



# NoSPG and NoSPHN Horizon Scanning Project 2011

NoSPG Annual Planning Event  
21st September 2011, Nairn

## Overview

- The project / what we have done
- Perspectives on horizon scanning
- What we have found
  - Context setting / wider issues
  - NoS workstream specific feedback and cross cutting issues
- Workshop 1 to discuss findings with more details from the NoSPG work programmes / understand implications for the North of Scotland
- Afternoon to focus on what we do with the information (Workshop 2 and panel discussion)

## Aims and Objectives

To detail for NoSPG the key factors which will have the biggest impacts on the provision of Health Services in the North of Scotland in the future and therefore the implications for planning on a North of Scotland basis.

Collate and build on work being done in individual Boards

- Gives a general understanding of:
  - Burden of disease (increasing or reducing),
  - Potential changes in demography,
  - Horizon scanning for changes in epidemiological needs, inevitabilities of demand, scope for the greatest gain, technology change and national policy change.
- Assesses / gives an understanding of commonalities / differences across Boards.
- Takes account of but does not duplicate other ongoing work.
- Details the implications for future planning and priority setting in the NoS Boards / NoSPG including potential lesser priorities and diminishing needs.
- Supports NoS Boards to deliver better outcomes for patients.


## What we have done so far

- Review of Board documentation (little evidence of horizon scanning)
- Review of demography
- Defining horizon scanning (in our context)
- Literature review (horizon 3-5 years+) / gathering sources / information
- Consulting / talking with and feedback from: NoS workstreams (Leads and Public Health) and national/other organisations

....today's event and final paper for NoSPG meeting  
November 2011

## Perspectives on horizon scanning

- Lots of people doing it (industry, Government, specialist organisations, general to subject specific)
- Numerous models (*surveillance, assessing the issues, predicting the impacts – evidence led / specialist views*)
- Lots of views of what it can and cannot do (*caveats / need to manage expectations*)
- Timelines (*over which to horizon scan and for impact*)
- World view / local view?



Horizon scanning as distinct from:

- Forward planning and implementation
- Trends and trend analysis
- Scenario planning

## NoSPHN Project: working definition of horizon scanning (based on Defra)

Horizon scanning is the act of gathering published insights and predictions (threats, opportunities and likely future developments) that may point us towards affirming or amending existing trends and developments as well as identifying new and emerging trends and developments (including those which are novel and unexpected) which are on the margins of our current thinking, but which will impact on our services and plans in the future and enable us to identify further information / research requirements.

Essentially the focus was on trying to understand –  
**'how will the future be different?'**

## Sources and types of information available:

- International Futures Forum, Foresight (UK Gov)
- Drug and Technology based: SMC, National Horizon Scanning Centre, Health Improvement Scotland - Scottish Health Technologies Group
- Topic or clinically specific information / evidence:
  - National - NHS Knowledge Network, Health Observatories, NHS Evidence, Scottish Government (Policies)
  - Local sources: LIHNN, CERGA (surveillance)
- Specific work: NHS24, Scottish Health Protection Review
- Specialist knowledge / views

Submarine outlook.....



Even if we spot the threats [issues] how receptive are we to them and how do we assess the impacts?

Once 'threat' [issue] is spotted do you dive or torpedo (passive / less passive approaches), call in the other forces or ignore?

Day and Schöemaker 2005

*'In expanding the field of knowledge we but increase the horizon of ignorance.'*

Henry Miller  
(American author 1891 - 1980)

*How will the future be different?*

## The Wider Context

- Economic / social / political context
  - Why that matters...
  - Determinants of health
- Public health including health protection
- The NHS
  - Christie
  - National horizons / futures planning
  - "Redesigning the plane while flying it"
- 5<sup>th</sup> wave.....scenario planning



## World view – global horizons

- Biosphere
- Climate
- Water
- Energy
- Food
- Trade
- Eschatology
- Governance
- Wealth
- Habitat
- Community - social
- Wellbeing
- World view
  - Globalisation

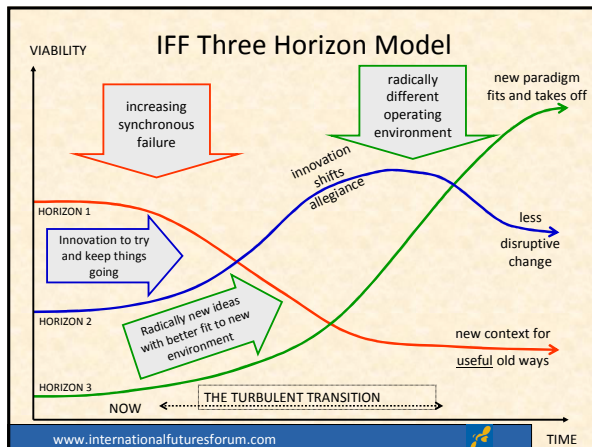
Why this matters here .....

## Health & Public Health

- New definitions of health
  - Public health horizons
    - Ecological public health
    - Health economics
    - Assets-based approaches
  - New wave of public health thinking
    - 1<sup>st</sup> wave: appliance of science & social-reform
    - 2<sup>nd</sup> wave: scientific rationalism
    - 3<sup>rd</sup> wave: materialism – living conditions
    - 4<sup>th</sup> wave: disease as risk factors, targeted interventions
- Time for a 5<sup>th</sup> wave.....

## Health services

- Exponential historical rise in health spending: e.g. Wanless
- Drivers:
  - demography
  - patterns of disease
  - medical activity
  - technology & drugs
  - workforce change
- Futures:
  - Marketisation
  - 'predict & provide' model
  - Christie Commission
  - Third horizon thinking



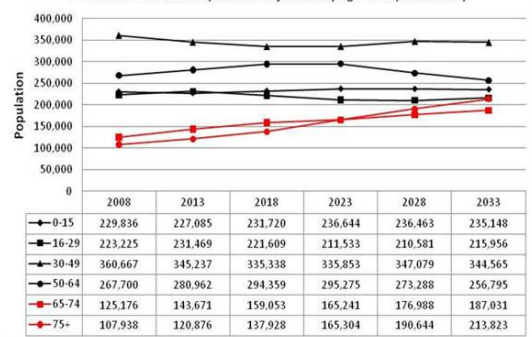
*There is no easy technical fix – this is a culture change*

## Demography

- North of Scotland Boards are predicted to go through significant changes in population demographics over the coming 25 years - will impact the way public services are delivered in the future
- Population increase driven largely by people living longer - all areas projected to have an increasingly elderly population
- North of Scotland - 72% increase in the population aged 65 and over by 2033 (GROS)
- Population projections do have limitations. Projections are calculated on particular assumptions: fertility, mortality and in and out migration rates. Social and economic factors are not included and can influence population change in a big way.

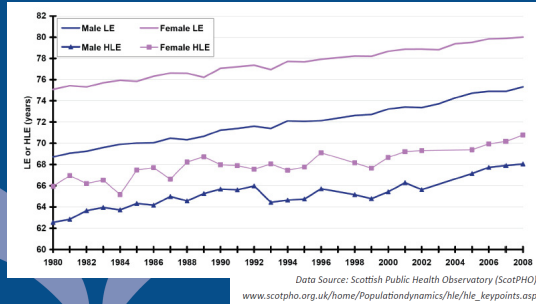
Briefing paper: detail of population projections for each Board area and details of local work done on population change e.g. Island Boards analysis on migration

GROS NoSPHN Boards Population Projections by Age Band (2008 based)



## Living longer – in sickness and in health....

Life Expectancy and Healthy Life Expectancy in Scotland,  
1980-2008



## Disease trends (morbidity)?

	Increasing	Decreasing
Cancer	✓	
Heart disease (IHD ↓)	✓	✓
Mental health conditions (dementia)	✓	
Stroke	✓	
Infectious diseases	✓	
Diabetes Type II (and Type I)	✓	
Respiratory disease (including COPD)	✓	
Obesity	✓	
Alcohol	✓	
Smoking		✓

## Impact of health behaviours and health interventions on demand for and cost of NHS services in the NoS

- Around a third of hypertension and nearly half of type 2 diabetes is due to obesity.
- Over 43,350 bed days in non psychiatric hospitals in 2007/08 were associated with alcohol related illness at a cost to the NoS of around £21.4 million.
- Over 25,500 ambulance journeys and 76,500 A&E visits were also alcohol related.
- Alcohol costs NHS in the NoS were at least £68.9 million per annum.
- 82% of lung cancer and 86% of COPD is smoking related – as are 50% of gastric ulcers.
- The cost of smoking related disease to NHS in the NoS was estimated at over £85.7 million in 2007/08.
- Obesity related illness cost NHS in NoS £48.7 million in 2007/08 and rates of obesity continue to rise (SG estimates likely to double by 2030)
- Long-term care is estimated to cost £2.8 billion in the NoS, and is forecast to rise to **£3.8 billion in the NoS by 2040.**

Adapted from Burns H, 2011

## Cross cutting themes (from the literature review and/or workstreams)

## Themes for future emerging from feedback from the workstreams (condition specific) and literature review

- Demographics
- Risk factor impacts
- Impact of improvements in health
- **Focus on earlier diagnosis (diagnostics / impacts)**
- Inequalities
- Increase in prevalence of conditions and complexity of conditions
- **Increase in complexity of and demand for interventions**
- **Primary / secondary care tensions**

## Emerging themes ctd

- **Sustainability of services**
- **Workforce** (e.g. numbers, recruitment and retention)
- **Drug and therapeutics**
- Technology
- **IT/ ehealth**
- **National policy impacts**
- Finance
- **Patient and public expectations**
- **Chronic disease management / LTCs**
- **The 'real' horizons – genetics, stem cell research?**
- What might we do better together or more collaboratively?

## Biggest impacts on healthcare in the future?

2011 Innovation Expo Conference - BMJ led debate on idea most likely to have greatest influence on healthcare by 2020?

### Anecdotal feedback from stakeholders:

- Radiotherapy
- Screening changes in next 3 – 5 years
- More bariatric surgery (including teenagers)
- More home care near patient tests and tele-reports to health providers
- Balance of people and process changes?
- Quality gain through efficiency and effectiveness on the 95% of spend / marginal costs and benefits of existing health care technology and drugs (including end of life use of resources)?
- Impact of genetics - on targeting health care, targeted therapies (e.g. cancer) via gene therapy, how we plan to care for the huge spectrum of rare disease
- Increase in antibiotic resistance (and decline in power of antibiotics)
- Potential for new and emerging infections
- Reduction in resources / financial
- Changes in other organisations / NHS?
- Tobacco / alcohol and food industry – challenges
- Technology (only if more cost effective)
- Global issues (e.g. water, oil, increasing populations elsewhere, political turmoil globally and risk of global military conflict)

*'The cloud never comes from the quarter of the horizon from which we watch for it.'*

Elizabeth Gaskell  
British Novelist 1810 - 1865

## Workshop 1

### Will the future be different?

- 5 themes (global, health services (vc group), health definition and Public Health, medical innovation, technical innovation),
- General discussion/observations on the presentation/ further questions
- What information have we missed / can you add to (need to take account of or look for)
- Presentations on themes and case study from NoS workstreams
- Discussion:
  - Worrying developments?
  - Positives/ opportunities?
  - How might these issues present in the NoS?
  - Most pressing challenges in relation to your Groups theme? (3)
- VC group (Gillian Needham to lead, Nairn will mute)
- Straight to lunch after, back here 1.15

*Welcome back to the future*

*Summary –  
key messages so far ....*

### *Big issues (stickies!)*...

*Finance 22  
Demography 18  
Workforce 12  
Technology 11  
Patient/Public Expectations 6  
Networks/Integration/Partnerships 6  
Medicines 5  
Care of Elderly / Chronic Conditions 4  
Health Improvement / Community Engagement 3  
Climate Change 3  
Obesity 2  
Rural issues 2  
lots of others 12*

## *The big 3...*

### *Global:*

- *Radical transformational change (risk taking)*
- *Practical local action*
- *Leadership*

### *Health services – structures, models & finance:*

- *Public perceptions*
- *Getting the right balance of risk*
- *Impact of demographics on how service is delivered*
- *Early intervention and transition through services*
- *Redesigning the plane without it costing any more, and possibly less*

### *VC group – Health Services*

- *Changing from risk minimisation to informed risk management*
- *Community empowerment (informative / formative / transformative)*
- *Inequality is unacceptable*

*Health Definition and Public Health:*

- Whole public sector response
- Training requirements v workforce v service models
- Communication

*Medical Innovation:*

- Cultural expectations of public and clinicians to take forward
- Workforce to deliver innovations
- Controlling drivers – sustainable and controllable

*Technical Innovation:*

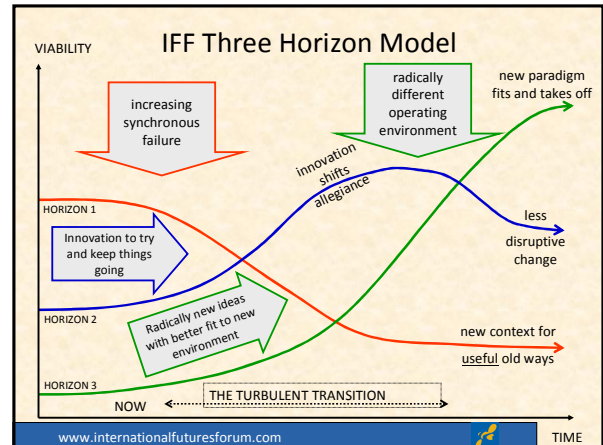
- Need to identify what patients and population want
- Patient outcomes and benefits
- Gather evidence of technological advances already in place and decide which are regional priorities to implement

## Horizon scanning: the process

- Uncertain science
- Complex (technical and time)
- Time lines are important
- Subjectivity (e.g. social of clinical perspectives)
- Global and local dimensions
- Cannot look at technical out with the political context
- Lots of caveats
- Huge body of work available – but impact (i.e. what does it mean?)
- Continuing process
- Scope for doing more but.....

## Horizon scanning: what we have found

- Wider context.....
- Demography
- Sustainability (environment, services, economy)
- Burden of disease (circulatory diseases, cancer, obesity, lack of wellbeing)
- Smoking, alcohol
- Cross cutting issues
- New technologies
- Drugs
- New issues.....



## So what might we do next?

- Are you convinced for the need for change?
- What are the challenges of thinking like this?
- Dive, bomb or ignore?
- How to keep the plane flying?
- What are we doing already that is heading in the right direction (asset based approaches, integrated services)?
- How can we take the best of what we already know and find the space for innovation and transformation?
- What opportunities does the future hold (e.g. demography)?
- What is our 'tipping point'?
- What needs to change?
- Do we need a new set of rules?
- Do we need new tools/ processes (e.g. more horizon scanning, set of questions we need to ask, scenario planning)?
- How resilient are we?
- On assumption this raises more questions than answers – bring questions to a NoSPG panel session after the break
- What are the big questions we need to ask ourselves / answer?

## Can we cut the issues another way?

*The greatest value in projections often lies not in their ability to predict the future but in their ability to stimulate thinking about the future and about the actions to produce a more desirable future than predicted.*

Gordon et al 2011

*Give up on the myth of control – this is about how to manage uncertainty ... look at what we can change.*

IFF

*Face the future with courage – this next few years will not dismantle but transform the HS in Scotland.*

IFF

## Workshop 2

### How might we redesign the plane whilst flying it?

- Do you think there is a need to change – and where this might be nationally/ regionally/ locally etc?
- What do we need to keep doing / what needs to stay?
- What needs to change?
- What might need innovating (and how do we create the opportunity for this)?
- What might be some of the new rules we operate by?
- What does this mean for NoSPG?
  
- What now do you think are the issues likely to have the biggest impacts in the future?
- Set of questions for a NoSPG panel?
- VC group 9Nairn will mute)
- Coffee then back here by 3pm

*Never look down to test the ground before taking your next step; only he who keeps his eye fixed on the far horizon will find the right road.*

Dag Hammarskjold  
*Swedish Diplomat (1905 - 1961)*