



## **Workforce Planning**

**How will technology effect your future staffing requirements?**

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**2nd December 2009**



**Collinson Grant  
Healthcare**

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# From the Review

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- *In this second phase of the review we set out our vision for NHS pathology services. The main objective must be improved quality and patient safety, delivered through service consolidation*
- *Based on the evidence we have collected, we believe there is a strong case for consolidation of pathology to improve quality, patient safety and **efficiency***

(Lord Carter of Coles, Report of the Second Phase of the Independent Review of NHS Pathology Services, December 2008)

# From the Department

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- *Based on the evidence we have collected, we believe there is a strong case for consolidation of pathology to improve quality, patient safety and **efficiency***
- *Characteristics of a good consolidated service would be end-to-end management of the service (including transport and logistics, IT connectivity and **efficient and effective use of resources, including people**) and the concentration of non-urgent and specialist work in one or more centralised and accredited core laboratories where throughput is sufficient to ensure high-quality results*

(The Rt Hon Dawn Primarolo MP, Minister of State for Public Health, Foreword to the Report of the Second Phase of the Independent Review of NHS Pathology Services, December 2008)

## And in case you missed it....!

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- *SHA chief Margaret Edwards to lead productivity unit*
  - *She has agreed to lead the unit, set up by NHS chief executive David Nicholson and based in NHS London, and will start as national director of **productivity and efficiency**.....*

(HSJ, 6th March 2009)

- *Everyone we have spoken to acknowledges that driving up standards, quality and patient safety, at the same time as reducing costs by between **£250 and £500 million** a year for reinvestment in the service, is a prize worth pursuing vigorously*

(Lord Carter of Coles, Report of the Second Phase of the Independent Review of NHS Pathology Services, December 2008)

## Yeah, but that was all because of the Review.....

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- *The prospects for the UK economy have dramatically worsened since the last Budget. One year ago Mr Darling thought the economy would grow by 2.5% this year; now he says it will shrink by 3.5%. But he is still hoping it will bounce back next year*
- *The current budget squeeze means that the gap between government spending and taxes will continue to widen*
- *The government may also face higher costs as benefits and debt service rise. If it also **tries to protect health** and education, other services could face major cutbacks*

(BBC News, <http://news.bbc.co.uk/1/hi/business/8002618.stm>, accessed 11th May 2009)

## And that was in May!

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- *NHS trusts will have to deliver between £15 billion and £20 billion in efficiency savings over three years from 2011 to 2014, David Nicholson, the NHS chief executive, told health service finance directors in a speech delivered behind closed doors*

(<http://www.telegraph.co.uk/health/healthnews/5524693/>, accessed 2nd December 2009)

- If we can't achieve the £500m cuts in Pathology, we will not achieve the £20 billion in the NHS

(unattributed source, John Stevens, SBK Quality in Pathology, 1st December 2009)

# And your point is

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- You were warned!

# What is workforce planning?

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Workforce planning is a process that aims to predict the demand for different skills and considers how best to manage the supply of suitably qualified, competent and skilled people to meet that demand. So it covers issues such as

- defining the competences that the service needs
- designing roles
- commissioning and providing education, and learning and development
- recruitment and retention
- succession planning
- flexible working arrangements

## Or alternatively.....

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Workforce planning is about getting the

- Right people in the
- Right place at the
- Right time and in the
- Right numbers

# What is workforce planning? (continued)

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- At the heart of the discipline are the measurement and management of workforce demand and supply
  
- Workforce supply:
  - How does the future state differ from the current state?
  - Can the gap be filled by finding new ways of working?
  - How will the gaps in skills and competences be filled?
  - What resources will be needed to make this happen?
  
- Workforce demand:
  - What will the service look like in the future – volumes, processes, etc?
  - What skills and competences will be required?
  - What assumptions have to be made about productivity and efficiency?
  - How many people will be needed and what grades?

## Some supply side factors

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- Retirement
- Part-time working
- Change in the amount of training and continuing personal development
- Change in employment
- Change in working hours (goodwill)

# Some demand side factors

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- Technology
- Volume of work
- Setting of work
- Reprofilng of work
- Consolidation of organisations

## And your point is?

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- Many factors may change in Pathology over the next few years
  - Supply side (the individual)
  - Demand side (the job, the technology)
- Change provides opportunities to reprofile the workforce

# The impact of technology

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- Will there be more machines that go 'ping'?

(With apologies to Monty Python, The meaning of life, 1983)

# Cervical Cytology – a worked example

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- The adoption of Liquid Based Cytology (LBC) throughout the country was completed in October 2008
- The two technological platforms - *SurePath* and *ThinPrep* - work in similar ways
- The sample is no longer 'smear'd' straight onto a slide by the sample taker but is placed in a bottle containing a proprietary fluid
- This is sent to the laboratory and centrifuged to remove debris. A monolayer of cells is then transferred to a slide, which is stained, mounted and labelled ready for microscopic analysis

## Cervical Cytology (continued)

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- The service collects LBC samples and tests them, using microscopy, to detect pre-cancerous abnormalities in the cervix
- Over 4 million invitations are sent out each year, resulting in about 3.6 million tests
- There are new, productivity-enhancing technologies emerging
- The future service is likely to be one with significantly fewer tests

## Cervical Cytology (continued)

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- MAVERIC is a randomised, controlled trial set up in 2005 to compare two automated cervical screening technologies (based on the *ThinPrep* and *SurePath* LBC systems) with manual screening.
- There is already a lot of published information on the use of automated reading systems (Davey et al, 2007a; Roberts et al, 2007; Papillo et al, 2008).
- These studies suggest that automated systems increase both efficiency and rates of detection for a range of abnormalities

## Cervical Cytology (continued)

- The *ThinPrep* Imaging System screens each slide and marks the 'XY' coordinates of the largest and darkest nuclei for further review. The slides are then reviewed by a screener (or a checker), whose eye is automatically 'guided' to potentially abnormal cells. This greatly improves productivity, as the areas of the slide that must be reviewed reduce from 360 to just 22
- The *SurePath* system (FocalPoint) can be used to screen out approximately 25 per cent of samples, which undergo no further review, although there is likely to be a requirement to check a proportion of them manually. The system ranks the remaining 75 per cent to allow checkers to prioritise those with potentially the most severe abnormalities
- Both technologies are believed to have a similar impact on productivity. Published data suggest that rates of screening of up to 13 slides per hour (Davey et al, 2007) or even 18 slides per hour (Biscotti et al, 2005) are achievable. A conservative estimate is that productivity could double

## So what's your point?

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- The introduction of new technology can materially effect the workforce
- An rare example of new technology in healthcare that reduces cost!

## But what about testing for HPV?

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- The ARTISTIC trial (A Randomised Trial of HPV Testing in Primary Cervical Screening) should
  - give evidence on the costs, medical effects and psychosocial impact of adding HPV testing to cervical cytology
  - estimate the effectiveness and costs of HPV as a stand-alone test
  - determine the contribution of HPV detection to the cervical screening programme, particularly to sensitivity, specificity and inadequate smears
- The use of the HPV test alongside cytological screening therefore allows women to be stratified into groups at different degrees of risk
- Significantly, this should result in fewer tests being done and in an approach to screening intervals that is better tailored to the differing needs of women
- Volumes could reduce by about 14% as a result of the introduction of HPV testing, equating to 400,000 tests

# Workforce planning models

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- 'Basic' 1st level Model
  - Builds an information base and informatics strategy and makes simple estimates
- 'Back of an Envelope' 2nd level Model
  - uses past supply side trends and uses inflation rate as the growth factor
- 'Prototype' 3rd level Model
  - builds complementary demand-side model using activity data and projects future based on growth and projected models of service (including technological change)
- 'Working' 4th level Model
  - builds more accurate supply-side models for each staff group based on robust survey and census data to embed robust evidence-base
- 'Integrated' 5th level Model
  - integrated evidence-based supply and demand model

(Dr Pat Oakley, Workforce Planning, CSO Conference, 25th November 2009)

## And your point is?

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- Technology can reduce the number and type of employees required whilst improving quality
- HPV vaccination can further reduce demand
- Simple workforce planning (level two – supply trends and inflation) would have failed to predict the step change and resulted in an over-supply (waste!) of trained employees
- Insert your own vignette about HR and workforce planning here!
- Horizon scanning and collaborative working with HR will balance supply with demand over the long term
- Waste will be reduced

## In summary

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- The 'perfect storm' just arrived!
- But opportunities exist to 'do stuff better, with the right people'
- Workforce change is difficult, but that shouldn't stop people trying

## And finally...

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- *increasing automation has created a widening gap between the functions and skills of pathology staff (a point we made in our earlier report). There is scope for better alignment of skills with functions, including the grading of functions, as well as for more broadly based skills to enable staff to work more easily across and between the different disciplines. Provision to enable the future workforce to be reskilled so that they can take on new roles will help to ensure the supply of skilled staff necessary to guarantee continuity of service for the future.*

(Lord Carter of Coles, Report of the Second Phase of the Independent Review of NHS Pathology Services, December 2008)

- Not a word about cost!

# A word about Collinson Grant Healthcare

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- For over 20 years we have been helping managers in Healthcare - public *and* private - to transform the performance of their organisations
- We have worked in Pathology at all levels of the NHS
  - We played a big part in Lord Carter's independent review
  - We have helped the Department of Health to plan and develop the Pathology workforce
  - A Strategic Health Authority engaged us to examine the costs, structure and effectiveness of a confederated network
  - We have led projects in many Acute Trusts
- We have also supported many private providers of Pathology Services consider how best to succeed in the NHS market

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