

# Fitness for Purpose in Infection Control

## Martin Kiernan, Southport and Ormskirk Hospital NHS Trust

### A Webber Training Teleclass

**Infection Prevention and Control Teams**  
Ensuring fitness for purpose

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50 Years on....

- It all began in Torbay in the South of England

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The most recent UK guidance

- Cooke, 1995
- Role of the ICT
  - Implement annual programme
  - Policy production
  - Decision making
    - Medical and Nursing
- “on the management of infected patients and other infection control problems”

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Infection Control Teams (1995)

- Functions
  - Outbreak identification and control
  - Education of hospital staff
  - Policy preparation
  - Annual programme that includes surveillance
  - Provision of an annual report to the CEO
  - Occ Health Liaison
  - Liaison with clinical teams on the development of standards
- But rudimentary surveillance only

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Change in my professional life

- 1990-1996
  - 1 ICN for
    - 1000 DGH beds
    - 1000 MH hosp beds
    - 200 nursing and residential homes
    - 56 General Practice Surgeries
    - 100 schools and nurseries
  - 1 0.5 WTE microbiologist
  - No defined IC time
  - no administrative support
  - also was Tissue Viability Service
- By 2006
  - Acute 700 bed hospital
    - 2 Medical Microbiologists
    - 1 Nurse Consultant
    - 2 Specialist Nurses
    - 1 Surveillance Nurse
    - 1 Administrator

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Currently in 2009

- Reducing
  - Beds, now 580
  - Length of stay for less risky procedures
  - Admissions for some procedures
- Increasing
  - Admissions up 18% over the previous year
  - Age and dependency of inpatients
  - Invasive clinical procedures
  - Surveillance
  - Screening
  - Requirement for information and performance feedback
  - Requirement for specialist input

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#### Differences were evident

- In the US, Infection Control team members were undertaking surveillance
- This was not happening in the UK as 'teams' were often one person
- Murphy (2002)
  - "from expert data collectors to interventionists: changing the focus for ICPs"

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#### What's been happening to Teams?

- Infection Prevention and Control Teams have evolved 'on the job' by reacting to external stimuli rather than by a conscious process
  - Very difficult to keep pace with demand for new skills
- Evolution/Revolution for Medical Practitioners
  - Management and leadership roles
  - Additional roles, no defined expectation, little development
- Within a developing Patient Safety culture, IP&C has increased prominence in an Organisation
  - Have Teams achieved the same prominence?

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#### How do teams work?

Findings from DH Support Team visits

- Traditional
  - High profile subject but team has low profile in organisation
    - "They phone us or pop in occasionally"
  - Highly reactive
  - Keep control and do...
  - Write reports

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#### How do teams work?

Findings from DH Support Team visits

- Modern
  - Prominent team
  - Highly visible
  - Highly pro-active
  - Provide expert input for others to do
  - Use data to drive improvement

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#### There are different models

- You could argue that organisations develop teams structures that work for them
- But that depends entirely on what the organisation wants from the team
  - Or what it thinks it wants
  - or doesn't want...
- Team structures/numbers differ around the country

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#### Team Numbers

- 2004 National Audit Office report noted 1 ICN to 347 beds
  - Canada have a benchmark of 1 per 167 beds
  - US used to have a benchmark of 1 per 250 beds
    - Now heading towards 1 per 100

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#### Dutch Model

van den Broek et al, JHI (2007) 65, 108-111

- Examined the American Model based on SENIC
  - Out of date and relating to a totally different era
- Considered that the number of beds is not a useful denominator
- Proposed a model of 1 ICP to 5,000 annual admissions
  - 1 WTE Microbiologist per 25,000 admissions
- Based on that Model, my medium/small Acute Trust would require 6.5 WTE IPCPs and 1.2 WTE microbiologists
  - 50,000 admission hospitals could require ratios of 10:2
- Still does not take casemix into account

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#### National Audit Office Report 09

- Produced in the summer of 2009
- Report to the public accounts committee on value for money of Infection Prevention and Control programmes
- Also provided a useful snapshot of the structure of Teams in the UK in the autumn of 2008

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#### Team Membership in Whole Time Equivalents

Category	Mean per organisation	Mean beds per staff resource
Beds covered by Team	738	n/a
Infection Control Nurses	3.9	189
Infection Control Doctors	1.12	641
Antimicrobial Pharmacists	0.85	872
Audit/Surveillance	0.53	1392
IT Support	0.28	2636
Clerical support	0.91	811

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#### Team shortfalls

- 6% had no Infection Control Doctor
- 14% had no Antimicrobial Pharmacist
- 57% had no Audit/Surveillance staffing
- 69% had no Information support
- 17% had no clerical support

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#### Most worrying

- On average, organisations were carrying 0.77 WTE vacancies for Infection Control Nurses
- 48% reported difficulties in filling these posts
- 73% of ICN posts were filled with unqualified practitioners

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#### Staffing levels

- There is no magic number
- 1 per x beds does not reflect
  - Organisational workload
  - Risk presented by procedures undertaken in the organisation
  - Geography
  - Local population characteristics
- Remember: Bed numbers can go down as well as up
- A report produced for the National Audit Office by Thames Valley University in 2003 showed wide variations in practice Internationally

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#### Types of Organisation

- NHS Healthcare Organisations
  - Acute Trust
  - Primary Care Trust
  - Mental Health Trust
  - Ambulance Trust
- Social Care Organisations/Partnerships
- Independent Healthcare Provider
- Health Protection Agency

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#### Where do other Agencies fit in?

- In the UK, the Health Protection Agency has the national lead for surveillance of HCAI
- Level of local support from Health Protection Units is very variable across the country
  - Sometimes fulfil IPC functions under SLAs
  - Sometimes have very little involvement in local IP&C issues
  - Care home support a case in point
- Quite a few ICNs were taken into the HPA
  - Many have now returned to PCTs as posts became available

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#### Mental Health Services

- Different or not?
- Varying models in use around the UK
  - Some rather small teams
  - Some extremely large teams
- Core function assessment vital

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#### Ambulance Provision

- Some Ambulance Services have recognised the importance of IP&C and have looked to meet service needs
- Acute care
  - Risks to patients and staff if IP&C not embedded
  - IP&C fits into the Health and Safety/Risk or Governance structures
- Definitely need
  - Director of Infection Prevention and Control
  - Expert clinical lead
  - Formal mechanism for Medical Microbiology advice

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#### Primary Care Organisations

- Commissioning is the one area where the traditional model doesn't fit
  - No operational aspect
- Advice to commissioners is vital when contracts are set and performance monitored
- Potential for conflict of interest if same team covers service provider arm
- Boards need assurance

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#### Core Activities

Activity	Acute	Comm PCT	Provider PCT	Mental Health	Ambulance
Surveillance	✓✓✓	✓(✓)	✓✓	✓	
Education	✓✓✓	✓	✓✓✓	✓✓✓	✓✓✓
Audit	✓✓	✓	✓✓✓	✓✓✓	✓✓
Expert Advice	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Strategy	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓
Policy/guidance	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Outbreak Manag'm't	✓✓✓	✓	✓✓	✓✓	✓
Perform'ce Manag'm't	✓✓✓✓	✓✓✓	✓	✓	✓

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**What does an organisation need from it's IPC Team ?**

- Provide the capability to meet Organisational objectives
  - Patient safety focus of no avoidable infections
  - Facilitate best practice
- Education and training
  - Embedding Infection prevention and control into all healthcare systems
  - Motivational skills are vital
- Truly Multidisciplinary
- To be both proactive and reactive

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**What else do they do?**

- Facilitate the implementation of relevant research
- Provide the Board with assurance (or alert when assurance can not be made)
  - Meeting stat. legal requirements
- Advise the organisation on local requirements for specialist Infection Prevention advice
- Lead IPC programme
  - Education
  - Policy
  - Surveillance / data / audit
  - Risk Assessment / Management

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**What should a team provide?**

- Expert Clinical Resource
- Monitoring against defined local and national standards
- Consultancy on capacity planning and the strategic direction of the organisation
- Communication
- Interaction with external agencies
- Curriculum development with ext. education providers
- Succession planning and career development

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**Requirements of a team**  
not mutually exclusive

- DIPC with strong clinical background
- Team manager (governance of the team)
- Expert clinical advisor on IP&C
- Expert Microbiological expertise
- Pharmacological expertise
- Decontamination expertise
- Data analyst / Statistician / Epidemiology / IT expert
- Administrative support
- Researcher (for some organisations)

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**What is the required skill set?**

- All are transferable and this should be recognised
  - Data analysis, interpretation and presentation
  - Educational
  - Motivational
  - Facilitation
  - Innovation
  - Leadership and influencing
  - Managerial
  - Policy development
  - Role model at all levels
  - Strategic/Operational
  - Cohesiveness / Team building

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**Specialist skills**

- Expert clinical advice
- Outbreak management and Incident response
  - decision making when only limited information is available
- Filtering/interpreting information from DH, SHA, PCT and passing this on
- Risk assessment specific to IP&C issues
- Influencing National, local, regional Agendas

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### DIPC Role Crucial

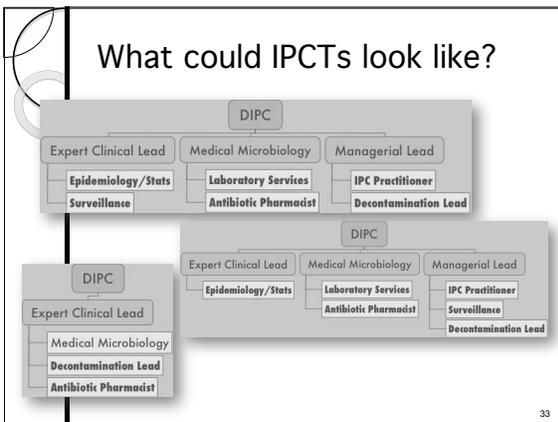
- Implementation has been variable
  - some have embraced
  - some have not
- Does it matter who it is?
- Certain skills are mandatory
  - Communication
    - Ability to take people with them
  - Strategy
  - Management
- And they must have power

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### Developing the Team Structure

- Understanding the organisational needs
- Full assessment prior to implementation
  - Type of business and the risk that this presents to the users and the organisation
  - Workload/capacity
  - Clear objectives for the team
  - Local considerations
- Role of the DIPC and their support mechanisms

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### Newer ways of working

- Directorate / Divisional liaison vital
  - Defined link person
  - Reporting through Governance and Risk Structures
  - Still retain corporate function
- Some of us find it VERY difficult to 'let go'
- Need to look at staff being appointed to new IPC posts
  - Have they the capability to be developed
  - Should we be bringing in people at a higher level who have the other skills and giving them the specific clinical skills

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### Questions for Organisations

- Who should be the clinical lead of the Team
  - Do all medical microbiologists want or have the capacity to commit the time required to be the clinical lead?
  - Have all IPCs the skills to undertake this role?
- Should all IP&C Practitioners be nurses?
  - Other disciplines have the necessary skills and the potential for development
  - It is appropriate to start people at a low grade?
- Should teams have a manager who is not the clinical lead?

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### Building the Teams of the Future

- IPCTs are working hard, but are we working smart?
- Review
  - Strategic objectives of the organisation
  - How to meet these either from within the team or how the deficit can be addressed
- Wouldn't it be nice to have some breathing space to do this...

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**What is absolute**

- Every organisation must have a charismatic champion who can take people with them
- Infection Prevention programmes require motivational skills to encourage practitioners to do what they know is right

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**The tools of our trade..**



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**Samuel Butler (1612-80)**

He that complies against his will  
is of his own opinion still

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Nothing matters  
until it is personal

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21 Sep. 09	(Free British Teleclass) <i>Live Broadcast from the Infection Prevention Society Conference</i> Fifty Years of Resistance Speaker: Prof. Gary French, Guy's & St. Thomas' Hospital, England
22 Sep. 09	(Free British Teleclass) <i>Live Broadcast from the Infection Prevention Society Conference</i> The Pursuit of Excellence During a Global Pandemic Speaker: Prof. Robert Pratt, Thames Valley University
23 Sep. 09	(Free British Teleclass) <i>Live Broadcast from the Infection Prevention Society Conference</i> Hot Off the Press - A Review of the Evidence Speaker: Dr. William Jarvis, President, Jason and Jarvis Associates
23 Sep. 09	(Free British Teleclass) <i>Live Broadcast from the Infection Prevention Society Conference</i> Moving on from Audit - Quality Improvement Tools for Infection Prevention Speaker: Dr. Neil Wigglesworth, Salford Royal NHS Trust

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