

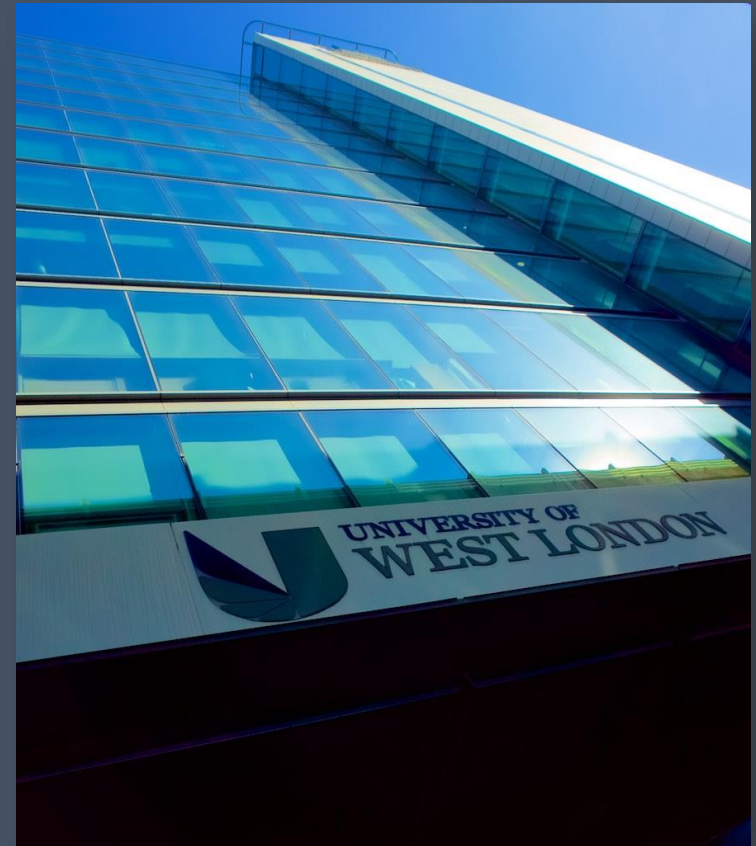
REFLECTIONS ON INFECTION PREVENTION AND CONTROL

Our reflections on IPC based on clinical microbiology, epidemiology, science & literature, and the practical issues that we run into day to day

How to use data to influence practice

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Declaration

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- I am Clinical Director of GAMA Healthcare with responsibility for clinical research and education

Organisational IPC Programme

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- We need to find ways of engaging with those who will deliver the programme
 - I had the worst job title in the world; I controlled nothing
- Staff frequently know what they should do but they do not always do the right thing
 - Even though they will tell you that they have
- What motivates people?
 - What are their desires..... or fears..

Motivators



Towards



Away from

Use of data to influence practice

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- Poorly studied in the literature
- Review of studies quantifying the effect of guideline implementation in community-acquired pneumonia showed a small negative effect of audit data feedback
 - Cortoos et al (2007) Int J Qual H'care 19(6) 358-67
- How was the message delivered?

Giving Feedback – Methods





Making data actionable

Hysong et al (2006) Imp Sci doi:10.1186/1748-5908-1-9

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- Feedback intervention characteristics may influence the effectiveness of the feedback in changing behaviour
 - *'We're down here in the trenches and if something goes wrong, somebody pounds on our head. Otherwise, they leave us alone'*

Making data actionable

Hysong et al (2006) Imp Sci doi:10.1186/1748-5908-1-9

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- Qualitative cross-sectional multi-centre study
 - concept of actionable feedback emerged as the core category from the data

- Differences between high and low performers
 - High performers provided timely, individualised, non-punitive feedback to providers
 - Low performers were more variable in their timeliness and non-punitiveness and relied on more standardised, organisational level reports

A model of actionable feedback

Hysong et al (2006) Imp Sci doi:10.1186/1748-5908-1-9

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- Feedback must be timely in order to be useful or actionable
 - personalised information may be useless if delivered too late
- Feedback information must hit the right target
 - clinical practice adherence measured at an individual level
 - clinician or department level feedback should be about individual/local performance rather than aggregated at organisational level to maximise effectiveness

A model of actionable feedback

Hysong et al (2006) Imp Sci doi:10.1186/1748-5908-1-9

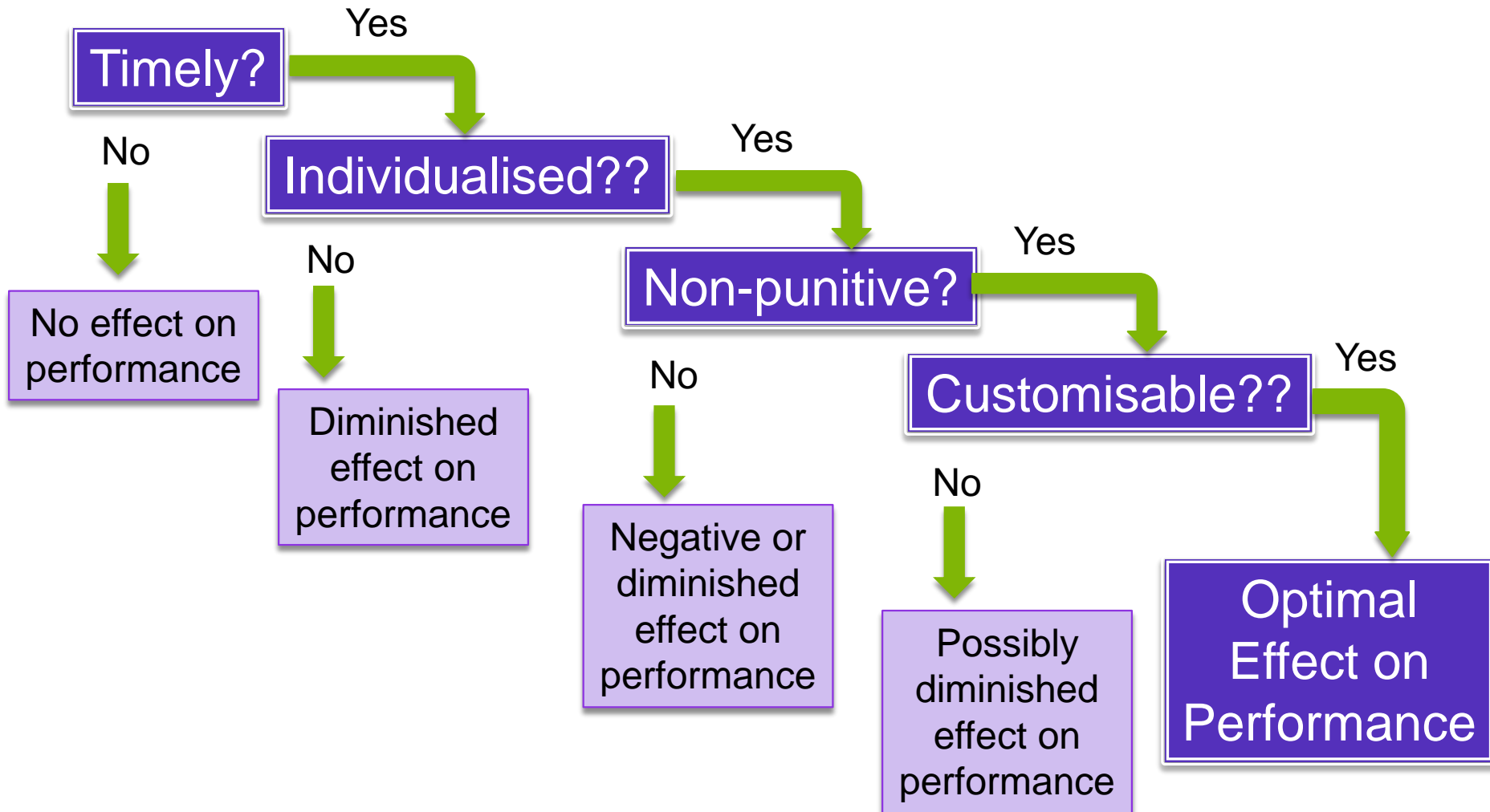
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- Feedback must be non-punitive
 - Feedback delivered in a non-punitive way is less likely to be resisted by the recipient regardless of content thus making it actionable
 - at least initially..
- Feedback must be customisable
 - Engages individuals with the data, making them an active participant in the sense-making process, rather than a passive recipient of information
 - Raw data and pivot tables are very useful for this

A model of actionable feedback

Hysong et al (2006) Imp Sci doi:10.1186/1748-5908-1-9

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Data collection

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- Try and involve clinical teams in the process
 - Data collection
 - Analysis
 - Reports
 - Research outputs
 - Conference abstracts may engage junior team members
- Building some ownership is vital

Watch for Resistors and Constipators

Saint et al, Joint Commission Journal Quality and Safety 2009 35(5)

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- Two types of person impede HCAI activities
 - Active Resistors - hospital personnel who vigorously and openly oppose changes in practice; increase the difficulty of implementing new methods to prevent infection
 - Organisational Constipators - mid- to high level executives who prevent or delay actions without active resistance
 - act as covert barriers to change by increasing work needed to implement evidence based practice

Overcoming the Resistor

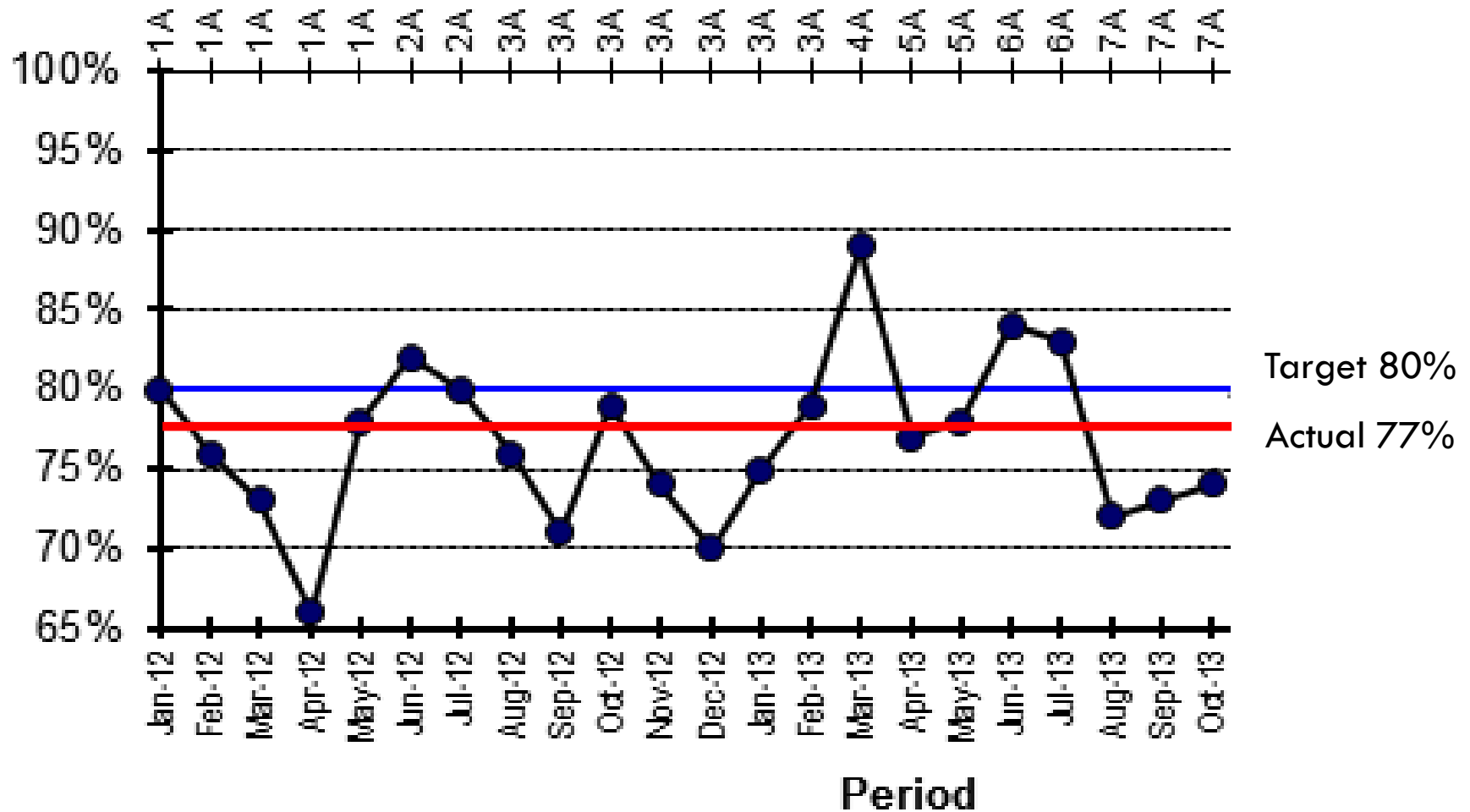
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- Championing by engaged and respected change agent who speaks the language of staff they are guiding (eg., surgeon to surgeon)
- Participation in collaborative efforts that align hospital leadership and clinicians in the goal of reducing healthcare–associated infection
- Data feedback
 - local infection rates to national rates
 - rates of practice compliance with rates of peers

Audit of prescribing

Stop/review dates by hospital ward

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Antibiotic prescribing – Two Actions

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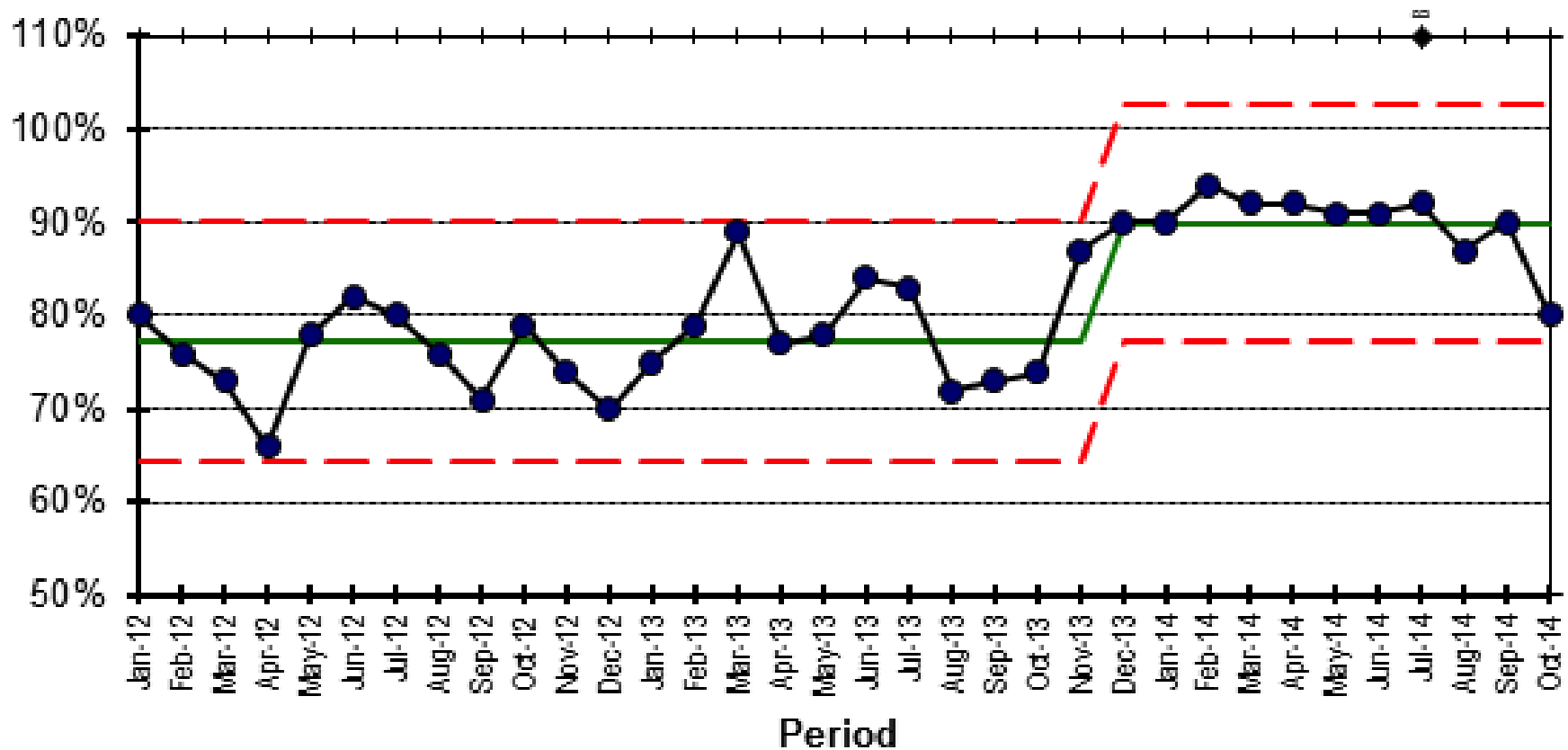
- We increased the standard from 80% to 90%
 - Possibly a lower standard did not demonstrate a true desire for high quality prescribing
 - ‘Everyone else will do it’

- We changed method to audit by clinician teams not wards

Antibiotic Prescribing

Getting Personal - Stop/Review Dates 2012-14

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Constipators

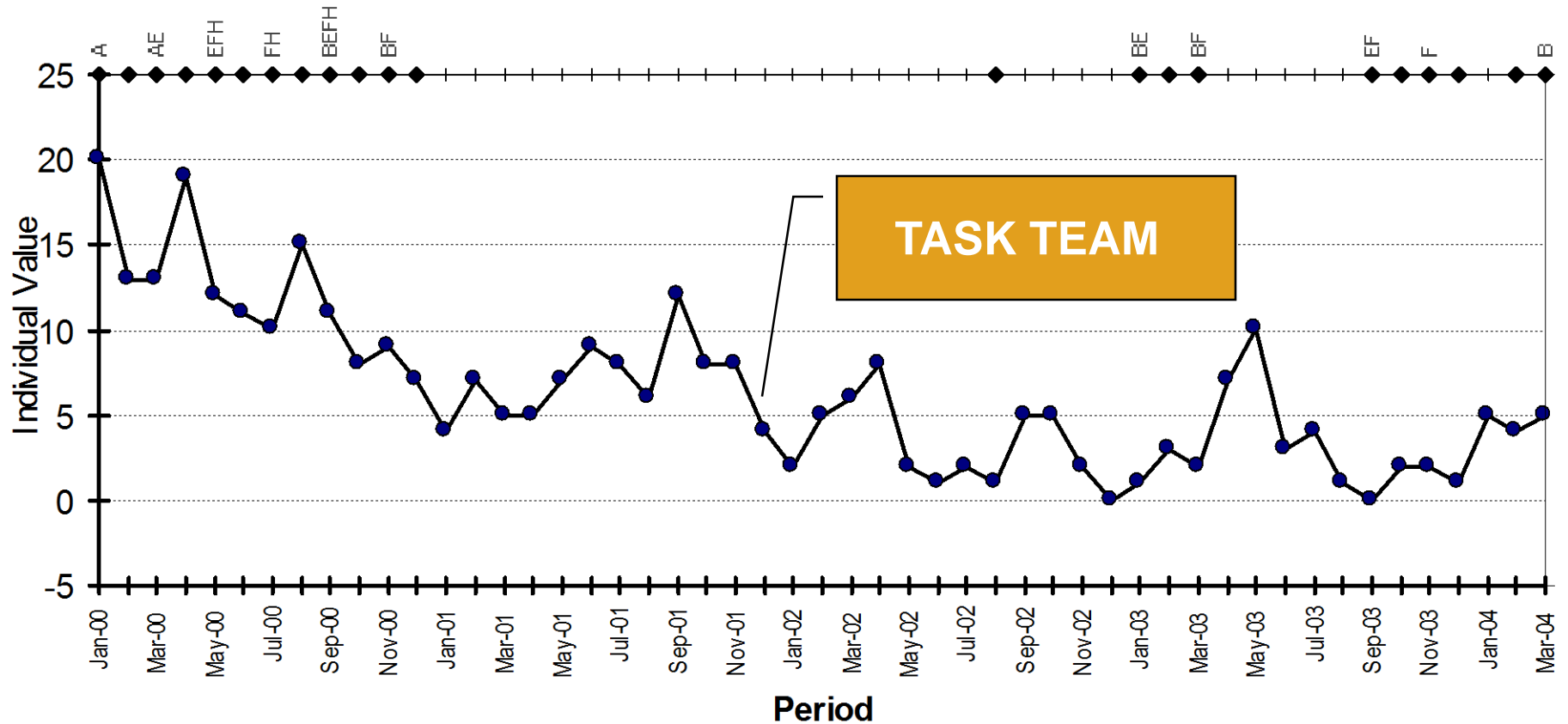
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- Strategies
 - Include constipators early in group discussions to improve communication and obtain buy-in
 - Take advantage of ‘turnover opportunities’ when constipator leaves the organisation by hiring a person who has a very high likelihood of being effective
 - Terminate the constipator’s employment
- Difficult when the constipator is the Director of Nursing
 - Work around the individual

Effect of Task Team on CDT

All Nosocomial CDT

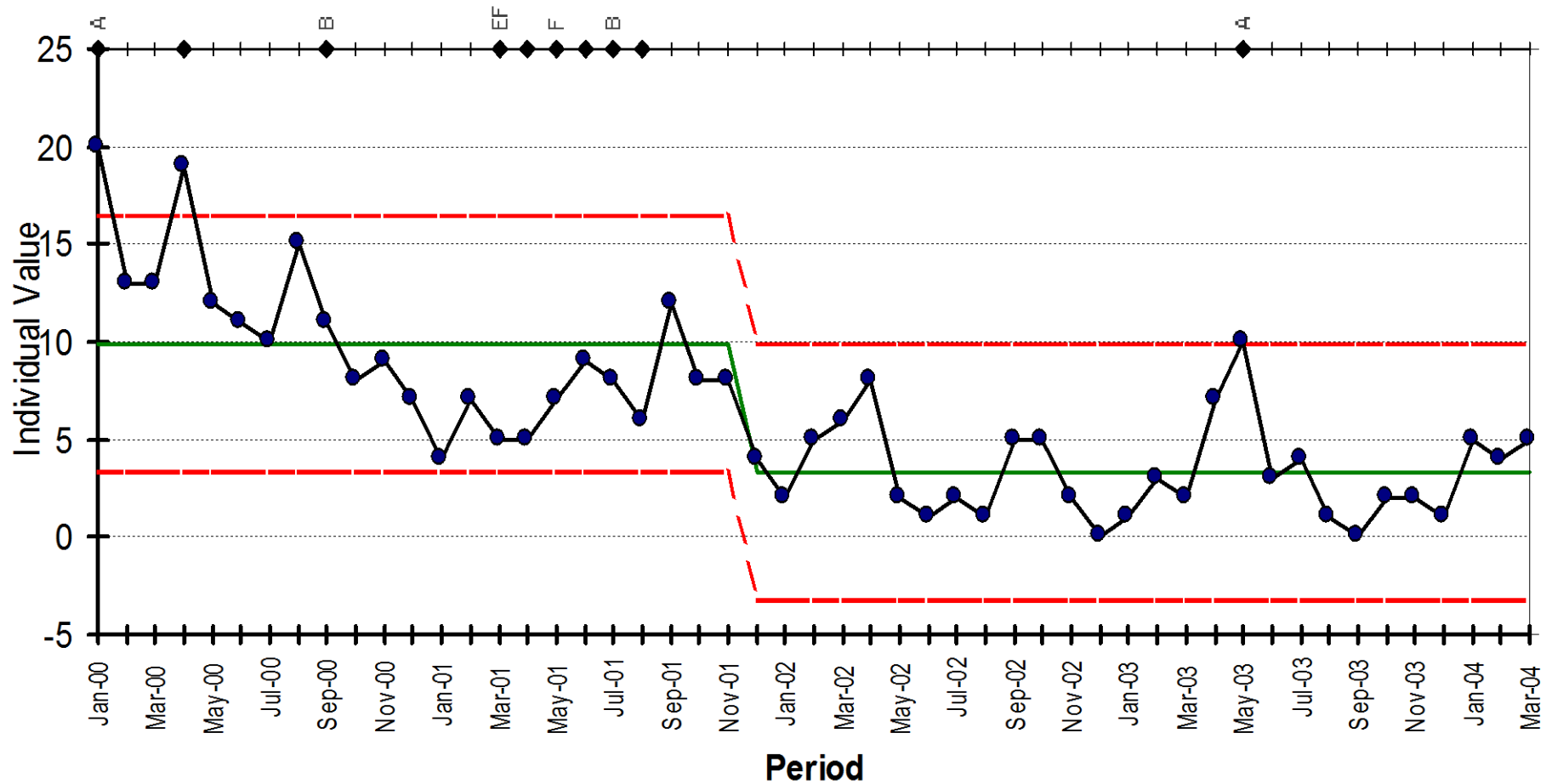
Special Cause Flag



Before and After Task Team

All Nosocomial CDT

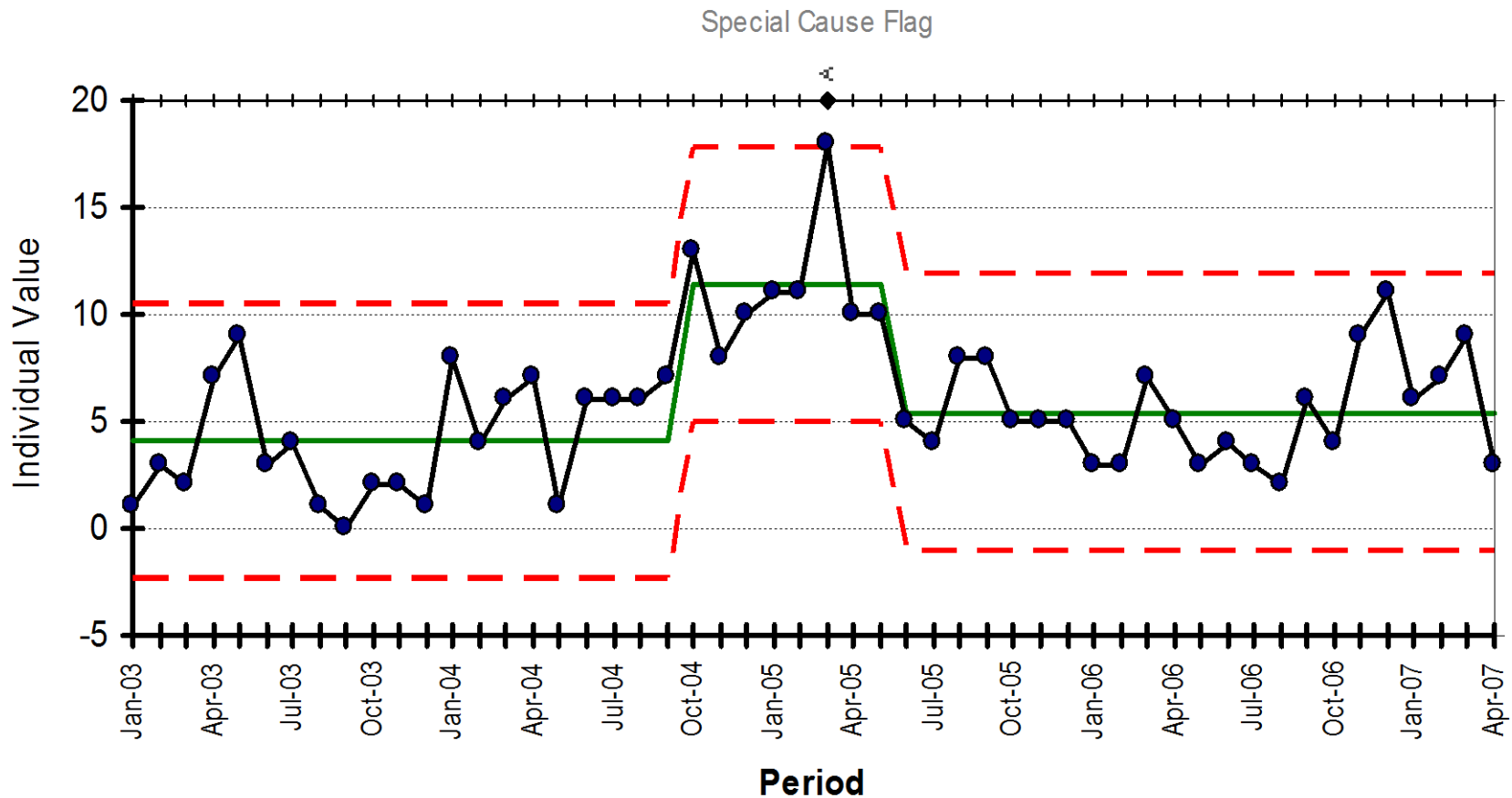
Special Cause Flag



Temporary Removal of the Team

Kiernan, Bowley et al, (2006) JHI 64(S1) p47

Total Nosocomial C. diff



You have a problem and you are going to fix it

We have a problem, how will you fix it?

Solution

We have a problem, how do we fix it?

Do we have a problem? How should we fix it?

Southport ITU

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- 2009 - IPC Team feel that Central Catheter-related Bloodstream Infections are too high
 - Clinicians do not...
 - But have no idea what their rate is
- Data collected
 - State of Michigan was 1.4
 - National programme in England 'Matching Michigan) (sadly temporary) about to commence
 - Rate of infection 10.97/1000 device days
- Ah.... I asked them to write why this was down on a post-it note

Receiving Bad News: Five stages of grief

Kübler-Ross

Denial



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graph TD; Denial[Denial] --> Anger[Anger]; Anger --> Bargaining[Bargaining]; Bargaining --> Depression[Depression]; Depression --> Acceptance[Acceptance];
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Anger

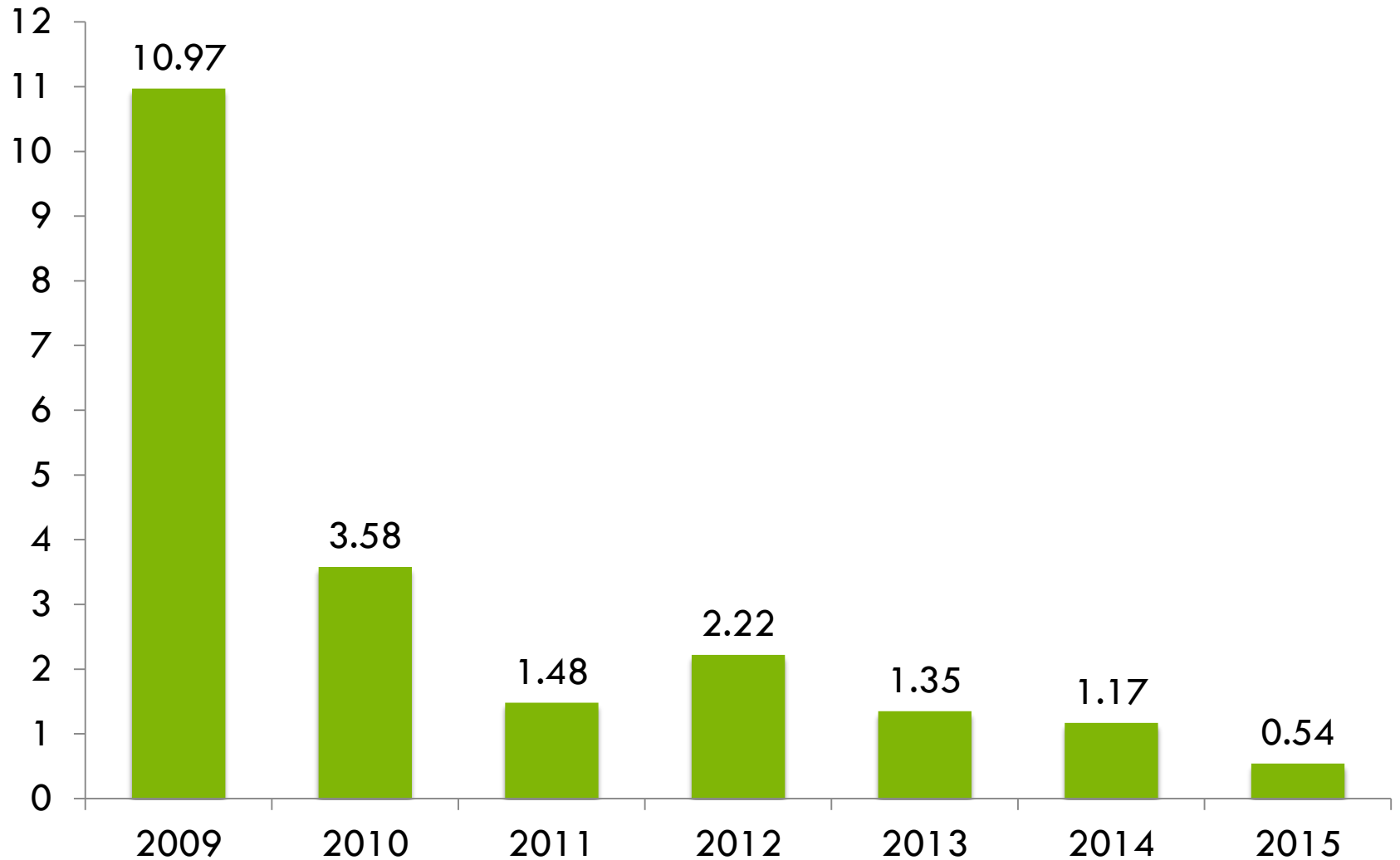
Bargaining

Depression

Acceptance

CR and CA-BSI in ITU 2009-15

Rate/1000 device days



Conclusion

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- Data are the friends of the IPC programme
 - Without them it is difficult to convince

- But dissemination must be
 - Timely
 - or impact and opportunity are lost
 - Individualised
 - to a level that is recognisable to the target audience
 - Non-punitive
 - or they will invoke the stages of grief
 - Customisable
 - to improve engagement