



Acute Kidney Injury
Adding Insult to Injury
Thursday 11th June 2009
RSM London

Dr Kevin Harris
Clinical Vice President



NATIONAL CONFIDENTIAL ENQUIRY INTO PATIENT OUTCOME AND DEATH

Acute Kidney Injury

- A study of contributory factors in, recognition of, and response to, acute kidney injury in a cohort of patients dying in hospital where AKI has been contributory
- First national audit of a common, important problem
- Addresses clinical and organisational issues
- Findings and recommendations
 - Will influence the prevention of AKI
 - Will influence the management of AKI
 - Make a difference...

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Expert Group Members:

- Mr David Mitchell, Vascular Surgeon: Bristol
- Dr Andrew Lewington, Nephrologist: Leeds
- Dr Alistair Hutchison, Nephrologist: Manchester
- Dr Philip Kalra, Nephrologist: Salford
- Dr Suren Kanagasundaram, Nephrologist: Newcastle
- Dr Paul Roderick, Public Health Medicine: Southampton

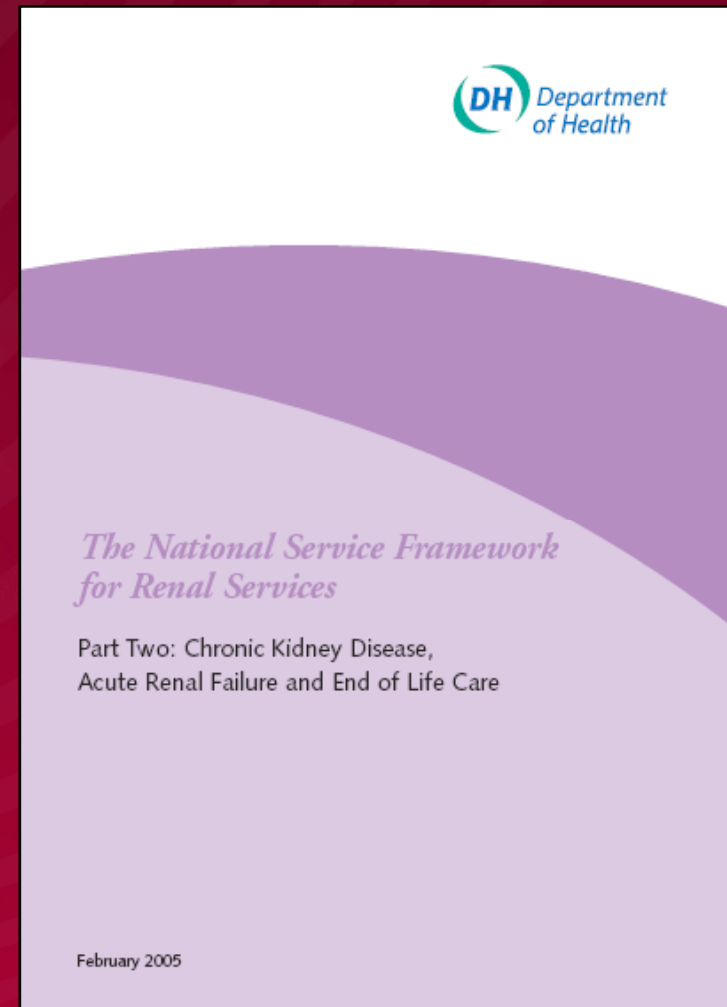
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Quality requirement three

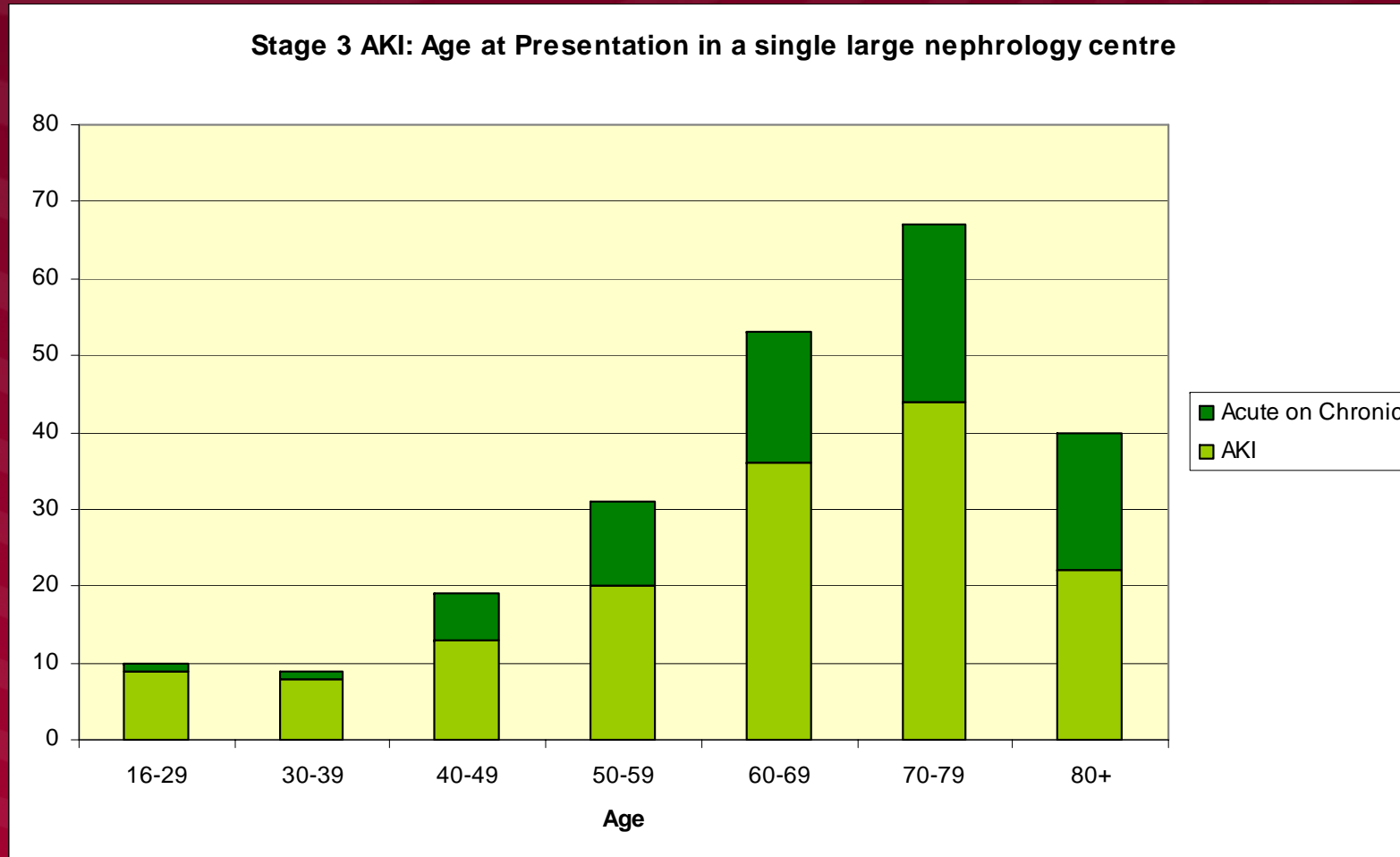
Acute renal failure:

People at risk of, or suffering from, acute renal failure are identified promptly, with hospital services delivering high quality, clinically appropriate care in partnership with specialised renal teams.

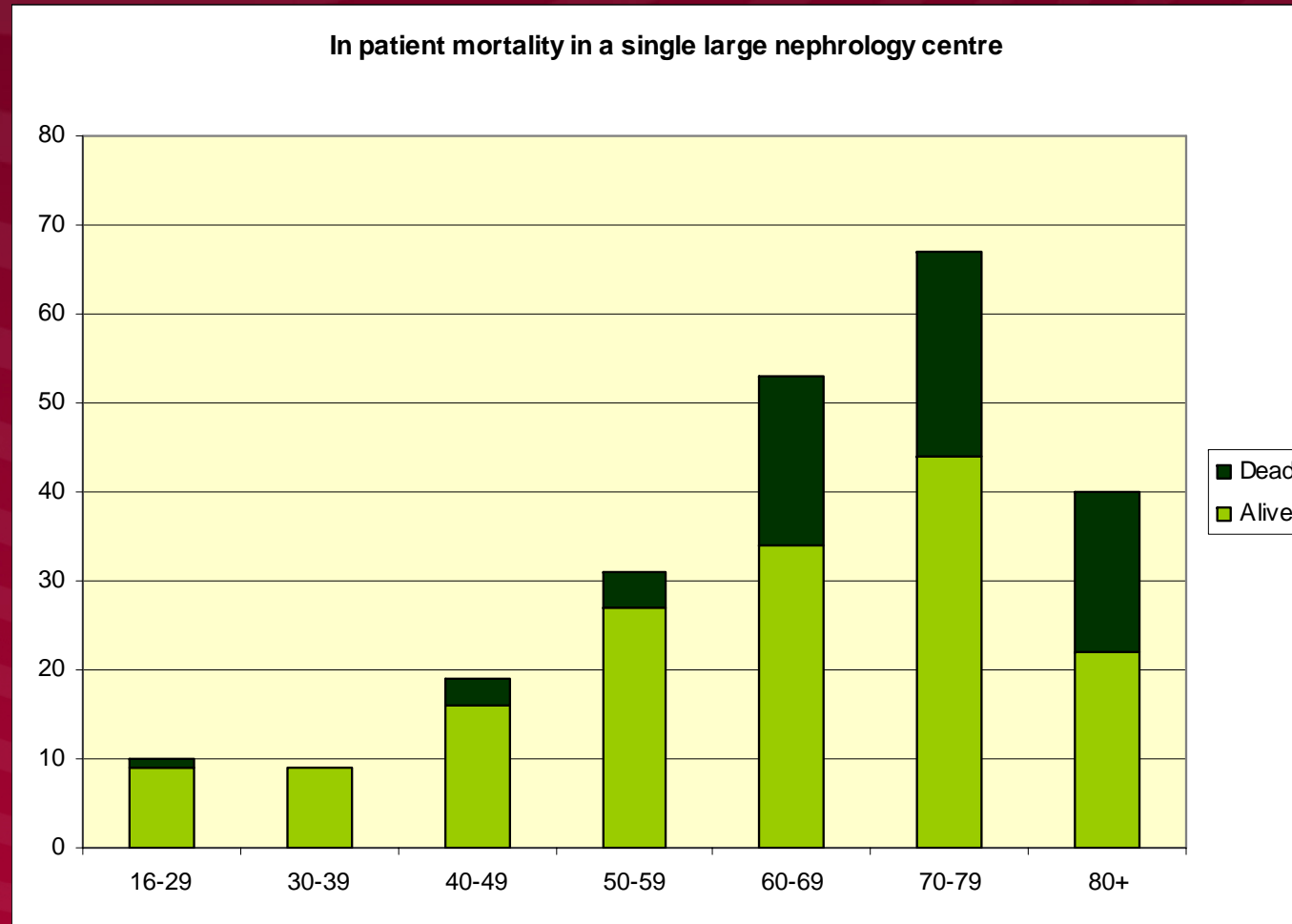
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Key issues identified in the report

Clinical:

- Early detection
 - Identifying those at risk
 - Appropriate observations (MEWS)
 - Appropriate investigations
- Appropriate prompt intervention

Organisational:

- Access to nephrology advice
- Access to nephrology services

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No real surprises

There is work to be done

Research into pathophysiology and treatment required

We already have the knowledge to significantly improve outcomes

The real challenge is to get people and organisations to do the right thing

Education of clinical staff

Quality improvement initiatives



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Renal Association Guidelines: Dr Andrew Davenport, Dr Suren Kanagasundaram, Dr Andrew Lewington and Dr Paul Stevens

<http://www.renal.org/pages/pages/guidelines/current/arf.php>

Assessment, Prevention & Pharmacological Treatment

Guideline 2.1

Patients at risk of AKI should be identified in the community and the hospital .

Guideline 2.2

Undergraduate and postgraduate medical trainees should be taught the principles of prevention and treatment of AKI.

Guideline 2.3

Initial assessment to determine the likelihood of whether their AKI is pre-renal, renal or post-renal in nature. This should encompass ...**assessment of volume status; reagent strip urinalysis and presence or absence of obstruction.**

Guideline 2.10

Therapeutic drug dosing must be adapted to altered kinetics in AKI.

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http://www.renal.org/pages/media/download_gallery/GIFTASUP%20FINAL_05_01_09.pdf

Lassen BJS, 96:123-124,2009.
*Consensus Guidelines on Intravenous
Fluid Therapy for Adult Surgical
Patients* is the first robust attempt
at a comprehensive system to reduce
the potential hazards of salt and
water administration to surgical
patients. They are very welcome.

British Consensus Guidelines on Intravenous Fluid Therapy for Adult Surgical Patients

GIFTASUP

Jeremy Powell-Tuck (chair)¹, Peter Gosling², Dileep N Lobo^{1,3}, Simon P Allison¹, Gordon L Carlson^{3,4}, Marcus Gore³, Andrew J Lewington⁵, Rupert M Pearce⁶, Monty G Mythen⁶

On behalf of ¹BAPEN Medical - a core group of BAPEN, ²the Association for Clinical Biochemistry, ³the Association of Surgeons of Great Britain and Ireland, ⁴the Society of Academic and Research Surgery, ⁵the Renal Association and ⁶the Intensive Care Society.



The Renal Association



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Renal Association Guidelines: Dr Andrew Davenport, Dr Suren Kanagasundaram, Dr Andrew Lewington and Dr Paul Stevens

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Treatment facilities & referral to renal services

Guideline 3.1

The critical care nephrology interface should be defined at each locality to ensure timely and appropriate placement of patients with AKI according to their clinical condition. Local critical care networks should be utilised to facilitate this process.

Guideline 3.2

Appropriate transfer and triage of AKI patients from the non-specialist, non-critical care ward to the renal unit should be facilitated through the **development of local guidelines and transfer protocols.**

Guideline 3.4

Nephrologists and intensivists should work together to provide care for patients

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“There is more variation in arrangements for the management of AKI in the UK than in any other aspect of the work of renal units.

Patients wait too long to be admitted to the renal ward both from within and beyond the base hospital. They are often managed in inappropriate facilities.”

This reflects:

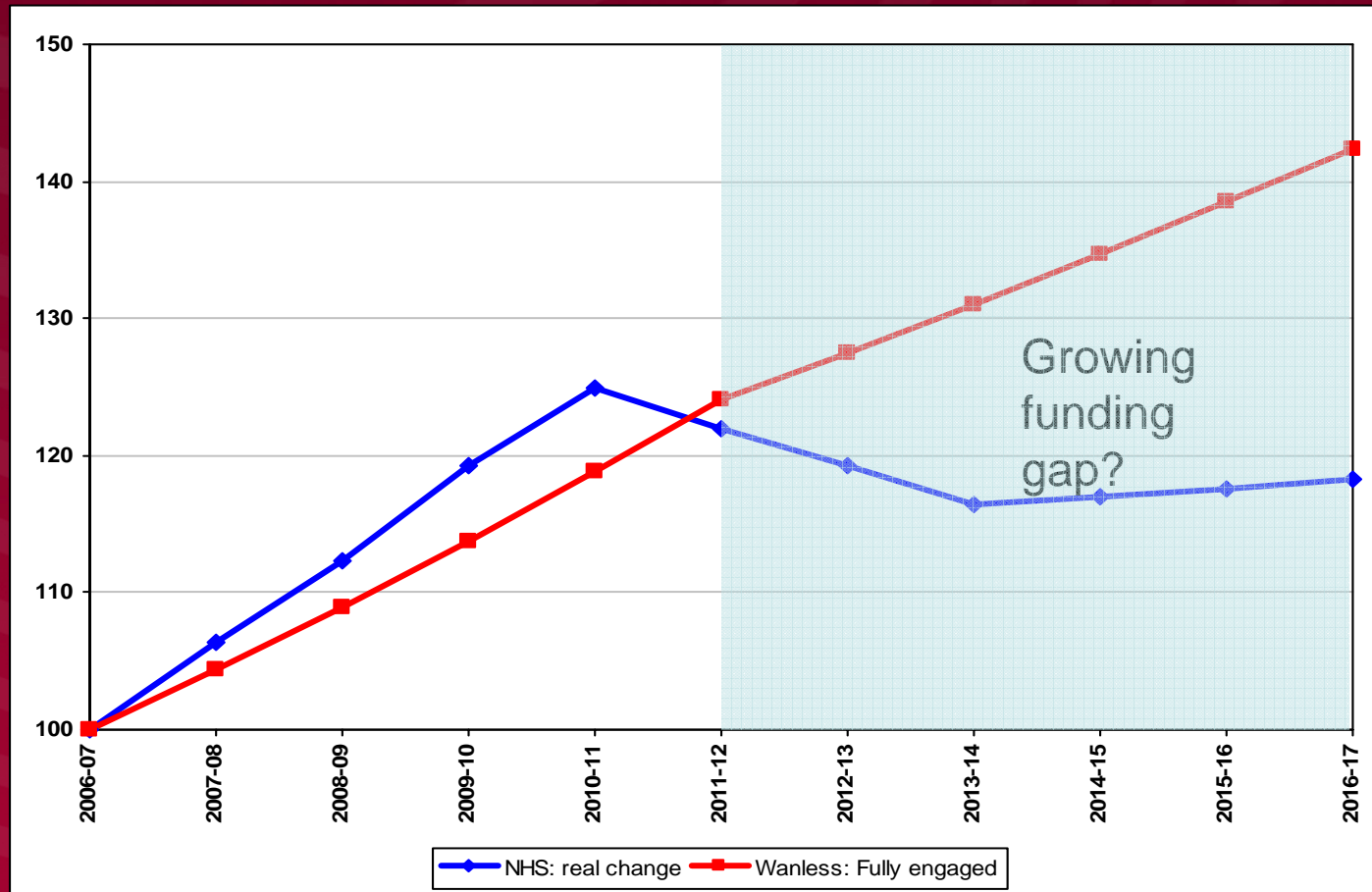
- the absence of any clear commissioning arrangements
- uncertainty about shared lines of responsibility
- lack of renal HDU beds
- lack of HD facilities in non-HDU renal beds

Professor John Feehally Past President of the Renal Association 2007

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Can we afford to do this?



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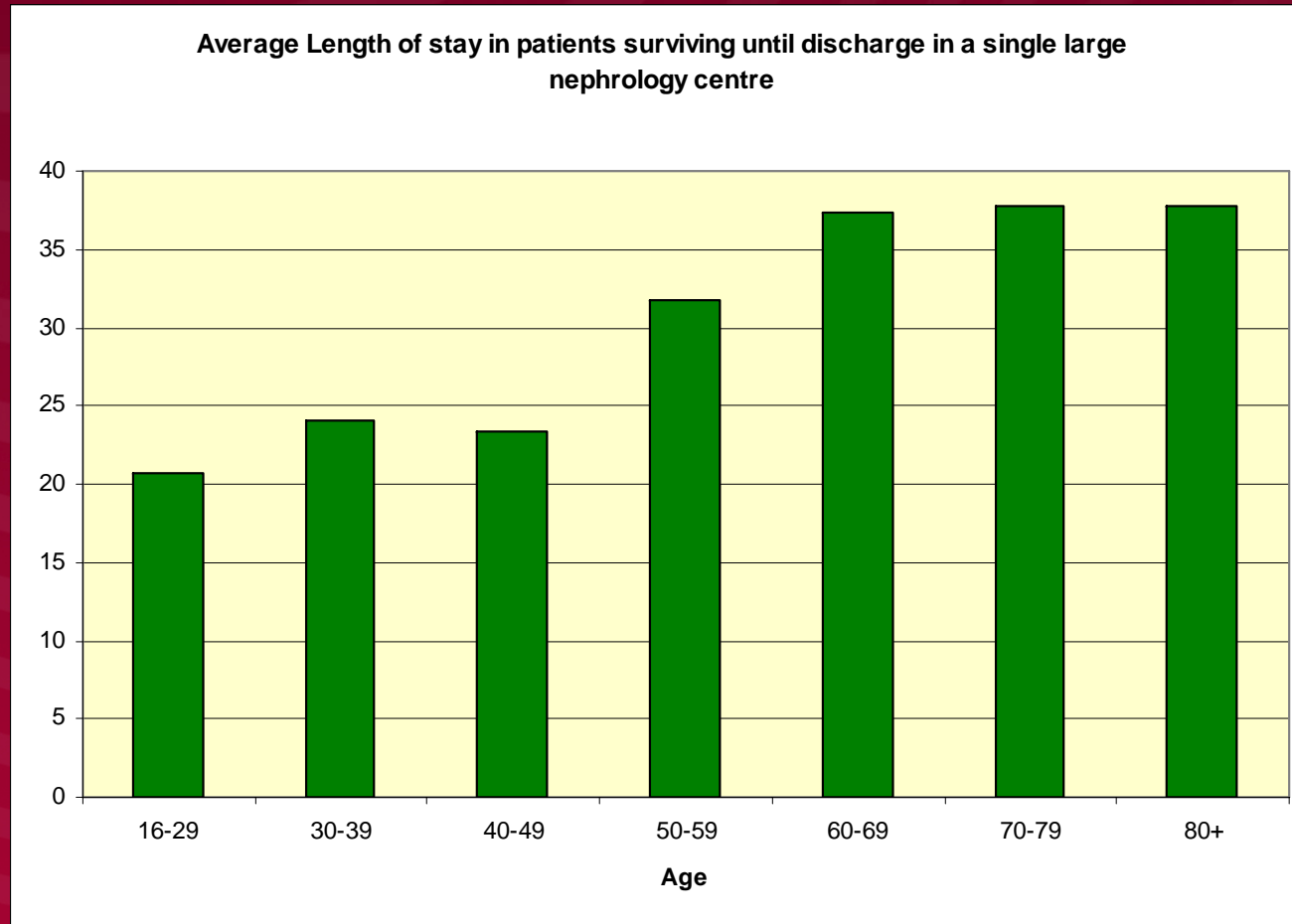
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Does Quality Have to Cost more Money?

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Can we afford not to?



“The First Law of Improvement”

Every system is perfectly designed to achieve the results it achieves.

Don Berwick, quoting Paul Batalden. Berwick D. Br Med J 1996; 312: 619



System Improvement

- Start with evidence-based guidelines
 - RA guidelines
- Understand the current system
 - Process mapping
 - Measurements
- Set clear aims
- Look for a “change package”
 - Steal shamelessly
 - Encourage innovation
- Form a quality improvement team



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Improvement will require action by whole health community

- Commissioners (world class)
- NHS Kidney Care
- Renal Networks (Specialist Services)
- NHS Trusts
- Chief Executives & Medical Directors
- Clinical Teams
- Deaneries
- Universities
- Professional bodies
- Patients

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RA actively participating in:

- Definitions for AKI
- Coding
- Guidelines for prevention
- Guidelines for appropriate referral and transfer
- Education
- Audit