Thinking Differently

To transform health care services

Beverley Leckenby
NHS Institute for Innovation and Improvement

The NHS Institute supports the NHS to transform healthcare for patients and the public by rapidly developing and spreading new ways of working, new technology and world class leadership.
Objectives for this Workshop

- Identify the key concepts behind idea generation
- Illustrate a three phase innovation process model that has been applied in leading health care organisations
- Demonstrate a number of tools that you can take away to use in your own organisation

Innovation in health care has led to....

In 1967 Cicely Saunders, a nurse, founded the first modern hospice creating a new experience for those who are dying

1973 Godfrey Houndsfield invented the CAT scanner radically changing diagnostic ability

1988 James Black wins the Nobel Prize for inventing beta blockers- saving many lives
Innovation in health care has led to:

- The transition from traditional surgery to keyhole methods
- Increase in diagnostic ability reducing the need for surgery
- Use of telephone consultations to improve access
- Use of wireless technologies to aid information transfer, & storage

However life in the NHS...
sometimes it feels like this...

"Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it."

A A Milne
What is the current context for innovation?

“With the tightening financial climate there’s no doubt the **NHS is facing challenges unprecedented in its history** and especially so with the ambitious goals we still need to achieve for the service.

**Innovation is no longer one of those ‘nice things to do’** if we have a bit of time to spare. It’s business critical and all of us in the NHS need to be looking for new, improved ways of using our resources to deliver the best services, every day.

By innovating however I don’t mean we need to lock ourselves in darkened rooms, grow pointy heads and invent. **We should be ‘stealing’ great ideas wherever we see them – from those in our networks, the global health system and industry.**

David Nicholson, CBE
Chief Executive of the NHS England
Speaking at the 2009 graduation ceremony of the NHS Institute’s Graduate Management Training Schemes.

Many of the ways we have implemented quality measures in the past need rethinking.

**Innovation—doing things differently, and doing different things, to create a step-change in performance—is essential if we are to deliver against such a rapidly changing environment**
“If I had an hour to save the world, I would spend 59 minutes defining the problem and one minute finding solutions”

Albert Einstein

We all have ideas…

How innovation currently happens…

A High Priority Area

Go with the first solution and implement quickly

Takes a long time

Rework

Individuals have ideas
What often happens in projects.....

- Energy and time spent reworking & redesigning the solution to improve it and gain additional value. The maximum increase in value is limited.

- The opportunity to maximise the potential.

- Speed to initial solution is slower due to greater investment in upfront set-up and wide investigation.

- Implemented solution is a well thought out and tested solution that has a significantly higher level of value.

- Opportunity: To save time & resources spent on redesign and reengineering.
“If I had an hour to save the world, I would spend 59 minutes defining the problem and one minute finding solutions”

Albert Einstein

...Innovators are clever ‘boffins’ who just come up with lots of perfect ideas all of the time
The best innovators aren’t lone geniuses. They’re people who can take an idea that’s obvious in one context and apply it in not-so-obvious ways to a different context.

Harvard Business Review

Everyone can have new ideas...

Innovation is typically the result of a structured process...
A process for Thinking Differently

A three step process
Follow in sequence - don’t race ahead
1. **STOP Before You Start** to really understand the issue
2. **Generate LOTS of Ideas** rather than running with the first
3. **Select and TEST ideas** to increase the likelihood of success

Loop back through the process when you need to
Note the cycles of divergence and convergence

Concepts
A core concept for Thinking differently…

“Creative thinking involves breaking out of established patterns (valleys) in order to look at things in a different way.”

Edward de Bono

Thinking differently is about making “creative connections”. It involves challenging, connecting and rearranging information in our mental valleys.

Note that laughter is a natural physiological reaction to a novel connection in the mind. In fact, someone initially laughing at an idea is a good signal that it is, indeed, creative!
Tool: Mental Benchmarking

Synopsis
Many of the basic issues we face are common to other industries and settings, if we state them in plain English and remove the jargon. For example, in health care we talk about “access,” or “patient flow,” or “matching up the correct patient with his or her medications.” But these are really common issues across many industries. Those in other industries will have different mental models from us – McDonald’s deals with “access” by providing a drive-through window; Disney World deals with waiting time for its rides by providing stimulating visual input to make the time pass more quickly; and FedEx certainly knows a thing or two about how to match up packages with the correct delivery lorry.

If we can connect our issues and those different mental models, we might generate a creative idea!

Quick Table Exercise: Mental Benchmarking Access & Flow

- How do the following industries and organisations think about “access to service”; what is natural for them…
  - Retail clothing stores
  - Banks
  - Fast Food outlets (McDonalds)
  - Airlines

- Choose one industry and write a list of things that you would associate with that industry.
Quick Table Exercise: Mental Benchmarking Access & Flow

- Go through the list that you have just made and for each one write a list of how it might be used to improve access within healthcare.

Service with a jab and a smile

For more than 10 years Beatrice Zastrow has received her flu shot.

Last year, Zastrow discovered an easier way to get the vaccine - by pulling into a full-service flu drive-through.

"We just drove in, filled out some paperwork, and got the shot. It took probably a total of 15 minutes," Zastrow said.

It was so convenient that she and her husband, Orville, are getting their flu shots by drive-through again this year in Shady Grove, Md., she said.

"I can go any weekend for the next three weeks, and I know it won't take up my whole day," Zastrow said.

One nano compared the process to picking up dinner at a fast-food restaurant only "you don't get the fries."

As patients pull into a drive-through clinic, nurses begin handing out paperwork consisting of medical history review and consent forms. Once the paperwork is filled out, patients stop at a fee station before receiving the vaccination.

Liane Osborn of the Howard County Health Department in Maryland said the vaccination process was easy.

"You roll down the window, roll up your sleeve, and get the shot," she said.

The Howard County drive-through was the second largest in the country, servicing 2,100 people in one day.

Not only do patients take advantage of the drive-through, but the county benefits as well by providing the kind of quick treatment that might be necessary in case of a large-scale medical emergency.

Another purpose to this process is to see how quickly we can perform in case of an emergency. We get better at it every time because we learn lessons about how to do it more efficiently," Osborn said.

The vaccines are the same as what you would receive in the doctor's office. You have a choice between the flu shot or nasal the vaccine.

"I find it all so interesting," Zastrow said. "At the doctor's office, I would have to wait in the waiting room before seeing the doctor and then wait 15 minutes after the shot to make sure everything was OK. But with this drive-through, if you've had a flu shot in the past, there's not much of a wait to see the doctor and you can drive off immediately."
Drive-thru flu jabs at the Virginia Mason Medical Center, Seattle, USA

Thinking Differently in health care has led to....

- Lean manufacturing techniques from industry being applied to wards and operating rooms (saving of £1 million at Bolton Hospital)
- Tools and methods of Service Design being used to better understand patient experience and co design services (42 changes in a services that has already been redesigned)
- Collaboration techniques leading to the development of new products to reduce infection
Tools Phase 1
Stop Before You Start
Phase 1: Stop Before You Start

Perceived challenge or issue

Others’ Point of View

Reframing by Word Play

Pause, Notice, Observe

Tool: Reframing by Word Play

Synopsis
Take existing statements of the problem, issue or opportunity that you want to work on and substitute synonyms and other words or phrases. These must communicate the same thing, but in plain language, without all the jargon. The goal is to stimulate non-traditional or unusual thinking.
Reframing your challenge

We want to think creatively about.......(WWTCA)

Tool: Pause, Notice, Observe

Synopsis
Studies of highly creative people indicate that one of the things that they habitually do is pause, notice and observe. While the rest of us pay somewhat limited attention to what goes on outside our immediate sphere of interest, creative people notice more and are relentlessly curious. Taking the time to pause, notice and observe helps provide us with both understanding and inspiration; and we have more to bring to idea generation sessions.
Randomly-
George de Mestral observed cockleburs sticking to his trouser leg when walking in the woods. This had annoyed millions of people before him but he was curious and explored them further. This curiosity led to the invention of Velcro™

*Curiosity may have killed the cat, but where human beings are concerned, the only thing a healthy curiosity can kill is ignorance* — Harry Lorayne

**Tool: Pause, Notice, Observe**

**Purposefully**— for a given topic
People do not always do what they say they do
People do not always do what they think they do
People do not always do what you think they do
People cannot always tell you what they need
Things are not always as they seem ……

(adapted from IDEO)
Tool: Pause, Notice, Observe

Observation tool

HCAIs - What we observed

- Inconspicuous gel dispenser
- A notice about a notice

Staff more frequently use gel when leaving a ward or department
Observe what happens at night

We know that......

Every system is perfectly designed to get the results it gets.

If we want different results, we must change (transform) the system
Tools Phase 2
Generating Lots of Ideas

The way to get good ideas is to get lots of ideas and throw the bad ones away.
Linus Pauling, Nobel Prize winning chemist
We have a variety of tools to help us...

Numbers depicted are illustrative only, but are based on typical ratios across a variety of industries.
**Synopsis**
Since others will have different ways of thinking and approaching challenges, we might be able to make a novel connection by using “Fresh Eyes” and thinking like another person, or making links to another industry.

*New ideas come from differences.*

Nicholas Negroponte
Great Ormond Street learns from Formula 1 Team

It was after what he described as “a particularly bad day at the office” that Prof Elliott, the head of cardiac surgery at the Great Ormond Street Hospital for Children, and his colleague, Dr Allan Goldstein, in charge of perioperative cardiac intensive care, slipped into chairs in front of the television.

On the screen was a motor racing grand prix and as they watched, the pair became aware of the similarities between the brainpower involved in the two fields. They were seeing in the pit of a Formula One racing team; a place that normally sees a collaboration between the brainpower of Great Ormond Street’s surgical and intensive care units, and the McLaren F1 racing team and their driver, Ross Brawn and, in particular, race technical director Nigel Stepney. They worked together at their Italian base in Modena, Italy, in the pits of the British Grand Prix and in the Great Ormond Street theatre and intensive care ward.

Daily Telegraph, 29/08/2006

Below is a list of “Fresh Eyes” perspectives you could explore:

- Accounting
- Anatomy
- Architecture
- Astronomy
- Biology
- Books
- Business
- Chemistry
- Computer science
- Cotton
- Dance
- Deserts
- Dentistry
- Economics
- English
- Entertainment
- Evolution
- Fast food
- Farming
- Fishing
- Fine cooking
- Fictional homes
- Finance
- Football
- Flying
- Geology
- Geography
- Government
- History
- Horse racing
- Hygiene
- India
- Interior decorating
- Insects
- Japan
- Korea
- Law
- Libraries
- Law enforcement
- Maths
- Medicine
- Manufacturing
- Mining
- Military
- Moon
- Museums
- Mythology
- Nutrition
- Oceanography
- Olympics
- Parks
- Pharmacology
- Photography
- Polio
- Philosophy
- Physics
- Planets
- Painting
- Philately
- Political science
- Printing
- Religion
- Restaurants
- Race team
- Resorts
- Sculpture
- Seminars
- Shipping
- Skiing
- Soap operas
- Space
- Sociology
- South America
- Space
- Society
- Spain
- Sport
- Stamps
- Steel
- Stars
- Steel
- Tabloids
- Television
- Theatre
- Travel industry
- Transportation
- Union
- Vatican
- Wine
- World
- Zoology
Synopsis
Identify the underlying assumptions, mental models, unwritten rules and thinking that maintain the status quo, and then deliberately think around them to create new ideas for service delivery.

There are no rules here, we are trying to accomplish something.

Thomas A. Edison

Problems cannot be solved by the same level of thinking that created them.

Albert Einstein
Unwritten rules in healthcare drive many processes and patterns of behavior

They create barriers to innovation

Tool: Breaking the Rules

Generating Ideas:
1. Identify the underlying rules
   • “We cannot do that because of the policy”
   • “Only doctors can do that”
   • “Patients must visit the doctor to have their blood pressure taken”
**Tool: Breaking the Rules**

**Generating Ideas:**

2. Creatively challenge the rules

This requires senior leadership attention
Tool: Random Word, Picture or Object

Synopsis

How can a randomly selected word, picture or object possibly help me think differently?!? The very words and images we use to talk about a topic bring us into our usual ways of thinking (our mental valleys), resulting in ideas that are not very different from what we already have. A randomly introduced word, picture, or object activates thoughts that we do not usually associate with the topic and therefore gives the possibility of a new connection and new ideas.
IDEA: Give schoolchildren a ‘fridge audit checklist’ of both healthy and unhealthy foods and get them to examine their own fridge with their parents.

Educational tool for both parents + children!
Tool: Stepping Stones

Synopsis
Offbeat ideas and somewhat wild scenarios can serve as catalysts or mental "stepping stones" to help us make an intuitive leap to a really good idea. By starting with the outrageous, we are able to suspend judgement and think more freely, provoking connections or associations between seemingly unrelated pieces of information in the mind.
We have a variety of tools to help us...

Tools Phase 3
Selecting and Testing Ideas to Make a Difference
Phase 3: Selecting and Testing Ideas to Make a Difference

- Fresh Eyes
- Breaking the Rules
- Random Word, Picture, or Object
- Stepping Stones
- That's Impossible
- Mental Benchmarking

Harvesting by Criteria and Dot Voting
Six Thinking Hats®
Enhancement Checklist
Testing New Ideas on a Small Scale
Implementing Change: making ideas a reality
Tool: Harvesting by Criteria and Dot Voting

Synopsis
You cannot implement everything that comes out of your idea generation sessions. Harvesting is about beginning to narrow down the list in order to identify those that deserve a bit more thinking, and perhaps a test.

Criteria:
Be clear about how you will select your ideas
• Return on investment: is it likely to create cost savings?
• Quality: will it increase quality of care?
• Likelihood: can we actually do it?

Dot Voting:
• Give participants a set numbers of ‘votes’ (eg sticky dots)
• Vote for ideas based on the criteria
• Identify the most popular ideas
Tool: **Edward de Bono’s Six Thinking Hats®**

**Synopsis**
This tool enables individuals or members of a group to explore an idea or topic from a variety of perspectives, and in ways that may differ from their preferred way of thinking. Edward de Bono, an expert on thinking and the developer of the concept, suggests that by metaphorically wearing different hats, we can direct our thinking in specific ways.

*The main difficulty of thinking is confusion. We try to do too much at once. Emotions, information, logic, hope and creativity all crowd in on us. It’s like juggling too many balls.*

Edward de Bono, *Six Thinking Hats®*
Tool: Enhancement Checklist

Synopsis
Edward de Bono suggests that we explore a series of questions that, in his experience, are often not asked, nor thoroughly addressed before people press on to test new ideas. Thinking through such issues early on, before testing an idea, enhances the chances for success.

An idea that is developed and put into action is more important than an idea that exists only as an idea.

Edward de Bono
Tool: Enhancement Checklist

**Strengths**
- How can we enhance the idea further to increase its power or value and make it fit our needs even better?
- How can we demonstrate its value compared to the current system?

**Weakness**
- Think about the weak points that you have identified in the idea, what can you do about them?
- What weaknesses were identified after testing and what can we do to improve the idea?

**Opportunities**
- How can we test the idea on a small scale, learning from this to enhance the probability of implementation?
- What new possibilities are opened up by this idea and how can we capitalise on that? (\*8)

**Threats**
- What could go wrong when we try to implement the idea, how can we avoid this threat?
- Who will raise objections and what might these be, how can we modify the idea to reduce these?

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Tool: Testing New Ideas on a Small Scale

**Synopsis**
If you are really thinking differently, then you are coming up with ideas that are unusual or uncommon in your environment. Therefore, you cannot know how they will work until you actually try them out. But spending lots of organisational resource and effort in the full implementation of an idea that you are unsure will work is not appropriate.

*In theory there is no difference between theory and practice. In practice there is.*

[Image of a happy and sad face]
Goals of small scale testing:

1. Create confidence and momentum for good ideas
2. Learn more about the idea to enhance it or…
3. Evaluate and eliminate the idea, without major investment of resources, if it wasn’t so good after all

Key Point: *the measure of success for a test is whether you learned something*

*I have not failed, I have merely found ten thousand ways that won’t work.*

Thomas Edison, inventor of the light bulb
Prototyping:

- A prototype should test the boundaries and also helps to manage risk
- A prototype is anything that tests an idea and answers a question
- It is not necessarily about the actual ‘product’ it is about the interaction it provokes

Start small. A prototype needs only to be as good as it needs to be. It helps you to fail early with some ideas and gather ideas to strengthen other ideas.
Implementing Change: making your ideas a reality

It is not enough simply to have creative ideas. Ideas alone do not really change anything. Innovation only occurs when ideas are put into action.

To put one’s ideas into action is the most difficult thing in the world.

Goethe

In the middle of difficulty lies opportunity.

Albert Einstein
Experience Based Design

"We’re working as equals alongside staff, sharing ideas and finding common sense solutions."
Sheelagh Wren
Patient

What is special about the EBD approach?

- encouraging and supporting patients and carers to ‘tell their stories’.
- using these stories to pinpoint those parts of the care pathway where the users’ experience is most powerfully shaped (the ‘touchpoints’).
- working with patients, carers and frontline staff to redesign these experiences rather than just systems and processes.
• www.institute.nhs.uk

• Beverley.leckenby@institute.nhs.uk