4	43.7	42.6	46.9	43.1	45.0	41.2	39.9	37.0	46.4

MeasureShortName

- NELOS Act Per 1000
- OP Fup Act Per 1000
- OP Fup Atts
- OP New Act Per 1000
- OP New Atts
- Total Unplanned Excess Bed Days
- Total Unplanned Excess Bed Days <18
- Total Unplanned Excess Bed Days 18-64
- Total Unplanned Excess Bed Days 65+
- Unplanned Beddays Age <18
- Unplanned Beddays Age >64
- Unplanned Beddays Age 18-64
- Unplanned Beddays Total
- Unplanned Beddays Total Per 1000
- Unplanned Beddays Total Per 1000 Age <18
- Unplanned Beddays Total Per 1000 Age >64
- Unplanned Beddays Total Per 1000 Age 18-64
- UnplannedAdms Age <18
- UnplannedAdms Age <18%
- UnplannedAdms Age >64
- UnplannedAdms Age >64%
- UnplannedAdms Age 18-64
- UnplannedAdms Age 18-64%
- UnplannedAdmsA&E
- UnplannedAdmsA&E%
- UnplannedAdmsOther

OrgTypeName

- Commissioner
- CCG

OrganisationName

- South Sefton CCG
- Southport And Formby CCG
- St Helens CCG
- Vale Royal CCG
- Warrington CCG
- West Cheshire CCG
- Wirral CCG

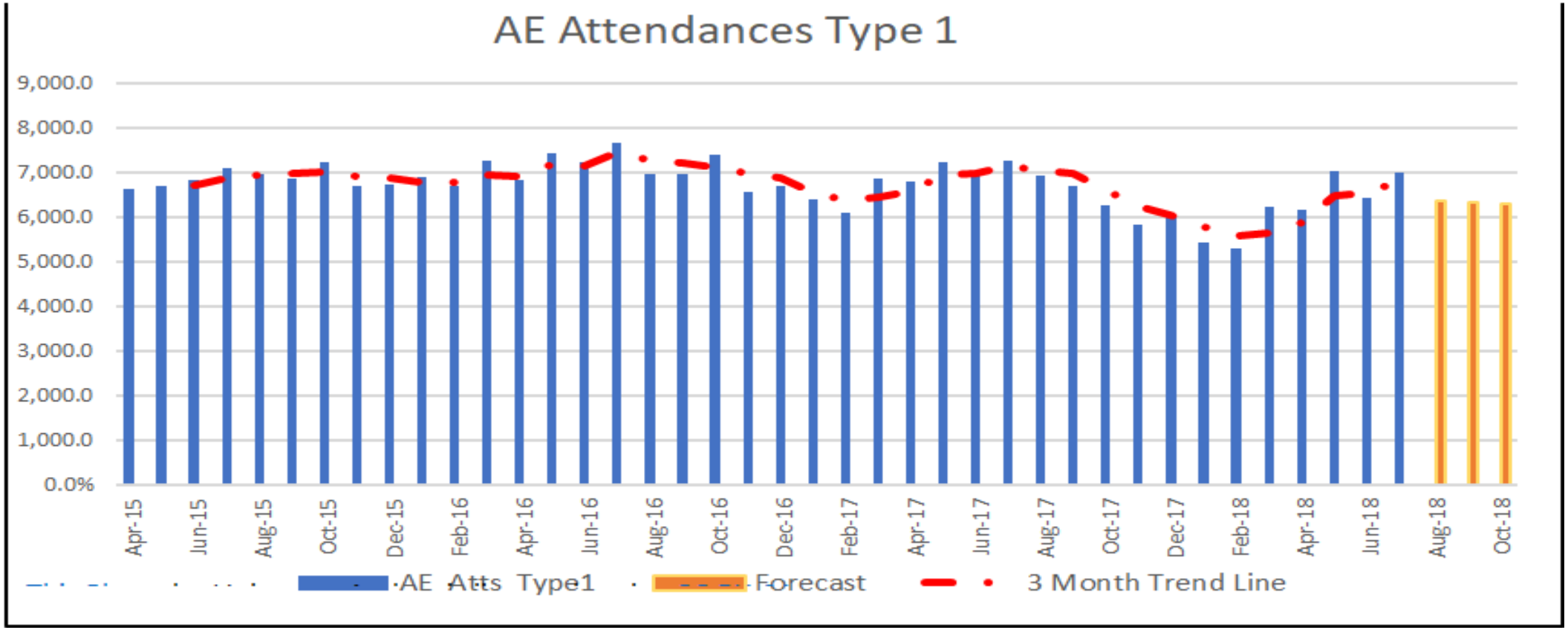
MeasureGroup

- Inpatients - Non-Elective

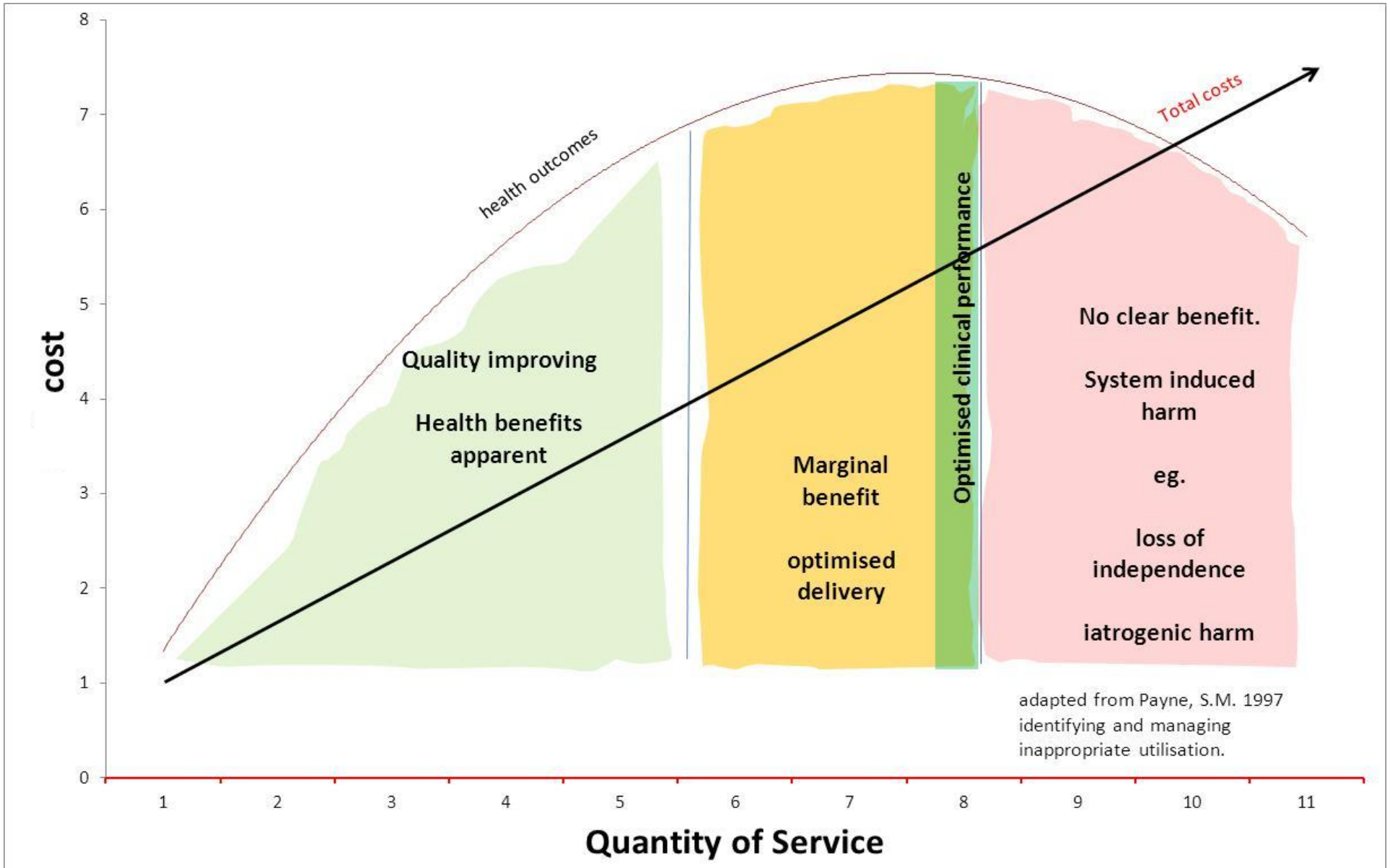
ControlComb...

- Normal
- Warning

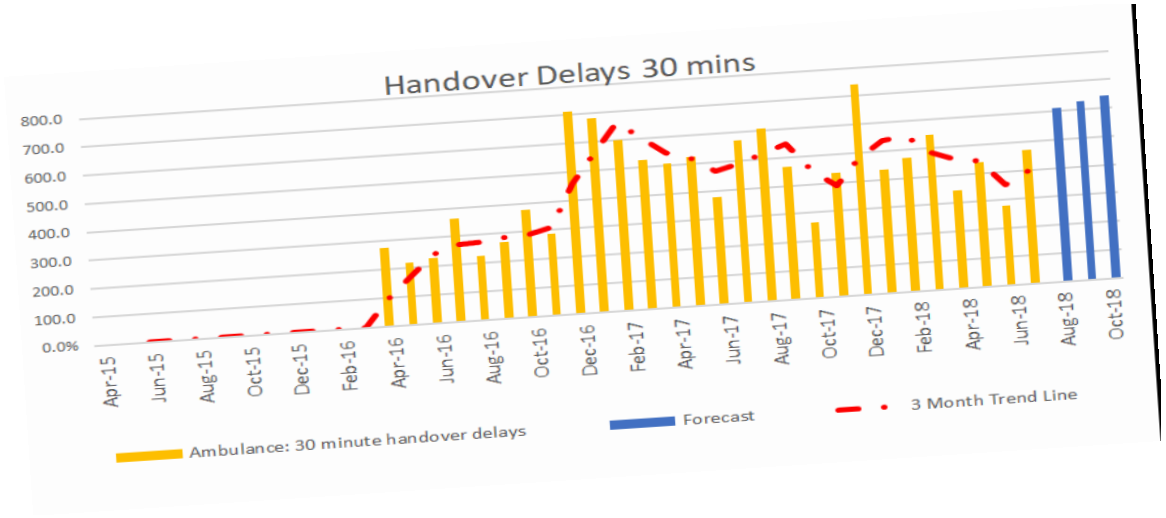
So that we can precisely predict what populations will do

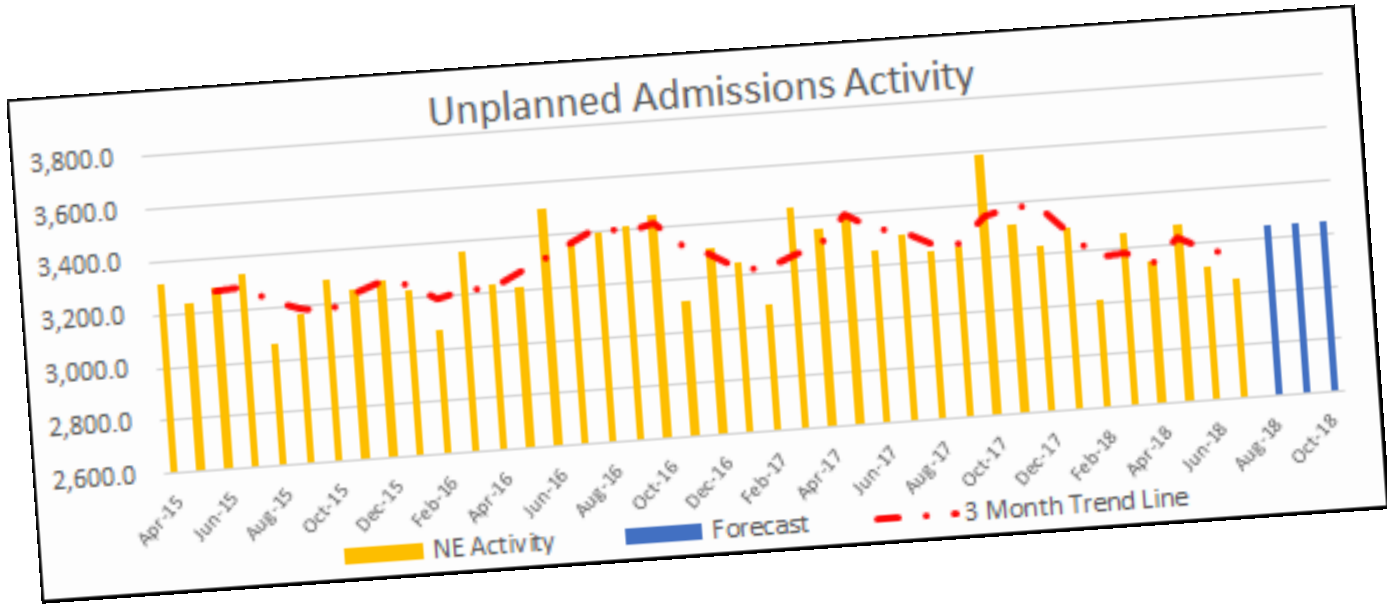


Understand pathway by pathway how much “healthcare” is needed at which point, trend sensitised and seasonally adjusted !

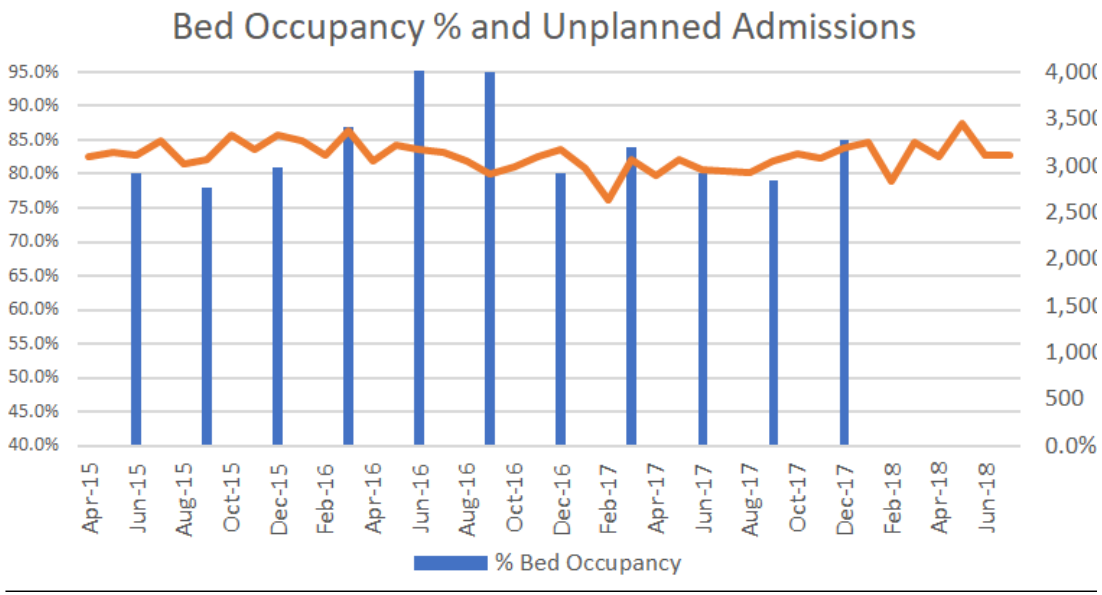


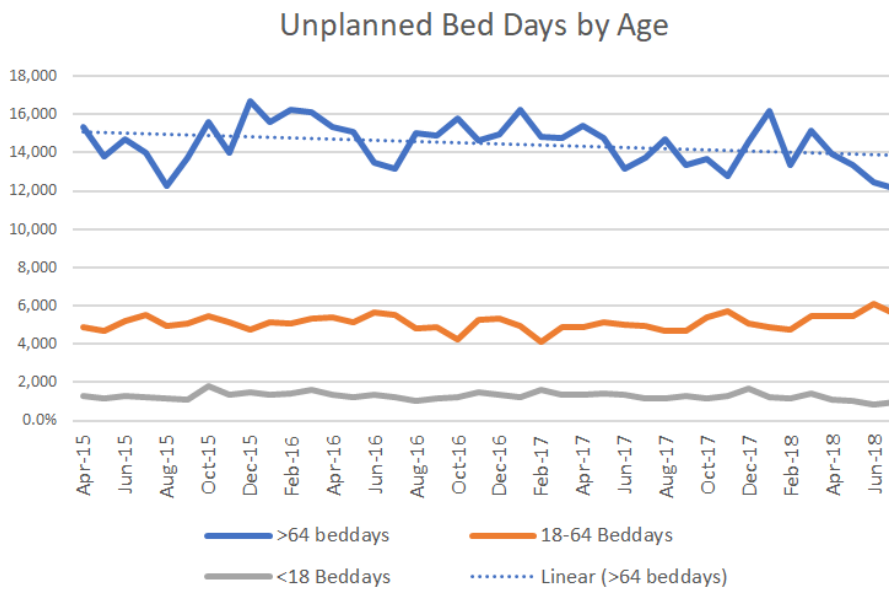
And be confident how services will respond, if nothing else changes …



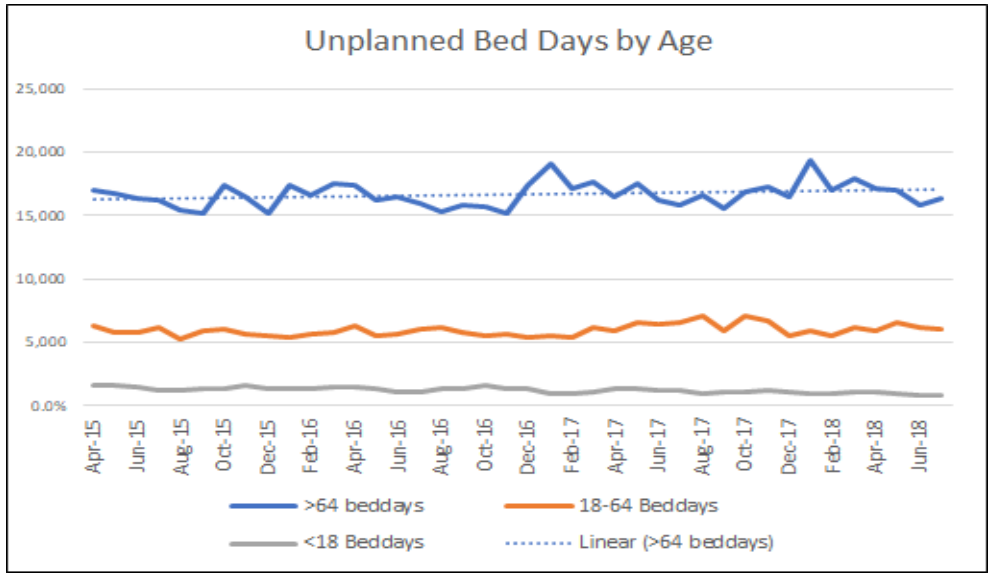


Agree what good looks like at organisational and pathway level





But we can still disagree and do !



Provider view

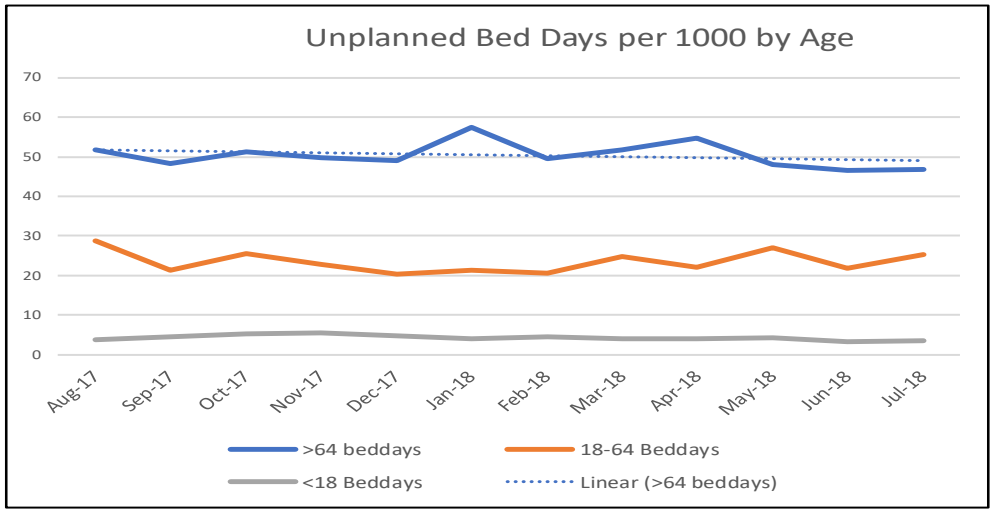
Trend increase in older peoples bed day rate (incidence) equates to comparative loss of 30 beds

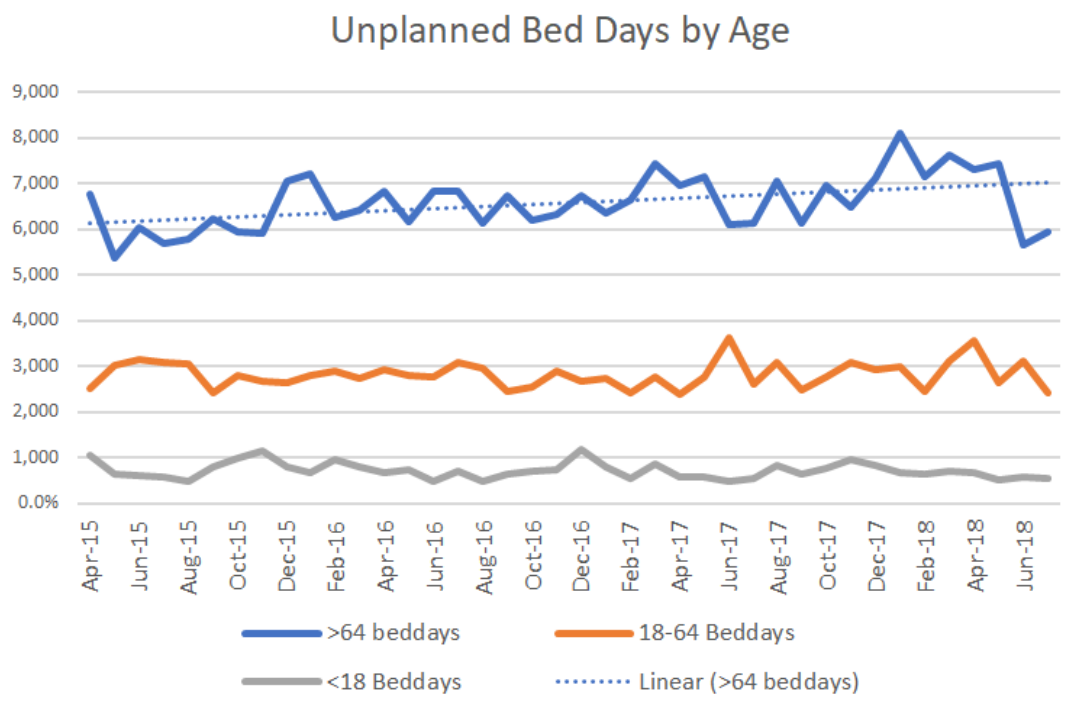
CCG " their systems are getting worse"

Commissioner view

The older peoples bed day rate (prevalence) is reducing slightly

Provider : "there are more older people in the population"





Provider view

Trend increase in older peoples bed day rate (incidence) equates to comparative loss of 33 beds

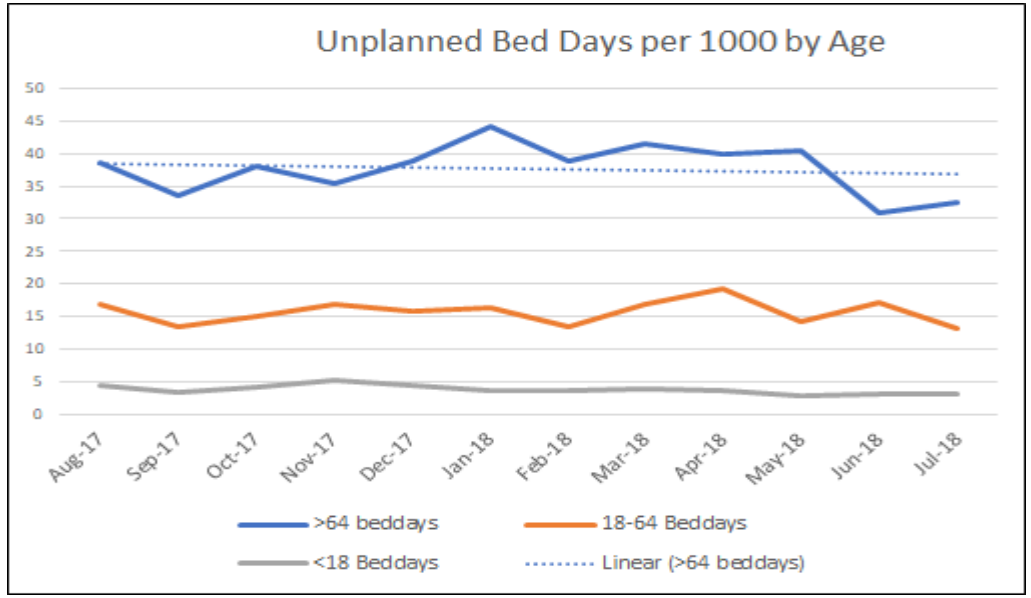
CCG " their systems are getting worse"

Reality : in 10 years time >64yrs patients will be 80% of the inpatient population

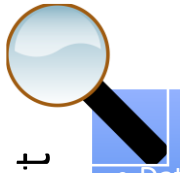
Commissioner view

The older peoples bed day rate (prevalence) is reducing slightly

Provider : we are making strong inroads into older people LoS



Insight without aligned aspiration is no more than a more precise description of a problem



Insight

- Data
- Information
- Articulation
- Impact
- Influence
- Cost effectiveness

ABCs

- ABCs
- Governance & Quality
- Aligned aspirations
- Vision
- Population resonance

Infrastructure

- Workforce
- Buildings/ Infrastructure
- OD
- Capacity
- Ability
- Timeliness

Evidence based decision support	Aligned with great corporate & clinical governance	Becomes the foundation of sustainable change

Governance

Themes

Products

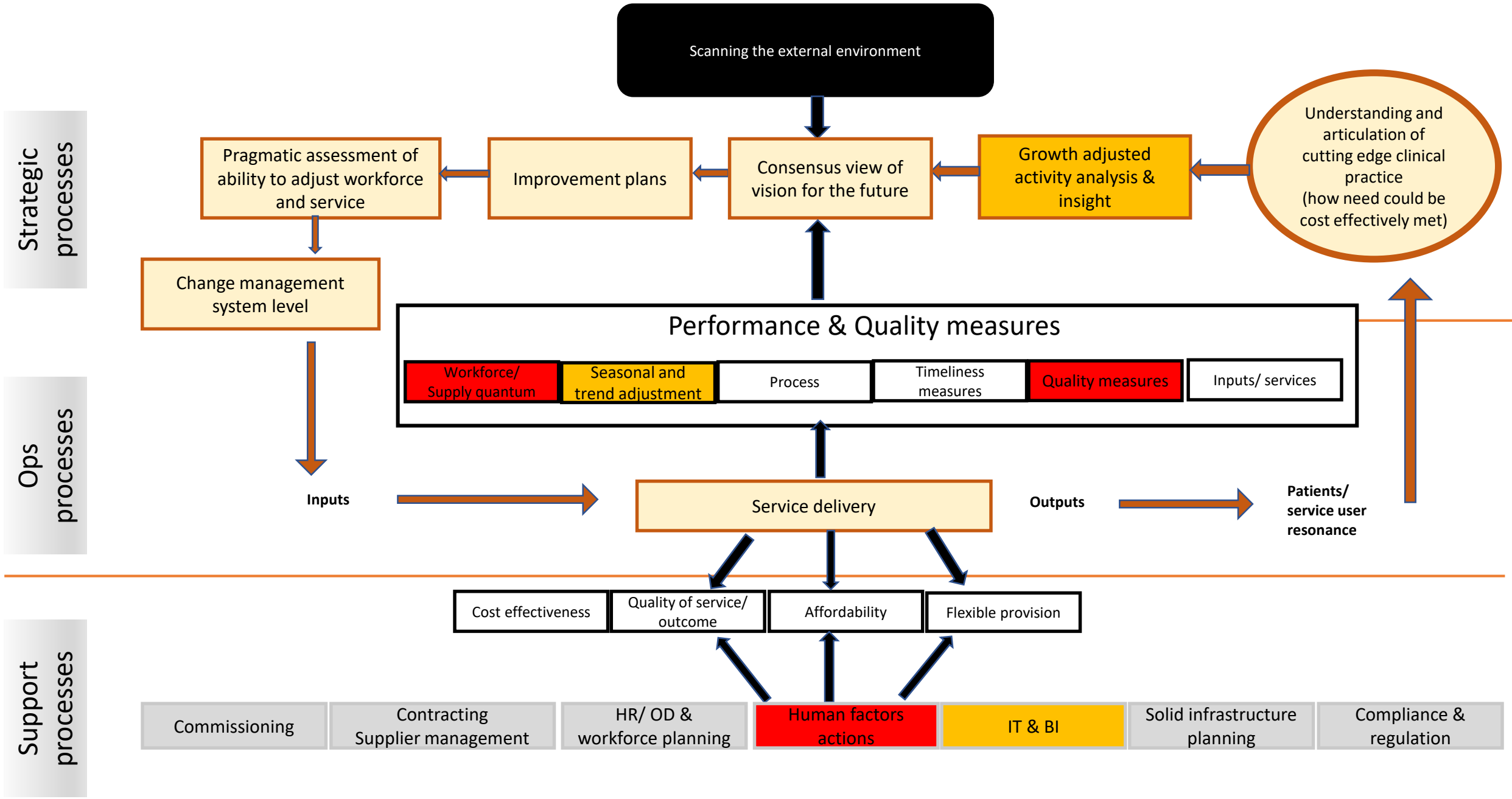
Options

Option A

- Build capacity based on robust demand profile
- Market forces / demand analysis drives capacity development

Option B

- Build capacity on PHM insight
  - Clinically indicated intervention rates, times
  - Population growth/ change analysis
  - Benchmark with other EU/ developed health systems


Strategic processes
Ops processes
Support processes
Scanning the external environment
Understanding and articulation of cutting edge clinical practice (how need could be cost effectively met)
Growth adjusted activity analysis & insight
Consensus view of vision for the future
Improvement plans
Pragmatic assessment of ability to adjust workforce and service
Change management system level
Performance & Quality measures
Workforce/ Supply quantum
Seasonal and trend adjustment
Process
Timeliness measures
Quality measures
Inputs/ services
Inputs
Service delivery
Outputs
Patients/ service user resonance
Cost effectiveness
Quality of service/ outcome
Affordability
Flexible provision
Commissioning
Contracting Supplier management
HR/ OD & workforce planning
Human factors actions
IT & BI
Solid infrastructure planning
Compliance & regulation

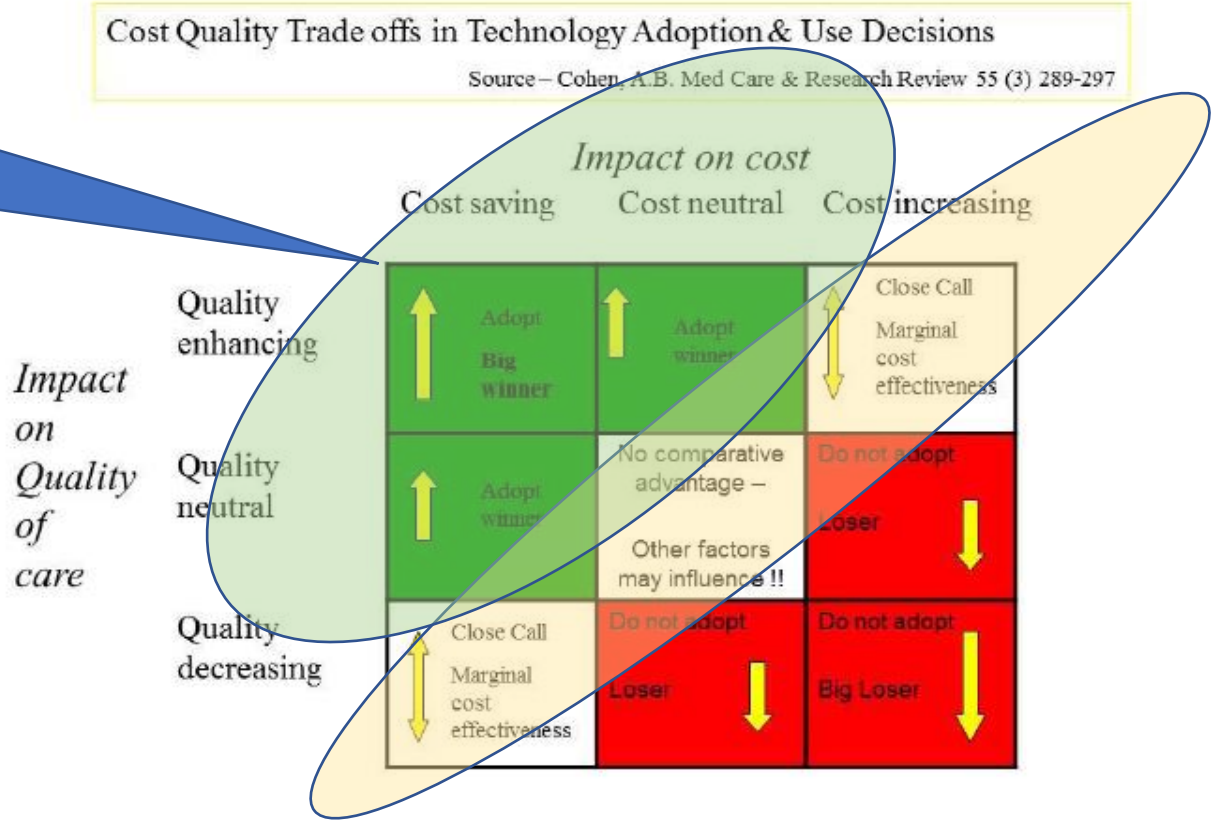
Critical information considerations

ABCs	Insight	Resources
Executive alignment	Confidence in system data	Resource constraints
Change readiness	Hospital centricity ?	Financial limitations
Aligned governance	Capacity insight	Workforce
Clinical engagement	Credible strategy	Organisational Development
Predictive or re-active ?	Policy alignment	Capacity
Aspirations/ Mission		Infrastructure
Organisation Development		Service sufficiency pre & post hospitalisation
Evidence of information driven responsiveness		

And a governance framework

More "here and now" value, immediate service resonance

Marginal adjustment/ PhD space : limited contemporary value



So that can ask and answer and act on the following questions

- Demand variation
  - What will the population do : are our pressures demand induced, population increase induced or age related complexity induced?
  - What's the seasonal and trend impact ? i.e. how will this affect my service need in 2 & 5 years time ?
  - What does our information tell me we need to do ?
- Supply side variation
  - How do services (true capacity) respond ?
  - Do I fully understand the Human Factors element ?
  - Four questions
    - What do the data suggest will happen?
    - How far can I adjust the service ?
    - Is strategic redesign indicated ?
    - If I do everything I can, will there still be a gap ?
    - What would be the **benefits** and **consequences** of
      - Using old metrics, doing more of the same, doing something different, **because its always different ….**
  - Have I got a
    - Strategic plan : *what does my system need to look like next year and beyond ?*
    - A tactical plan : *what can I do with what I have through the next 6 months ?*
    - An operational response : *what do I need to adjust now, next week and for the next 6 weeks ?*

Evidence based decision making

#DATA SAVES LIVES