Healthcare Scientists: Leading Change

Accelerated Learning Event
Facilitated by the
NHS Institute for Innovation and Improvement
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NHS Institute of Innovation and Improvement
What is an accelerated learning event (ALE)?

“An ALE is not your usual conference or workshop, it is a specially designed journey that enables a depth and quality of output that would usually be unachievable in such a short time frame.”
The scan, focus, act model...

**Scan**
- Build foundation for high value discussion
- Engage with industry trends, industry experts, and leading practices
- Create a common language
- Uncover critical assumptions and issues
- Explore metaphors
- Create visions of solution

**Focus**
- Focus is the first iteration
- Test models and rapidly prototype potential solutions
- Evaluate options
- Clarify expectations
- Uncover and remove barriers to change
- Address the situation in all its complexity

**Act**
- Create group alignment and intention to act
- Make definitive decisions
- Engineer all aspects of the solution through parallel processing
- Establish detailed long and short-term action plans
Objectives for the two days...

- To articulate and agree the future vision for healthcare scientists
- To consider the issues and barriers (including how the external environment within the NHS impacts on the ability of healthcare scientists - as leaders - to demonstrate leadership and effect change) to what prevents healthcare scientists taking on and aspiring to, leadership roles
- To identify how we can overcome the above (by taking action both centrally and locally) including how to empower leadership beyond authority – we need to be clear this is not just about hierarchy or positional leadership
- To determine how we can learn from, and build on, current best practice and accelerate its spread to the wider healthcare scientist’s workforce and commissioner’s community.
“You can’t impose anything on anyone and expect them to be committed to it”

Edgar Schein
Professor emeritus MIT Sloan School
Thank you to everyone for joining us today. This is an important event for the healthcare scientist workforce and the role you can all play in healthcare reforms.

The purpose of this accelerated learning event (ALE) is to get you to think differently and to understand how you will lead change.

You all have lots to contribute to NHS reforms...you have contributed a lot already but now we need you to contribute in a different way.

In order to meet the objectives of the two days, we need to take action both centrally and locally. For those of you who listened to Radio Four this morning, you will have heard that healthcare reform is all about local action to affect change.
Connecting with our roots...

Over the next two days we need to continually reconnect with our roots – ask ourselves what are the things that have helped to shape who we are and what we do? What are the things that have influenced?

For me, growing up in a small village gave me a sense of community, of sharing and so on. Being actively and competitively involved in both team and individual sports enabled me to learn enjoy team work, competing against myself and training to get better.

These things, combined with my interest in human biology, led me to want to follow a career in sport and physiology – but I got injured and couldn’t.

Community, team work, sport, biology and wanting to make a difference in memory of my father after his early death all shaped and influenced my career in healthcare science.
Patient-centred healthcare...

My background is in respiratory disease and I have always been driven by a strong desire to improve outcomes for patients and to ensure the evidence for what I was doing was robust.

I spent most of my career working in Birmingham, which is where I began to ask patients what they felt was best for them and how they felt they could best manage their disease better – despite coming up against resistance from my healthcare scientist colleagues.

Over the years I have seen informed patient choice grow and a gradual shift towards a patient-centred NHS.

The current NHS reforms are fundamentally about patient-led services and this is where we need to place our focus and capture our thinking over the next two days.
Patient focus – the fundamental aim of NHS reforms
The future system: implemented
2013

National Commissioning Board
- 4 outposts
- 50 local offices

Clinical senates
Clinical networks

200 clinical commissioning groups

Health & wellbeing boards

CQC & Monitor

250 foundation trusts
Independent & third sector

How can we, as healthcare scientists, add value to this system with all the collective knowledge and experience we have?
Opportunities and challenges...

Creating CCGs with a ‘new DNA’ with added clinical value

Developing new integrated pathways of care with quality outcomes at the core

Taking a patient AND a population focus

Shifting care outside of hospital and closer to home, providing more choice
Quality improvement...

...will be hardwired into the new system starting with the outcome goals in the NHS outcomes framework and informed by NICE quality standards.

What we do relates to these five domains...quality runs through the core of us and through evidence-based practice. This needs to be taken into consideration.
Success in quality improvement…

Work to improve scientific services has seen real improvement in quality, outcomes for patients and efficiencies for the NHS:

- reduced waiting times
- avoidance of unnecessary admissions
- reduction in inappropriate demand
- cost savings

NHS Improvement working with NHS sites have helped drive major change for patient benefit in audiology, imaging and pathology.
A scientific workforce for the future...

Recruitment

CF 1 - 4

PTP and BSc

School for HCS

HSST

STP and MSc

New ways of working and delivery of service

Supporting consolidation and reconfiguration

Providing new skill sets
Healthcare beyond 2013...

Moving from a hierarchical structure to a system of networks...

Hierarchy

Network

These networks need to be representative and we need to get our voice into the system.
Shaping the journey beyond 2013

**POLITICAL**
- Increasing public demand for involvement and more active participation
- Power devolved to people

**ECONOMIC**
- Deficit and low economic growth
- Healthcare spending to rise into the medium term

**SOCIAL**
- Fast growth in older people
- Increasing co-morbidities and LTCs
- Lifestyle diseases

**TECHNOLOGICAL**
- Telehealth
- Digitisation of care and access to information
- Genomic medicine
- Disruptive innovation
- Implantable and external monitoring devices,
“We all have the opportunity to create the future...we need to use our collective power to make a real difference.” Sue Hill
Assignment one (scan):
What should the future vision look like for healthcare science in 2021?

• You are allocated specifically to one of eight groups
• Each group has a unique question and discussion
• Collect, collate and cluster your responses as a group
• Write a good record of your thinking on the hypertile
• Summarise a maximum of six points onto one hypertile for feedback
• Use diagrams and drawings
• You have 50 minutes to complete the task and to agree who and what you will feedback
• Design five minutes of feedback
• All group representatives on stage at the same time
Assignment one: group questions

Marie Curie
What unique contributions can healthcare scientists bring to the healthcare demands of the future?

Alexander Fleming
What does this look and feel like?
• As a patient receiving care from healthcare scientists in the NHS
• What is the difference in the NHS system?

John Logie Baird
What contributions as a group of healthcare scientists have we made towards this new future?
• As a professional
• Our professional bodies

Ada Lovelace
What are we doing differently in 2021?
• As experienced by the patient in terms of choice and accessibility
• Working in the NHS System as healthcare scientist professionals
Group questions cont...

**Isaac Newton**
What implications has this had on quality outcomes for patients?

**Alexander Graham Bell**
Where are the gaps between the vision and where we are now?
  - For NHS systems
  - For the professional
  - For the patient

**Louis Pasteur**
If the vision was a reality, what would it look like in the day-to-day life of a healthcare scientist leader?
  - How are you influencing commissioning?
  - How are you influencing the local health economy?

**Thomas Edison**
How would you write the vision for clinical leadership in healthcare science as a compelling story?
Assignment one: Marie Curie

Demands of the future

- Financial constraints and the need to be cost-effective
- Privatisation of some services
- Importance of patient information and expectations

Our USP

- We are the bridge between the clinical problem and the technical solution
- Network experts – at the patient and strategic level
- Technology implementers
- Evidence collectors and presenters – need to get better at communicating with patients, clinicians and commissioners

Analytical skills are being enhanced by the MSc programme.
Assignment one: Marie Curie
Lots of healthcare science is patient-facing but a great deal is done in the background. A new vision is needed on how patients will access healthcare science in the future.

Patients want:

- Convenience – what they want, when they want and where they want it
- Equity of accessibility – is everyone going to have ease of access? Need to improve access, particularly for those who experience inequality
- Evidence – assurance that services are evidence-based and benchmarked for quality
- Centralised records – joined up results from access to care from multiple locations
- Care that is free at the point of access
Regulation

Healthcare science is vital in the regulation of services as it has knowledge, training and education in this area. Healthcare science also goes right across the health system.

Healthcare scientists need to be involved in, and consulted on, regulation. They are a valuable source of information for regulators.
Assignment one: Alexander Fleming

- Centralised record portal
- Evidence-based
- Results in the medium I choose
- Assurance: tests appropriate, accurate
- Quality: equipment
- At the patient's convenience
- Equity of accessibility
- A source of information & advice but...
Assignment one: John Logie Baird

• Embryonic networks
• Need to grow and develop these into a ‘human being’
• Move towards innovation – healthcare scientists are good innovators
• Harmonisation of systems and processes
• Quality standards benchmarking
• Education and training – of patients, GPs and other staff to use diagnostic tests
• Workforce profile and planning – ensure appropriate skills mix
• Patient pathways (the ‘biggie’) - dialogue with clinicians, multi-disciplinary team involved
Assignment one: John Logie Baird

6 points on contribution

- Education & training
  - Internal/external & partnerships
  - PCT's staff - CPG's commissioners
- QM systems & standards
  - Benchmarking groups
  - Entrepreneurial networks & informal systems
- Harmonisation - processes
  - Workforce planning
  - Appropriate skill mix
  - Need for local/regional overview & national

- Innovation
  - HCS are innovators
  - Involvement in PCT dialogue with clinicians
  - Involved in MDTs
Assignment one: Ada Lovelace

- Where we are now...lots of services like snakes and ladders. We are happy to lose the snakes and keep the ladders.
- IT can help move things forward...remote access to healthcare scientists (e.g. Skype) for prevention as well as for people who are sick.
- Patients can take more responsibility for their own care.
- Entry point doesn’t have to be the GP – patients can access healthcare scientists directly.
- Patients could access information on services that have been rated by other patients (akin to TripAdvisor) so they can make informed choices.
- Work collaboratively – look to industry and manufacturing to learn how they come together without competition getting in the way.
Assignment one: Ada Lovelace

- The third sector could take a greater role in sharing information – e.g. disease-specific data
- Who defines quality standards? Need better definition and more robust standards
- Modernising scientific careers – buddying up different professions for learning purposes
- Improve how we communicate what we know to patients
Assignment one: Ada Lovelace

- **Accessibility**
  - Standardised clinical pathways (95%) - Ada
- IT Facilitated diagnosis - Expert IT Systems
- Patient choice + knowledge - Pts more educated
- Raised awareness
  - Better Pts. language
  - Some Pts. don’t want choice
- Cater for whole Pts.
- Proactive Healthcare - Early diagnosis
- Multi screening? evidence

- **Professionals**
  - Set standards & funding
  - Support from IS
  - Working closer with drug companies + manufacturers
  - Direct access to our Services
  - Advisory role to Commission
    - HCS at all levels of Commission + Representation
    - Clear leadership + achievement
    - GPs + Networks
    - Collaboration across HCS disciplines
Assignment one: Isaac Newton

• What does quality mean?
• Patients want certainty – am I OK? Who cares about quality, I just want to get well!
• We need to communicate quality both internally and externally
• Performance and evidence – whether things are good or not so good and how we can reassure people that we are making things better and learning from our mistakes
• Integrating diagnostics across the patient pathway
• Delivering results direct to the patient – how do we deal with this? What is the role of the healthcare scientist and how do we get GP buy-in?
• Patient focused rather than silo working
Assignment one: Isaac Newton

ISaac

Patients want....
- Control
- V. low waiting times, quick appts
- quality
- (cost effective) treatment
- choice / confidence in service
- accessibility

- Have we asked what patients want?
- How they want their results < text / e-mail
  Consent

IMPLICATIONS FOR NCS

- "Telling" people about quality outcomes - Publish data
- Develop trust in the [NHS / NCS] brand
- Offer people what they want
  Speedy & clear
- At a quality / standards level that is acceptable to:
  - patient
  - commissioners / clinicians
  - achieves the outcome
Assignment one: Alexander Graham Bell

- Architecture – churn of the NHS...SHAs down to four from 10, commissioning groups not yet legal entities
- Staff not clear what their roles are
- Networks – are key enablers and critical support for emerging commissioning groups
- Healthcare scientists are motivated but concerns whether they get out enough and contribute to the end-to-end patient journey
- Healthcare scientists are specialists in innovation but need to express this better, need to raise profile
- Not yet informing and engaging patients well enough
- Healthcare scientists well placed to help define quality standards
- Funding – will there be enough to meet clinical service demands and to achieve the vision of quality?
Assignment one: Alexander Graham Bell

AGB #1 Key points:
- Architecture - "churn"
- Will the plane land?
- Role of networks -
- HCS not taking part + realising potential
- What is quality + how does this influence patient outcomes.
- Are we patient focused enough?
- Joining it all up takes time, money + energy.

AGB #1

PATIENT

- Patient focused language
- Not at heart of system now - must be involved
- Professionals not thinking about the patient
- Often thinking about organization + system
- Not what is best for patient

Gaps - freedom of professional integrating care - more benefit

Professionals - General care builds
- If you don't work directly with patients + labs, can be difficult to focus on patients
- Communication between networks
- Silo working prevents engaging with wider healthcare vision
- Don't recognize value of contributions + potential to make change happen
- How can we influence if we don't understand the proposed new system + where we are now
- Understanding the role of networks + Senate feeding into CCC.
- Time - Senior Scientist don't just do science...
Assignment one: Louis Pasteur

- Formula one analogy
- Patient at the centre of services
- Healthcare scientists joined up to do things collectively
- Raise the profile of healthcare scientists – who they are and what they do
- Partnership with commissioning colleagues
- Need to drive innovation and be more proactive in persuading commissioning colleagues
- Networks across care pathways
Assignment one: Louis Pasteur

VISION

Patient at centre
Wherever testing done to
appropriate std.
* same in 100/community
as in 20/30 care.
Also
quality of services as above
* including qot etc in 10 care.

Networks

* HCSs in networks, committees, etc.
* Cross-discipline working at practical level.
* Do we have infrastructure to influence commissioning?

Currently:

* not really influencing commissioning.
  * lots of barriers to overcome.
  * do it as a HCS group
    rather than individual
    scientific disciplines.

Competition is a barrier
If being collective & influence
commissioning
Recognising strengths/weaknesses
of different minds to work together.
The vision: delivery of healthcare science and patient care through good clinical leadership. Analogy of a rocket to the moon to achieve the vision.

- Need to influence – more voice for healthcare science, locally and nationally
- Working with doctors and nurses more – collaborative working
- Raise the profile of healthcare scientists
- Clear direction (don’t want to be going the wrong way) – aim for the moon, not Mars!
- Use innovation to overcome barriers
- Make better use of collective and individual skills
Assignment one: Thomas Edison

VISION = FUTURE

SKILLS IN A CLINICAL LEADER
- OPEN + HONEST
- TRUST
- RESPECT
- CLEAR VISION
- SKILLS + KNOWLEDGE
- PRACTICAL
- DELIVER
  (MANAGEMENT + LEADERSHIP)

EMPOWER THE PATIENT TO ALLOW YOU TO MAKE THEM BETTER
- INFORMATION
- FLEXIBILITY
- TRUST
- RESPONSIBILITY
- EFFECTIVENESS

VISION 8

HCS VISIBLE IN NHS → A PATIENT-CENTRED
JOURNEY → INNOVATIVE

DIRECTION
SCIENTIFIC
SKILLS/UTILISATION

CLINICAL LEADERSHIP TO TAKE US THERE!
Q. Regulation – does this refer to people or services?

A. Both. It’s not just about standards but about the quality of relationships and information.

Three types of regulation: quality, economic and professional. Part of the discussion has to be around how we maintain quality standards...is this a role for healthcare professionals as well as regulators such as the Care Quality Commission, Monitor and the Health Professional Council?...What you as professionals do to push home what quality means.
Question time...

Q. How do we as healthcare scientists get involved in funding setting and prioritisation?

A. This is our challenge, limitation and chance to show our expertise in resource management. It is about finding the time to do the things that will make the vision happen. We need to be more outward-looking...we are pushing on an open door but need to find more time to do this.

Q. How do we encourage joint working?

A. We need to look at leadership and developing people in different ways...move away from silo working. This is an ideal opportunity to work across clinical boundaries and we need to think more about working across clinical pathways. We need to engage the whole workforce – and both emerging and existing leaders – who are the drivers and stimulators for change.
Assignment two: Good practice / innovation

• You will listen to a short 10-minute presentation from one of six speakers
• You will then move on to another speaker
• You will hear a total of three speakers
• Leave your thoughts, reactions and reflections on the ‘graffiti wall’
## Good practice/innovation sessions...

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Graffiti wall...

Work is contractual
Effort is personal

Useful Leadership Tips

We need more bungee jumping scientists!

Building identity
(1) Mentor across professions + generations dialogue with PBs
(2) Develop trust wide/area training strategies for HCSs

Team HCS

Inspiriting and motivating to give confidence to try what has not been tried before

National Random Service
not National Health Service
The multi-disciplinary approach will unlock lots of potential in the healthcare science workforce to improve services and also persuade others of the enhanced role that scientists can perform.

From genomics talk, the need for something like ‘technology/science grand rounds in trusts and/or scientists/nurses/HCS – CPD revalidation must have passed’ genomics science/technology course
Sue Hill – Reflection, review and comment

I have been encouraged by what I have seen and heard so far this morning. There is a real sense of people wanting to come together...not orbiting around each other on separate planets but to reach for the moon together.

To use the snakes and ladders analogy from the earlier feedback session, we can recognise the snakes but don’t necessarily want/need to put them on the board!

There is great passion and enthusiasm coming through but perhaps some questions, too. So now we have some time to ask and discuss those questions in open forum.
Q. Is there a central point (website, forum) where we can come together to network and share information?

A. Yes, we have the NHS Networks site where information can be posted. An action from these couple of days should be how we create this national forum.

An additional word on networks...work is going at pace in establishing these networks and there is a strong sense that these shouldn’t be professional networks. We need to move away from professions and more towards service and outcomes-based networks.
Q. Can you expand on what the CCGs and National Commissioning Board will do?

A. In 2012, the commissioning authorisation process will begin. Clinical commissioning groups (CCGs) will have to demonstrate that they have/are:

- Established multi-disciplinary groups
- Engaged with service users and the wider public
- Developed a plan that is credible
- Collaborating with other CCGs

The next 4-6 months is the critical time to arriving at the point where CCGs will know if they have been authorised or not.
Q. Can you give an indication of the role of the Chief Scientific Officer (CSO) in the future as our work needs to be aligned to that of the CSO?

A. This is not yet in the public domain and is still being worked on. But what I can share with you is that while the post may sit within the National Commissioning Board, it will have system-wide responsibilities, will still deliver things on behalf of the Department of Health, and will work with Health Education England, the public health system and the trust/provider development group.

The role will operate under a shared services model.
Question time...

Q. As science moves towards the patient / healthcare moves away from hospital, where are we with healthcare scientists’ ability to prescribe?

A. PGDs are available and can already be used to facilitate this. Independent and supplementary prescribing is for future scoping and work. A lot can already be done but many are not aware.

Q. How do we access difficult groups who don’t readily come forward for services?

A. Example of activity with the Gujarati population in Preston…don’t want to access the NHS but are at risk of certain diseases/conditions (e.g. Diabetes). So take the services out to them – health screening. Patient seen by medical professional and diverted to the right healthcare professional as a result. Making diagnostics more convenient and relevant to the communities we are trying to reach.
Assignment three (focus): Start to focus on key issues

Each group has a unique question to address. With this question, you have:

- 10 minutes of individual time (in silence) to record own record thoughts on paper
- 35 minutes to share your individual thoughts in your group (35 mins)
- 15 minutes of group discussion to reach consensus on the six key points you want to make (record these on a hypertile)

Then it is time to ‘shift and shape’:

- Your group shifts to another group as directed – *leaving a representative behind* to share your work with the next group and for them to shape further. There are two rounds of 20 minutes each before returning to your original group. Capture the discussions/ideas on hypertiles for each round.
- Prepare your group’s eight-minute feedback as pictures/diagrams on a hypertile (30 minutes)
- Identify a spokesperson to feedback and return to plenary
- Describe the positive future and how we get there!
Assignment three: questions...

Marie Curie
How do we create the ‘right’ culture and behaviours to allow healthcare science to flourish?

Alexander Fleming
How do we unearth the untapped pool of leadership talent in healthcare services? And how do we identify the additional talent we need to support the future of healthcare science?

John Logie Baird
How do we make our strategy for healthcare science inform the local NHS landscape?
(a) Working with providers
(b) Working with commissioners
Ada Lovelace

How do we more effectively build engagement with the healthcare science networks into daily work in trusts? What is the journey we need to make:

(a) Now, in 2011
(b) In 2012?

Isaac Newton

What is the healthcare science profile and sphere of influence in 2011 and what might it look like in 2021? What will we be doing differently?

Alexander Graham Bell

What is the added value of healthcare science?
(a) Who needs to know this?
(b) How do you and the healthcare science networks engage effectively with them?
Louis Pasteur

How do we identify emerging leaders? How can the developmental needs of healthcare science leaders be addressed to support the leadership skills, capabilities and confidence needed to realise the opportunities? And are healthcare scientists different from other leaders?

Thomas Edison

What is the added value of healthcare scientists? How would you convince the NHS of the value of healthcare science networks? What return on invest might an investor expect?
• We need an identity and to get this we need to value ourselves as healthcare scientists
• In order to facilitate this, we need a ‘home’ – possibly a forum
• We have lots of skills and experience – need to share these within and further afield
• We need to realise how good we are so that others will and we need to become more media savvy
• We must engage more with medical colleagues, patients and the public
• We need to work well as a team and promote innovation and better ways of working
Assignment three: Marie Curie...
Assignment three: Alexander Fleming...

- We have everything we need if we just go and look for it
- If we don’t have vision and direction, how can we encourage leadership?
- Do colleagues understand what it means to lead? May need to explain
- We need to train the workforce in order to get where we need to go
- Let’s be creative – lend our staff to other areas, take them out of their comfort zone
- Study the opposition...how do they do it? Do they do it better than us?
- We need to understand the business and the commissioning agenda in order to understand the support services needed to make it fly
- Strategic thinking and vision
Assignment three: Alexander Fleming...
Improved patient outcomes and evidence-based need to be at the centre and surrounding these are the strategic objectives:

- Developing a clear understanding of the healthcare science workforce
- Develop cohesion across healthcare science
- Need a culture change, a willingness to be represented by another healthcare scientist
- Articulating the benefits of services to patients and listening to what services and providers need and what patients think
- More influence at policy level (historically had a voice)
- Prepare for the future and prepare the current workforce for change
Assignment three: John Logie Baird...
Assignment three: Ada Lovelace...

- Building on the embryonic scheme from earlier this morning
- A network is embryonic...it evolves
- If we are inventive, we can find ways for things to become automated that are open to the mass market
- Key to the plan is regular consultation with stakeholders about innovation and the value it can bring
- Evaluation – what works best and where can healthcare science add value
- There is a need for a strong, evidence-based business case
Assignment three: Ada Lovelace...
Assignment three: Isaac Newton...

- Currently very much living in terraced houses...in silos
- Have a diverse voice that is not well heard
- Alternative view that we are the foundations holding those buildings up...healthcare scientists are working away out of sight in the basement making perfectly formed, high quality cookies
- Have low visibility and so influence is isolated/limited
- Need to overcome the traditional terraces we used to live in so that in ten years time our leaders will give us the vision but enable us to go out and network so that we can come together and work together
- We may need coaching to help us get there
- Making fruit cake, not cookies!
Recipe for a fruitcake...

Future
Redesign
Utilising
Innovative
Technology
Collaboration
And
Knowledge
Exchange
Assignment three: Isaac Newton...
Assignment three: Alexander Graham Bell...

- Diversity of healthcare scientists
- Flexibility of what we do, how we do it, how we learn, how we communicate – we have to be flexible
- Have standards to maintain – quality control over whole networks
- Need to get the message out to all stakeholders and need to find effective ways of doing this
- Need to communicate at local, regional and national level...to get representation and get voice heard
- Qualities and values
- Meetings and educational days on what we do and how we do it
- The future is wider acceptance and value
Assignment three: Alexander Graham Bell...
Assignment three: Louis Pasteur...

Concept: top down, climbing up the mountain

- Rudolph, as top/head reindeer, needs to find the right people to train...inspirational leaders – ‘I wish I could be...’
- At the moment it is a bit of a lottery, so Rudolph has a big input
- ‘Lost for a day, found forever’ – you may lose someone from the lab for a day but you will get a leader forever
- Natural talent will emerge. Aspiring leaders will need to come out of their comfort zone and ‘grow up’
- Many may progress up the mountain but only one or two will make it to the top to become the next Rudolph
Assignment three: Louis Pasteur...

Concept: bottom up

• Equity is key – throw everyone in the pot and then the same opportunity is available to all
• Some will choose to paddle in shallow waters, others will get by, some will succeed
• The mentor role is important in helping emerging leaders to ‘get on the road’
• Need to encourage the creative side in our leaders
Assignment three: Louis Pasteur...
Assignment three: Thomas Edison...

- Overall image now in 2011 is of a very small tree fighting against being ploughed down by the juggernaut of change
- By 2020, will have developed into a larger, stronger tree capable of withstanding the impact of the juggernaut of change
- We need to develop into larger networks and raise profile for the purpose of sharing best practice and developing as an organisation
- Value of the network lies in workforce development and modernisation, operational efficiencies and quality and audit
- Return on investment is not just relevant to commissioners but also GPs, staff, patients, trusts, suppliers etc.
- Equity of service – align operational activities to business needs
Assignment three: Thomas Edison...
Day one (close): Reflections...

Sue Hill – Reflection on our work today...

I have definitely seen a coming together of different healthcare science disciplines today and it is great to see this cohesiveness (set of fruitcakes!)

We need to do a lot more work on the vision and direction is what I have heard you say in the room throughout the course of the day.

An action that needs taking is that something needs to happen about the professional voice and how we can come together under the academy to be the voice of the future.

I have picked up a real sense of how networks are what we need for the future and that they need to be organised at a local level.

There is definitely merit in studying the competition and learning from what they do.
Sue Hill – Reflection on our work today...

You have started to pull things together today so that we are in a good position tomorrow to start action planning and take incremental steps towards 2020. But unless everyone is working together with a clear vision and set of objectives, we are not necessarily going to achieve everything.

So one of the challenges for tomorrow will be to put yourself in the shoes of those who are not convinced...see things from their perspective and think about how we can bring them on board.
Dr Pat Oakley
Senior Fellow and Head of Healthcare Science Doctoral Programme
King’s College London
Leadership models:

- Transactional model
  - Lego-rational authority
- Transformational model
- Charismatic authority
- Distributive model
  - Expert systems and authority
  - A shoal of fishes working together and responding to opportunities, threats and change quickly and effectively
High-high is the ultimate goal

High technology, high involvement – a social and technical movement
New service design assumptions:

- Assertive public health strategies and public engagement
- Technology supported homes and communities (single occupancy)
- Early health risk screening, diagnostics and interventions
- Advanced pharmaco-therapeutics and genetic profiling
- Technology supported clinical decision making support systems

Responding to changing demographics – more people living alone:

- Single people enabled homes and communities
- High street screening and diagnostic centres
- Community activity centres and the gym
- GP wellbeing practices and managed care centres
- Re-enablement, rehabilitation and resettlement centres
- Urgent care centres, planned care centres, nursing and care homes
Evening plenary (cont.)...

Big science coming soon:

- Genetic profiling and therapeutic targeting
- Proton beam therapy and novel treatments
- High speed infomatics and cooling technology
- Stem-cell based research and new science
- Prosthetics, regeneration and bio-engineering developments

Leadership challenge:

- Psychology of workforce, organisational boundaries and cultures
- Current financial instruments and perverse incentive schemes
- Workforce and patient and carer information handling skills and confidence with handling new technologies
- Science professions in the 21st century and dynamics of professionalism
- Leadership models that support expert systems change
Q. Nanotechnology may involve more testing closer to the community. If it does, will it still be delivered by healthcare scientists?
A. It is high science and there is a chance of things going wrong so it needs experts...quality assurance, training and accreditation – lots of thinking to do.

Q. Are patients going to change with us? Some patients are ostriches...will technology mean patients become more knowledgeable?
A. Complicated picture...education levels and social class, rate of adoption of new technology (different in different parts of the country). Different ages have different aptitudes towards technology. As with all technology, there will be some early adopters and some later one – all will catch up eventually.
Q. You seem broadly positive on where healthcare is going...when you talk to us, do you feel encouraged that healthcare science is up to the job of delivering? What are the positives and negatives?

A. Any specialist group is normally distributed and it is about how to join up the 70%. Some of the infrastructures are currently underdeveloped and there is a lot to be done there to catch up. But healthcare science has a workforce of just 56,000 so it can catch up quickly. There will always be some ‘won’t dos’ but healthcare scientists are a bit too ‘nice’, a bit too much in ‘cuddly bear mode’ and readily accepting of those who won’t come along.
DAY TWO
A positive day yesterday...it is our responsibility to lead change and be ambassadors for our profession. But some people may need more assistance than others.

The new science is an exciting opportunity for us to see we are all up to speed on it. It’s going to be a really interesting next few years.

A plea to be conscious of each other and help those less confident to jump in at the deep end.
Questions from the floor...

Q. I can’t quite see how the distributive leadership model will work. Is there more information?
A. It is early days with this model but it is a different power system...it is a flat structure, not hierarchical. It is problem-focused and time-bounded, developmental. Taking the shoal of fish analogy (and the medical royal colleges), they are always ready to respond. We need to think how this might work / the relevance for healthcare science.

Q. We need some good news...we have to go back and make cuts, do the same things cheaper. We want to deliver new science so where is the good news?
A. The good news is you – your skills and experience. You are creating the future. What can you do to provide better scientific healthcare for better patient outcomes...
We have reached a tipping point in terms of coming together as a cohesive group. There are clear things that we need to do, which you came out with through your discussions yesterday.

We need to think about what needs to happen in provider organisations to ensure that clinical networks are representative.

There will still be some hierarchy in the system, even with a distributive model of leadership.

There is some work to do in giving a message back to the academy that we need to be flexible...a shoal of fishes.

We need to capitalise more on patient power in delivering healthcare science (audiology has a great history of patient involvement).

I am keen for you to articulate the vision and start action planning today.
“Science will characterise the future and we need to capitalise on this.” Pat Oakley
Assignment four (focus): drivers and barriers

Assignment overview:

Groups will work together and use their creativity to answer a unique question and prepare an eight-minute feedback presentation for plenary (90 minutes).

• Presenting back in plenary should be done as creatively as possible – you will be given materials to help you!
Marie Curie
What barriers do we need to overcome to:
   (a) identify our emerging leaders?
   (b) deliver a strategy on healthcare science leadership?
And how do we motivate healthcare science leaders to participate in developmental activities?

Alexander Fleming
What barriers do we need to address to:
   (a) support healthcare science leaders to make connections into a broader healthcare arena?
   (b) support partnership working?

John Logie Baird
What are the drivers for developing a healthcare science leadership strategy? Who can help to deliver and support this strategy? What could approach could we take with the National Leadership Council (equivalent body) on the outcomes and actions required to create impact for healthcare scientists?
Ada Lovelace

How do we motivate healthcare scientists to use the current system, resources and support to develop healthcare science leadership at:

(a) national level
(b) regional level
(c) local level

Isaac Newton

What are the drivers for change in order to earn the CCGs’ respect and appreciation of the contribution and value that healthcare science can bring? How can we exploit these to our advantage? And how can we use this to influence at a local and national level?

Alexander Graham Bell

What are the barriers to the change we want to see in commissioning? What can we do to overcome them, what are our drivers and how can we enhance them?
Assignment four: questions...

**Louis Pasteur**

What would successful collaboration with other clinical professions, patients and healthcare professionals look like in 2021? (Building on what is already in place – e.g. local best practice/networks and resources – so assuming no additional funding and bearing in mind the emerging work of the academy.)

**Thomas Edison**

What stops us from making our unique healthcare contribution more visible now? What could we do better and how could we do this using current resources?
Assignment four: Marie Curie...

- Biggest problem is being able to identify the emerging leaders
- Perception
- Resources
- Professional jealousy
Assignment four: Alexander Fleming...

• The ‘Healthcare Science Racing Stakes’ tackling barriers/hurdles including:
  ➢ egos, protectionism, lack of motivation and ownership, conflicts of interest
  ➢ structures, hierarchies, money, policies, lack of time, too many priorities, perverse incentives

• Ways of clearing the hurdles include:
  ➢ realising that the sum is bigger than the individual parts
  ➢ developing self-belief
  ➢ swimming in a shoal / working together
  ➢ communicating
  ➢ being visible
  ➢ increasing understanding of what we do
Assignment four: John Logie Baird...

- Team GB
- Money
- Succession planning
- Create networks
- Talent spotting
- Leadership potential
Do people feel valued?
Do they feel that they have ownership and autonomy?
Barriers include:
- silos
- ‘done-to’ mentality
- too protectionist
Need to get out of the lab
Need to develop local forums
Lead scientists are the catalyst for change
Empower people from local to regional to national levels
Sustaining healthcare science for patients for the future
How do patients understand what we do?
Outcomes driven
Don’t understand ‘new science’
Pressured to do more for less, to re-design services
No-one has yet mentioned the patient
Feeling swamped and out of depth
Need to speak as one voice – a representative
Define the work needed to do to gain respect
Toolkit for patient pathways
Patient-focused workforce with great ideas and solutions
Bob ‘knows a man who can’
Assignment four: Alexander Graham Bell...

- I am the commissioner and, as the holder of the purse strings, I look down on consultants
- I am the consultant and I look up to commissioners because they pay their salaries and green fees and they look down on patients because they know nothing
- I am the patient – I know my place
- I am the healthcare scientist and I tell the commissioner about quality vs. cost. I tell the consultant about service redesign and I tell the patient that I can hear what (s)he has to say
Barriers are:

- Ignorant commissioners and consultants
- Uninformed patients
- Lack of dialogue with healthcare scientists
- Lack of finance and business planning
- No healthcare scientists in the commissioning process
- Lack of honesty in the planning process

Healthcare science is able to do everything!
Assignment four: Louis Pasteur...

- Lack of business mindedness and marketing knowledge
- Invisible
- Need to improve recruitment and retention of health scientists
- Become empowered
- Improve outcomes
- Need to understand core competencies
- Consider new ways of working
- Research and innovate
- Develop more leaders
- Locate the healthcare scientists in trusts
- Speak as one voice
Assignment four: Thomas Edison...

- ‘The Church of Saint Sue the Scientist’
- The wedding cake – what it is and how it is made...
  - Bottom tier: Department of Health, health and wellbeing boards
  - Second tier: Royal colleges, academies, national leads
  - Top tier: Local networks, senates, acute trusts and other providers
- The CQC Sheriff – something may be missing...the proof is in the eating...need to cut into the cake and see if it all works/blends together
- A patient in the centre of the cake
- The wedding cake – a perfect marriage of different bodies
Strategy is the process of turning the resources we have into the power we need to win the change we want. Marshall Ganz
Assignment five part one (act): national action on key themes...

Work in groups on your chosen theme to develop seven and 30-day action plans and a manifesto (85 minutes).

Complete your action plan templates and record your manifesto on hypertiles to share during a six-minute feedback slot in the plenary session.
Assignment five part one (act): Themes...

- Commissioning
- Refining the vision
- Leadership
- Involving and empowering patient groups
- Addressing the ‘I’ in QIPP
- Influencing the organisation you work in
- Network developments
Assignment five part one (act): Commissioning...

How healthcare science can influence commissioning:

• Directory of healthcare science specialists so people know who to turn to for what
• Who are the local leads – do we know?
• Make sure that information is readily available and transparent
• Are local leads meeting independently of regional leads and, if so, who with?
• What do local leads need to be doing about quality?
• Who are the CCGs and what pathways are they working on?
• Get information and directory on a website
Assignment five part one (act): Refining the vision...

- Make a difference to patients – it’s about the patient experience and outcomes
- Use scientific skills creatively, critical thinking
- We are disparate, need to be cross-cutting
- Glue for the patient pathway
- Vision has to be national agreed and from national bodies...get on shadow board of the academy ASAP
- Feedback information from this event etc. to colleagues
- Engage with local patient groups
- Distil the messages from the innovation paper and get key messages out to the regions
- Academy to communicate with individual scientists
- United and one vision
Assignment five part one (act): Leadership...

- What is a leader?
- Who do we look at for emerging leaders?
- Need to tap into the leadership framework – don’t re-invent the wheel
- Mentors are key to developing new leaders
- Leadership tools as part of the appraisal process
- Cascade information locally and nationally
- 360 degree appraisals
- PDR process
- Learning from peers/other networks
- Strategy for leadership group
- Form a website to disseminate information
- National leadership group (done!)
## Assignment five part one (act): Leadership...

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<tr>
<th>What</th>
<th>When</th>
<th>Who</th>
<th>Success measure</th>
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<tbody>
<tr>
<td>Leadership group formed - terms of reference</td>
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<td>LS</td>
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<tr>
<td>Start to develop strategy for leadership in NCoS</td>
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<tr>
<td>Use NCoS website and NCoS networks to communicate</td>
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</table>
### Act - Assignment 5: Leadership

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<tr>
<th>What</th>
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<th>Who</th>
<th>Success measure</th>
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<tbody>
<tr>
<td>Letter to all trust HR directors/email</td>
<td>Wed pm</td>
<td>LS</td>
<td></td>
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<tr>
<td>Identity HCS lead/contact point in each trust</td>
<td>Thurs am</td>
<td>LS</td>
<td></td>
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<tr>
<td>National HCS leadership group</td>
<td>SH</td>
<td>Distribution list</td>
<td>![Check mark]</td>
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</table>
Assignment five part one (act): Patient involvement...

- Who are the patients?...Users of our services, local public groups, volunteers, patient groups, WI, celebrities etc.
- How we communicate with them, the information they needs, direction and purpose for engaging
- Different frameworks for local, regional and national engagement. Universal strategy
- Patient involvement toolkits
- How we let patients know their views are important/of value
- Patients don’t have a lot of time so make things as easy as possible...questionnaires, patient pages on web, blogs, consultation etc.
- Groups already involved - ethics, public governance etc.
- Services out into the community...open days
Assignment five part one (act): Patient involvement...

- Raise awareness
- Empower patients to help us
- Find out what patient/public information (leaflets) we have in our own organisations, what the Department of Health has, and how we could use information together
- Patient/public involvement toolkit – circulate so that can build on existing work, complete it and get it out to all healthcare scientists
- Launch at the next event
Assignment five part one (act): Innovation in QIPP...

- Systematic approach
- Single point of contact to promote and support innovation
- Healthcare scientists can’t do innovation on their own – need to set up a network
- Website to capture ideas
- Innovation includes service improvement and redesign
- Management of suggestion schemes
- Push and pull – need to get to grips with this...pull (solving existing problems) is better to work with than push (innovating then trying to find new market)
- Need to get better at marketing – innovation based on benefits, not on how it works
Assignment five part one (act): Innovation in QIPP...

- Scoping exercise – find out what is going on and work with it
- Survey local support – who are the enthusiasts?
- Who is the target market?
- Investigate the innovation survey
- Approach chief executive/board for top-down buy-in
- Plan how to do marketing within trusts
- Regional leads should develop marketing plans and methods for CCGs
Assignment five part one (act): Own organisation...

Who?
- Other healthcare scientists, medics, patients, charitable bodies, the workforce, GPs...everyone!

Where?
- In existing workplaces, at formal meetings, out there in communities and by virtual means

Why?
- Raise the profile, facilitate change, improve patient outcomes, better communication

What?
- Healthcare science used in all patient pathways

How?
- Feed back information, produce action plans, communicate
Assignment five part one (act): Own organisation...

- Go back to work having reflected upon the two days and feedback to colleagues on what it has all been about
- Identify healthcare science colleagues in own place of work
- Build networks locally and regionally
- Develop local contact group and feed up into a national database
- Have a voice
- Come together
- Shape the future
Assignment five part one (act): Network developments...

Local networks:

- Trust networks – lots of people don’t have these at all in their trusts but it is where people need to be going
- Workforce planning, information sharing, quality assurance and spread and adoption of best practice
- Identify members, co-ordinator, work out the network’s role, get sign-up from trust (someone in HR/board) to support this and join the group
- Organise introductory meeting
- Establish regular links
- Identify local operations for research and development and innovation
- Areas of investing
Regional networks:

- Identify CCG contacts (on Department of Health website)
- Map out regional networks
- Share key themes at action learning event
- Lead scientists have access to NHS network and it would be useful if there could be one central access point for all information to avoid duplication
- National communications strategy and permission to circulate information
- Survey to evaluate the role of the network
- Link professional advisors into regional networks
- Trial a toolkit nationally
## Networks

**Action area/theme:**

**Act - assignment 5:**

30-day action plan

### REGIONAL+

<table>
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<tr>
<th>What</th>
<th>When</th>
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<th>Success measure</th>
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<tbody>
<tr>
<td>1. One central point of information - lead scientific projects.</td>
<td></td>
<td>John Paul Mayten</td>
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<tr>
<td>2. National communication strategy - permission to circulate.</td>
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<td>JPM + SN + DCC</td>
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<tr>
<td>3. Short survey to evaluate 10% of network</td>
<td></td>
<td>Richard Scott</td>
<td></td>
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<tr>
<td>4. Link Proj Advisors to regional networks</td>
<td></td>
<td>Barbara Lloyd</td>
<td></td>
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<tr>
<td>5. Trial a toolkit nationally</td>
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## Assignment five part one (act): Network developments...

### Regional 7 day action plan

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<th>What</th>
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<th>Success measure</th>
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<tbody>
<tr>
<td>1. (Identify) CCG’s contacts (DH website)</td>
<td></td>
<td>L.S.</td>
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<tr>
<td>2. Map out regional networks</td>
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<td>L.S.</td>
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<tr>
<td>3. Identify innovation leads - leads in the “champions” region.</td>
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<td>L.S.</td>
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<tr>
<td>4. Share key themes of ALE event action plan with SHA medical director &amp; HCS leads in RA region</td>
<td></td>
<td>L.S.</td>
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</table>
Assignment five part two (act):
Regional group work...

- Participants feed back to each other in their groups on their action plans (55 minutes)
- What does this mean for our region?
- Personal commitments from participants
- Record the personal commitments on a hypertile
Assignment five part two (act): The ‘Middle East’...

- Split back out into original regions to discuss actions then came back together
- Building up local networks and establishing leads
- Revisit and strengthen regional networks
- Super-regional sharing of best practice
- Get buy-in from those not here
- Fact find about 360 degree appraisal and innovation
- All committed to deliver (and before Christmas)
- Action for Sue – to revisit lead scientist job specification
Assignment five part two (act):
The South...

- Common themes around innovation
- Find out success stories and share
- Use success stories as evidence to form the basis/support the set-up of networks
- Help develop point-of-care testing
- Find people to help with developing a regional network website/hub
- Shamelessly network!
- Leadership development – share what’s going on
- Vision science network to be set up
- Gather intelligence on local priorities
Assignment five part two (act): The North...

- Opening doors in departments – healthcare science tours and network with other specialties to learn
- ESR coding – get involved
- Revisit the ‘I’ in QIPP and review the PPI toolkit
- Develop a directory of leads and specialists – will provide a structure and framework to carry out tasks
- Scope training and education available across the north and identify gaps
- Develop a website for the north
- Meet cluster MD for the north – get his perspective and support
- Celebration event and awards
- Assess how life science trainees will access genetics part of curriculum
Assignment five part two (act): London...

- Incredibly powerful
- Meet to map champions across London
- Appoint lead scientists to fill the gaps
- Podcast of vision for London healthcare science
- Set-up informal groups locally
- Look at emerging leaders – develop a network and get them to create a website and newsletter
- Get traction behind the voice
- Innovation paper – distil what it means for London
- Focus on success stories
- Link in to cross-cutting networks
Part of what we need to do going forward is accept that some of the things you do won’t have an impact...but you’ve got to keep doing them as you will have that Eureka moment.

We need to look at tools, products and guidance at a national level and I need to meet with senior scientists to understand what this might be. This is essential and what the future is about as we move to a Commissioning Board.

Cluster meetings will happen in the new year and senior scientists need to have a story and action plan ready to take to these.

Locally there have been some tremendous ideas on how to work in networks and organisations.
There is still work to do with the academy for healthcare science to ensure the shoal can work together.

Moving forward with our work from the two days here in Birmingham, I will be bringing together a strategic group to plan what we do for the remainder of this financial year and then into the next year and beyond.

There will be specific activities developed starting in the new year that you will be able to sign up to – for example, how do we develop the narrative and what is our elevator pitch?

On 6-7 March 2011, we will have a CSO conference. I hope that you can commit to being a part of this conference and tell your story to others at it.
A huge thank you to everyone in the room for your participation over the last two days. We have seen art and science come together and your creativity shows no boundaries, which is fantastic!

You have all been prepared to think differently and to put yourself in other people’s shoes and you did all of this with great enthusiasm. I have a real sense that you all have something to take away with you from the last two days.

You have reached for the moon over the last two days!

This is one of the best workforces in the NHS...in the UK! What you do is fantastic, we now just need to become more visible – remove that cloak of invisibility.
Assignment five – Act Part 2: commitment chart

<table>
<thead>
<tr>
<th><strong>GIVES</strong></th>
<th><strong>GETS</strong></th>
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<tr>
<td>Commitments we make</td>
<td>Commitments we ask other to make</td>
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*Action area/theme: .......*

*Region: ...........*