# Project and Programme Evaluation: Health

*Anne Nolan*

*MSc Economic Policy Studies*

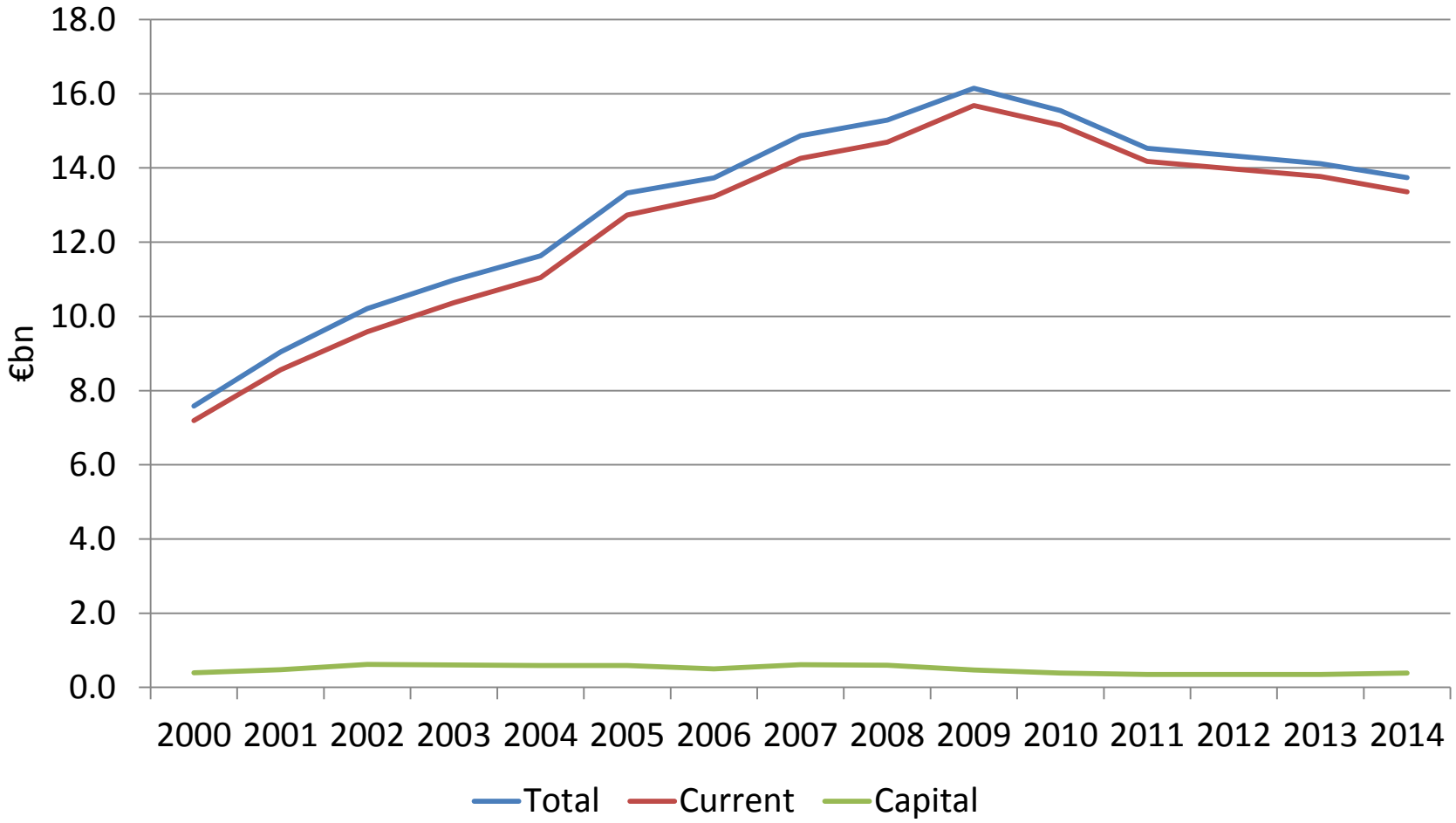
*4th December 2015*

# Outline

- Introduction/Context
  - Fiscal context
  - Policy context
- Evaluation Techniques – Health
  - Health technology assessment
  - Policy impact analysis
  - Cost of illness
- Summary/Discussion

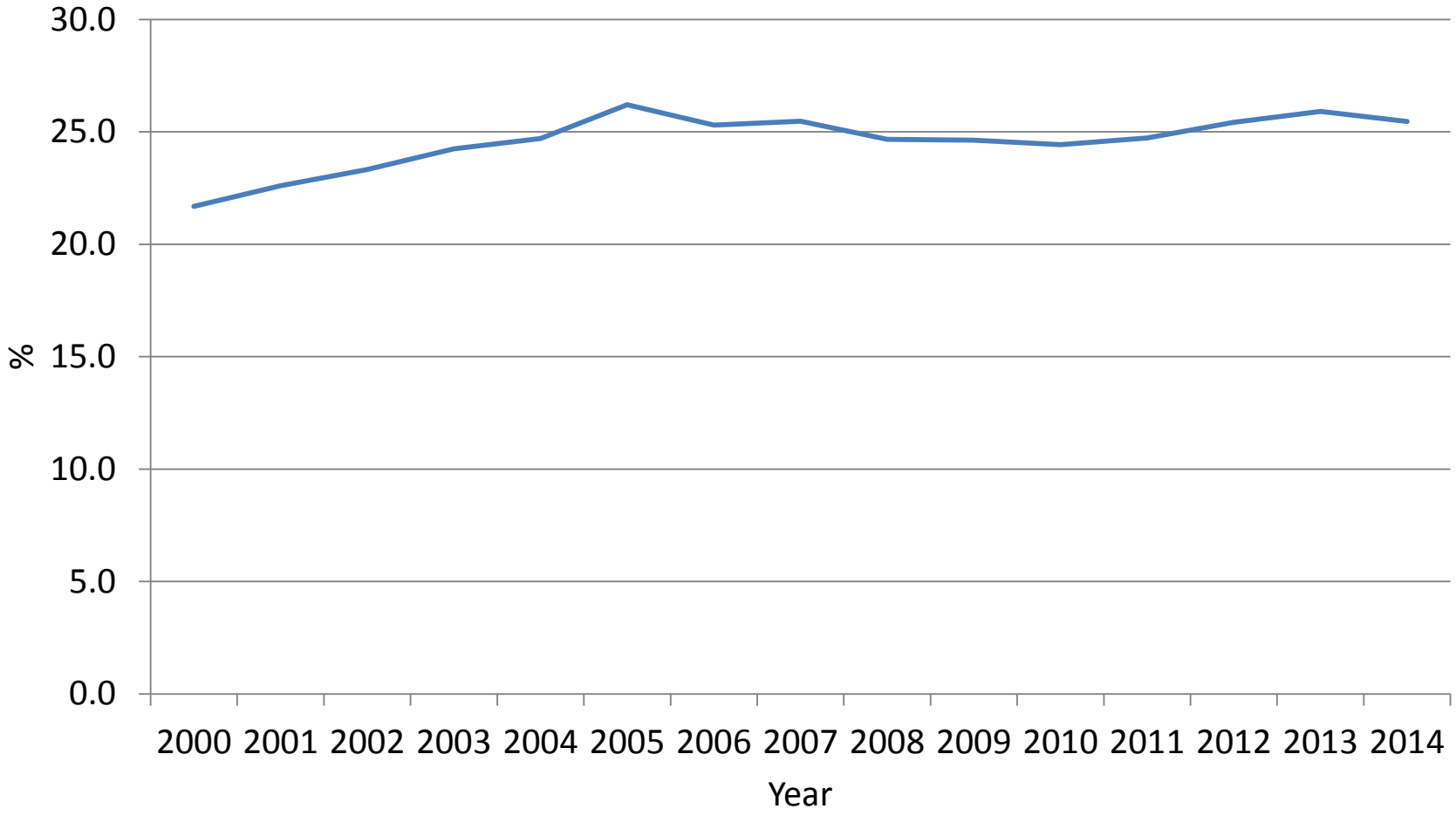
# Context

# Trends in Public Health Expenditure, 2000-2014 (2014 prices)




*Note*: Gross voted health expenditure (see www.per.gov.ie/en/databank/)

# Share of Total Public Expenditure devoted to Health, 2000-2014



# Fiscal Context

- CRE 2015-2017 forecasts small annual increases in PHE
- Greater emphasis on efficiency in how public funds are allocated
- Evaluation a tool to ensure that resources are used efficiently
  - But also to ensure accountability, to aid planning and design of policy, *etc*.
- Focus here on economic evaluation (not monitoring or audit)
  - A number of agencies involved in setting quality standards, inspection, *etc*. (e.g., HIQA, Mental Health Commission)
  - HSE publishes monthly performance monitoring reports

# National Policy Context

- Department of Public Expenditure and Reform Public Spending Code
  - applies to both capital and current expenditure
  - applies to all stages of 'expenditure lifecycle'
  - CEA/CBA required for all capital spending in excess of €20m
  - sets out new rules for appraisal (economic & financial) of current expenditure proposals in excess of €20m
  - provides for pilot studies
  - incorporates and updates existing VFMPR process (allows for focused policy assessments)
  - sets out central appraisal parameters (e.g., discount rate, time horizon, *etc*.)

Further details: http://publicspendingcode.per.gov.ie/

# National Policy Context

- Role also for (among others):
  - Comptroller and Auditor General
  - Irish Government Economic and Evaluation Service (IGEES)

- Evaluation/VFM also explicitly mentioned in numerous official policy documents, expert group reports on health, *etc*.

- Health technology assessment (HTA) process for medical interventions (e.g., drugs, screening programmes, *etc*.)

- General Issues
  - Data availability
  - Link to budgeting and strategic planning?

# Economic Evaluation Techniques - Health

# Evaluation Techniques - Health

- Economic evaluation/HTA
  - Cost benefit analysis
  - Cost effectiveness analysis
  - Cost utility analysis
  - Cost minimisation analysis

- Policy impact analysis (generally no analysis of costs)
  - Variety of methodologies (depending on data availability)

- Cost of illness/quantification of costs of alternative policies (generally no analysis of benefits)
  - Direct and indirect costing methodologies

# Health Technology Assessment

# Cost Benefit Analysis (CBA)

- Both costs and benefits are presented in monetary terms
- Results in a net present value (NPV)
  - Also IRR and BCR
- Benefits quantified using one of two methods:
  - Willingness to pay
  - Human capital
- In practice, CBA is rarely used in healthcare because of the difficulties of expressing health benefits in monetary terms

# Cost Effectiveness Analysis (CEA)

- Used to compare alternatives that have a common effect (e.g., life years gained)
- Results expressed in terms of cost per unit of effect (e.g., cost per life year gained)
- Useful for comparing alternative treatments, pharmaceuticals, *etc*.
- For comparing two alternative treatments, the incremental cost effectiveness ratio (ICER) is used
  - ICER = (Cost A – Cost B) / (Effect A – Effect B)
  - Generally, B is the *status quo*
  - ICER below a certain threshold is considered cost-effective
  - ICER below zero indicates an intervention that is cost-effective and *cost saving*

# Cost Utility Analysis (CUA)

- An extension to CEA that considers the quality of the additional life years gained (generally the preferred option)
- Results expressed in terms of utility (e.g., cost per quality-adjusted life year gained - QALY)
- QALYs are calculated by assigning a weight (utility) to each possible health state
  - Utility ranges from <0 (states worse than death) to 1 (perfect health)
- ICER may also be calculated:
  - NICE (UK) use an ICER per QALY of £20,000-£30,000
  - NCPE (Irl) use an ICER per QALY of €45,000 for reimbursement of pharmaceuticals (more later)

# Cost Minimisation Analysis (CMA)

- Aims to identify the least expensive intervention
- A special case of CEA and CUA where the benefits are assumed to be the same, just the cost differs
- Limited use
  - Exception is evaluation of generic drugs

# General Issues in HTA

- Specification of parameters
  - Reference/baseline case
  - Study perspective, i.e., payer
  - Target population
  - Time frame
  - Appropriate discount rate
    - HIQA use a 5 per cent discount rate
- Importance of sensitivity analysis
  - To account for uncertainty in model data, methods and assumptions
- Generalisability of the results
  - Particularly when non-Irish data on incidence, prevalence, costs, *etc*. are used
- Budget impact analysis
  - Assesses the net financial impact of an intervention, relative to the status quo

# Health Technology Assessment Application 1 (HTA of HPV Vaccine)

# HTA of HPV Vaccine

- Carried out by NCPE on behalf of HIQA in 2007
- Aim was to compare the cost effectiveness of a HPV vaccine and cervical cancer screening programme with a cancer screening programme alone
- Components
  - Epidemiology: patterns of sexual activity, disease prevalence, screening take-up, *etc*.
  - Costs: direct medical costs to State (i.e., individual costs – lost time, not considered)
  - Outcomes: LYG based on results from international clinical trials
  - Key parameters/assumptions
    - Vaccine efficacy of 95 per cent
    - Vaccine offers lifelong protection
    - Vaccine coverage of 80 per cent
    - Vaccine cost (per dose) €100
    - Vaccine administration cost (per dose) €30
    - School-based vaccination programme
    - Population cervical screening coverage of 80 per cent
    - Discount rate of 3.5 per cent

# HTA of HPV Vaccine

- Methodology
  - Comparator is a population-based cervical screening programme alone
  - Perspective is the cost to the State (i.e., the HSE)
  - Dynamic model describing evolution of disease
  - Herd immunity allowed for
  - Outcome measure is LYG

- Five scenarios examined:
  - Annual vaccination of 12 year old girls
  - Annual vaccination of 12 year old girls + catch-up to 15 years
  - Annual vaccination of 12 year old girls + catch-up to 17 years
  - Annual vaccination of 12 year old girls + catch-up to 19 years
  - Annual vaccination of 12 year old girls + catch-up to 26 years

- Sensitivity analyses (e.g., vaccine cost, one booster dose after 10 years, discount rate, *etc*.) also carried out

# HTA of HPV Vaccine

- Vaccination of 12-year old girls most cost effective
- ICER: €17,383 per LYG
- Guideline ICER: €45,000 per LYG
- Cost: €9.7m per annum
- Vaccination of 12 year old girls remained cost effective under various sensitivity analyses
  - For example, addition of one booster dose after 10 years increases ICER to €24,320

# HTA of HPV Vaccine

- HTA did not consider:
  - Other benefits: improvements in quality of life, cross-protection against other types of HPV
  - Other costs: surveillance systems, education programmes

- NCPE recommended that a programme of HPV vaccination of 12 year-old girls be introduced
  - Commenced in September 2011

- Reports available from:
  www.hiqa.ie/system/files/HIQA_HTA_HPV_Full_report.pdf

# Health Technology Assessment Application 2 (Pharmaceutical HTA)

# HTA of Pharmaceuticals

- Economic evaluation explicit in current agreements with pharmaceutical companies (IPHA/APMI)
  - 'the Health Services Executive reserves the right to assess new and existing technologies (pharmaceuticals, diagnostics and devices) that may be high cost or have a significant impact on the Irish healthcare system' (IPHA, 2012; 2)
- Used to decide whether a pharmaceutical is reimbursed under the various State pharmaceutical schemes (GMS, DP, *etc*.)
- Evaluations carried out by NCPE; advice forwarded to HSE and Minister for Health
- Two stage process:
  - Rapid review
  - Formal HTA for high cost or high budgetary impact products
- Further information available from:

  www.hse.ie/eng/about/Who/cpu/IPHA_APMI_Agreements.html

  www.ncpe.ie/

# HTA of Ivacaftor (Kalydeco)

- Rapid review in August 2012 recommended a full HTA
- Undertook a CUA of Ivacaftor vs. usual standard of care
- Costs per QALY ranged from €449,035 - €855,437
  - Annual cost (for max 120 patients) ranged from €26.5m - €28.2m
  - Concerns over absence of data on long-term health outcomes
  - Reimbursement not recommended 'at the submitted price'
- Subsequent negotiations between supplier, HSE and DoH led to reimbursement ('patient access agreement')
  - Process also used for other pharmaceuticals
- Summary document available from:

www.ncpe.ie/wp-content/uploads/2013/01/Ivacaftor-Summary.pdf

# What is the appropriate threshold?

- €45,000 threshold explicitly stated in 2012 IPHA agreement (drugs)

- Issues:
  - Empirical basis? (recent University of York work)
  - Does it also apply to non-drug interventions?
  - Essentially acts as a price floor

Further reading:

- www.york.ac.uk/media/che/documents/reports/resubmitted_report.pdf
- Brick *et al*., 2013
- O'Mahony and Coughlan, 2015

# Policy Impact Analysis

# Policy Impact Analysis

- Objective is the identify the impact of a ‘treatment’ on an ‘outcome’
  - e.g., effect of insurance/user fees on use of health care services
- Generally no consideration of costs
- Evaluation problem
  - Cannot observe the counterfactual
- Identification
  - Randomised controlled trial (RCT)
  - Quasi-experimental design
- Important role in investigating possible mechanisms

# Randomised Control Trials (RCTs)

- Usually associated with medical interventions

- RAND Health Insurance Experiment
  www.rand.org/health/projects/hie.html
  - Approx. 3,000 families and 8,000 individuals
  - Randomly assigned to 14 different health insurance plans
  - Significant effects on healthcare utilisation, and some effects on health

- Oregon Health Insurance Experiment
  www.nber.org/oregon/
  - Ran a lottery in 2008 to expand Medicaid eligibility (n=75,000)
  - Significant effects on healthcare utilisation, medical debt, financial strain and some effects on health (SAH, depression)

# Alternative approaches

- Quasi-experimental designs mimic random assignment to treatment and control groups using 'exogenous' variation (usually induced by policy changes)
  - e.g., changes in entitlement rules (across time, geography) (de la Mata, 2012)

- Various econometric techniques used to identify (causal) effects
  - Instrumental variables (e.g., Vera-Hernandez, 1999)
  - Regression discontinuity design (e.g., de la Mata, 2012)
  - Difference-in-difference (e.g., Madden *et al*., 2005; Layte *et al*., 2009)
  - Selection on unobservables (e.g., Nolan, 2007)
  - Selection on observables (e.g., Hudson *et al*., 2015; Layte *et al*., 2015)

# Policy Impact Analysis Application 1 (User Fees)

# Policy Impact Analysis
# User Fees

- Extensive empirical literature on impact of user fees on health care utilisation

- Consistent evidence from range of settings (developed *vs* developing countries; experimental *vs* quasi-experimental approaches, *etc*.)

- Key identification problem is distinguishing between moral hazard and other potential reasons for observed effects (e.g., adverse selection)

# Policy Impact Analysis
# User Fees

- Irish system of entitlements to free public health care is unusual (in comparison with other European countries)
  - Particularly for GP services
  - Important role of private health insurance (PHI) in financing hospital (and increasingly, GP) care
  - Major reforms planned and partly underway
    - Free GP care for under 6s and over 70s (introduced summer 2015)
    - Next phase: children aged 6-12

- Important to analyse demand implications of extension of free care

# Entitlements and User Fees

| | GP User Fee | Prescription User Fee |
|---|---|---|
| Full medical card | free | €2.50 per item (€25 limit per family per month) |
| GP visit card | free | full cost up to €144 per family per month |
| PHI with GP cover | full cost at point of use, with full or partial reimbursement by PHI | full cost up to €144 per family per month |
| PHI without GP cover | full cost at point of use | full cost up to €144 per family per month |
| No cover | full cost at point of use | full cost up to €144 per family per month |

*Notes:*
50c per item prescription charge introduced in October 2010; increased to €1.50 per item from January 2013 and to €2.50 from December 2013
€144 deductible increased from €132 in January 2013

**Full medical and GP visit cardholders may also hold PHI ('dual cover')**

# Data

- GUI Infant Cohort
  - At **wave 1**: 11,134 children (average age 9 months)
  - Surveyed between September 2008 and April 2009
  - Sampling frame was Child Benefit Register
  - At **wave 2**: 9,793 children (average age 3 years)
  - Surveyed between January 2011 and August 2011
  - Response rate of 88 per cent
- GUI Child Cohort
  - At **wave 1**: 8,568 children (average age 9 years)
  - Surveyed between August 2007 and May 2008
  - Sampling frame was the national school system
  - At **wave 2**: 7,525 children (average age 13 years)
  - Surveyed between August 2011 and March 2012
  - Response rate of 89 per cent

# Research Questions

- How has entitlement to free GP care changed between wave 1 and wave 2 of the Infant & Child Cohorts?

- What is the impact of gaining a full medical or GP visit card, i.e., removing GP user fees, on GP visiting?

- What is the impact of losing a full medical or GP visit card, i.e., introducing GP user fees, on GP visiting?

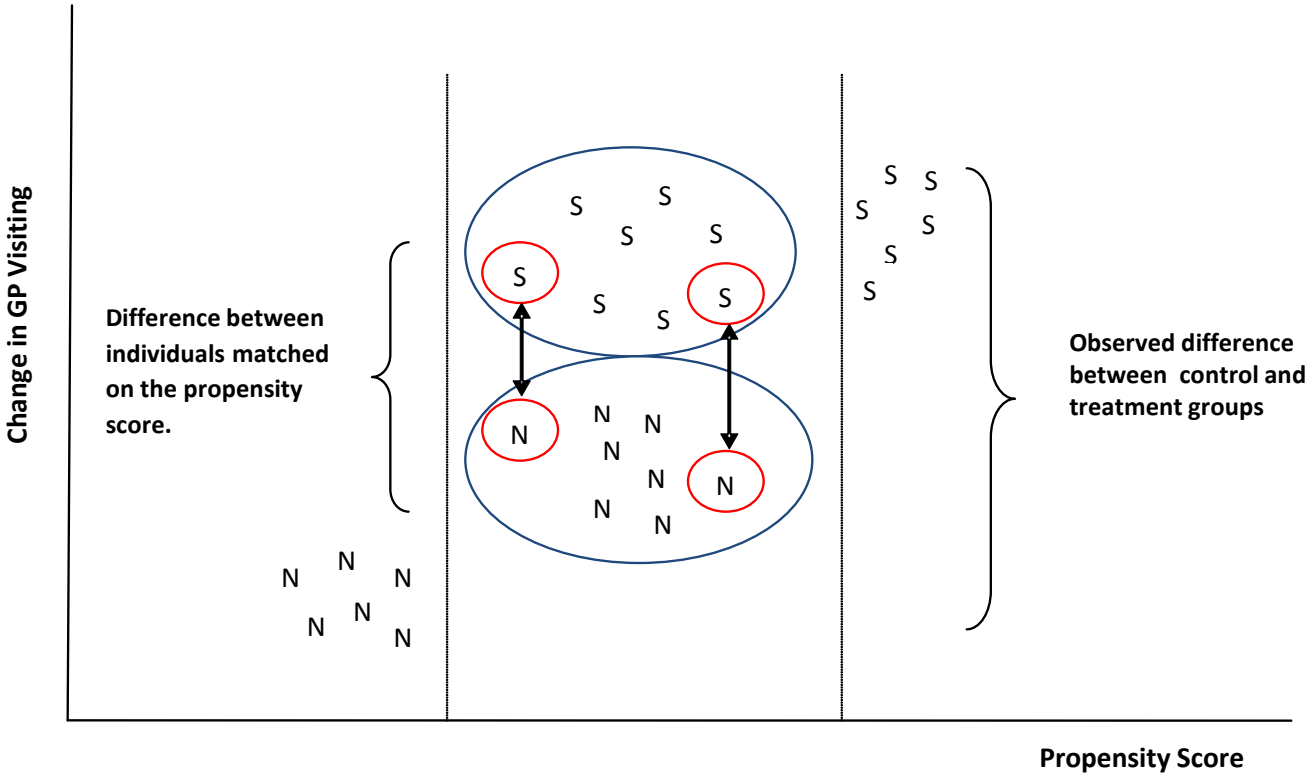
# Methods

- Objective is to analyse the impact of a treatment (i.e., change in entitlement) on an outcome (change in GP visiting)

- Use propensity score matching (PSM) methods

- Method compares the outcomes of treated and control observations that are matched in terms of observable characteristics
  - Matched on basis of propensity score (derived from probit model of probability of treatment)
  - Non-parametric
  - Use a difference-in-difference PSM approach: also allows for selection on (time-invariant) unoservables

# Propensity Score Matching



# Definitions

- Two transitions examined

- Gaining a full medical or GP visit card

| | Wave 1 | Wave 2 |
|---|---|---|
| Control | Private | Private |
| Treatment | Private | Public |

- Losing a full medical or GP visit card

| | Wave 1 | Wave 2 |
|---|---|---|
| Control | Public | Public |
| Treatment | Public | Private |

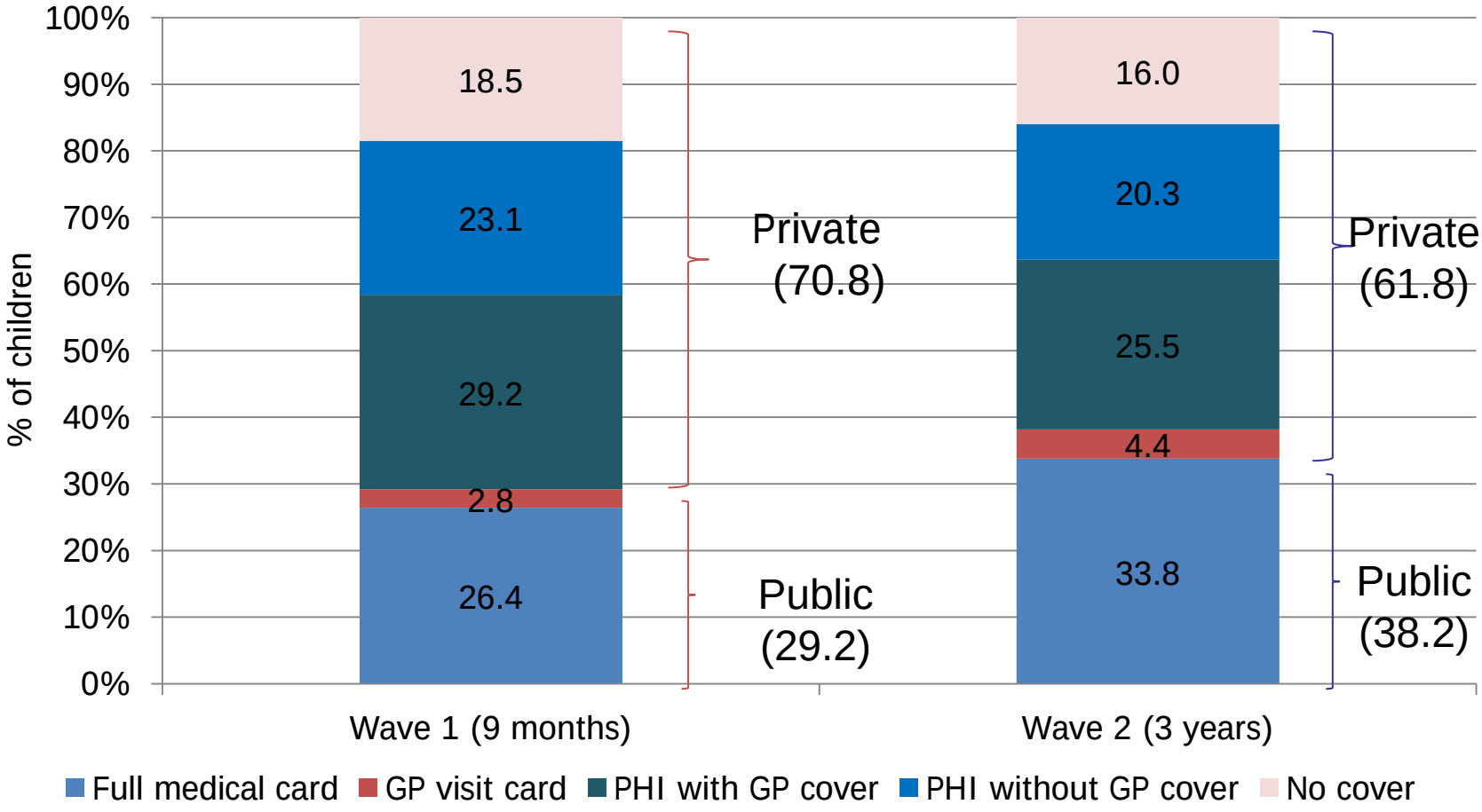
# Variables

- Outcome Variable
  - Change in number of GP visits between wave 1 and wave 2

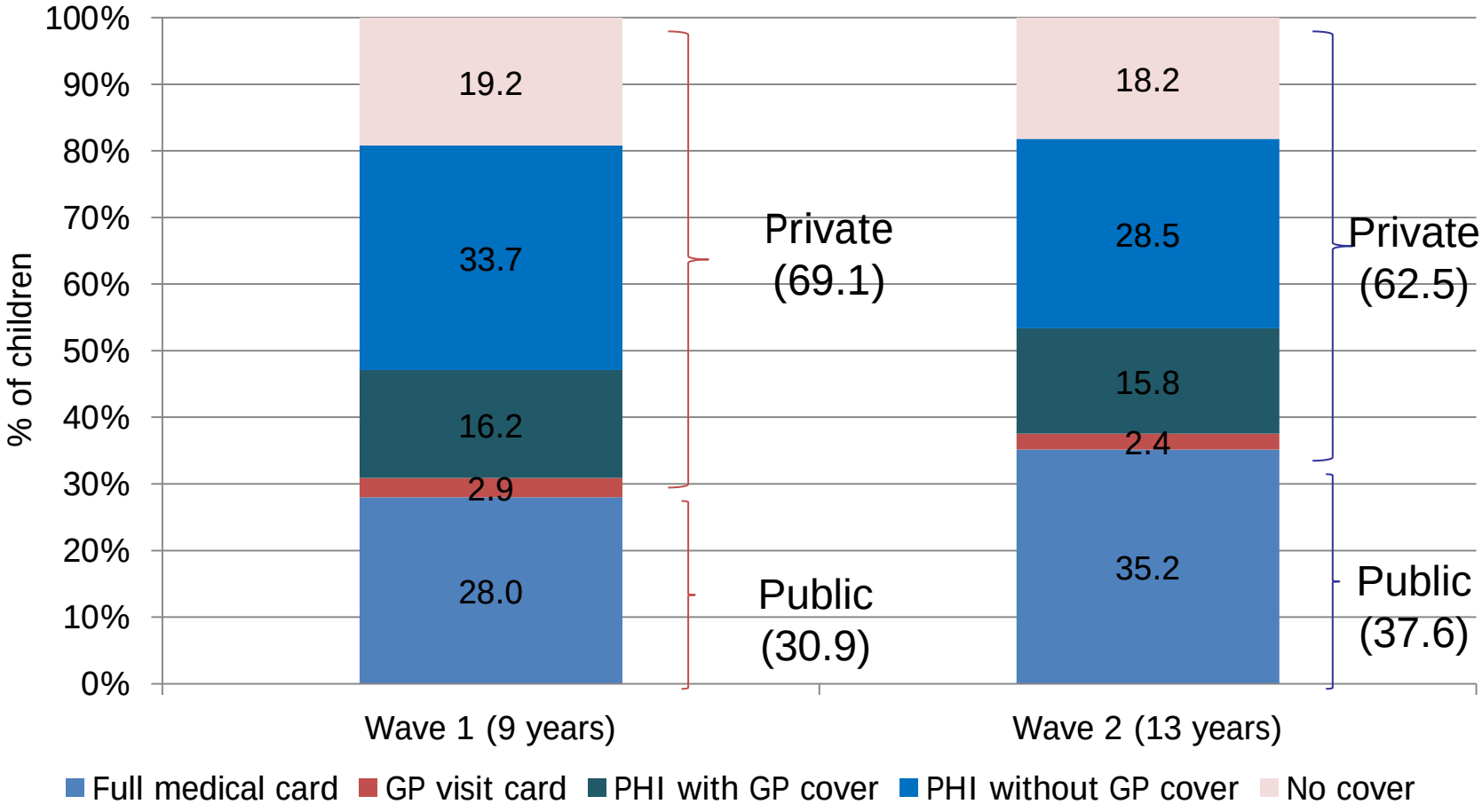
- Control Variables (to estimate propensity score):
  - Child: sex; health
  - Pregnancy/birth: birth weight; gestation; smoking; breastfeeding
  - Mother: age; health; education; employment; marital status
  - Household: equivalised income; deprivation; urban/rural

  - All measured at wave 1

# Public Healthcare Entitlements (Infant)



# Public Healthcare Entitlements (Child)



# Summary Statistics (Gaining)

- Gaining a full medical or GP visit card (Infant Cohort)

| | Wave 1 | Wave 2 | Outcome | N |
|---|---|---|---|---|
| Control | 3.3 | 2.2 | -1.1 | 5,636 |
| Treatment | 3.2 | 2.8 | -0.4 | 1,071 |

- Gaining a full medical or GP visit card (Child Cohort)

| | Wave 1 | Wave 2 | Outcome | N |
|---|---|---|---|---|
| Control | 0.8 | 0.8 | 0.0 | 5,022 |
| Treatment | 0.8 | 1.2 | 0.4 | 754 |

# Summary Statistics (Losing)

- Losing a full medical or GP visit card (Infant Cohort)

| | Wave 1 | Wave 2 | Outcome | N |
|---|---|---|---|---|
| Control | 4.3 | 3.2 | -1.1 | 2,351 |
| Treatment | 3.9 | 2.7 | -1.2 | 276 |

- Losing a full medical or GP visit card (Child Cohort)

| | Wave 1 | Wave 2 | Outcome | N |
|---|---|---|---|---|
| Control | 1.3 | 1.6 | 0.3 | 1,185 |
| Treatment | 1.3 | 1.1 | -0.2 | 274 |

# PSM Estimates

| | Infant Cohort | Child Cohort |
|---|---|---|
| Gaining a full medical/GP visit card | 0.69<br>(0.15)*** | 0.44<br>(0.10)*** |
| *% change from wave 1* | *21.6* | *54.7* |
| | | |
| Losing a full medical/GP visit card | -0.14<br>(0.32) | -0.58<br>(0.20)*** |
| *% change from wave 1* | *-* | *-44.6* |

*Notes:*
Kernel matching estimates
Bootstrapped standard errors in parentheses
*** significant at 1% level; ** significant at 5% level; * significant at 10% level

# Discussion

- Irish system of entitlements to free GP care is unusual internationally
  - Initial evidence that this system has *causal* effects on utilisation
  - Consistent with international evidence

- Caveats:
  - Results based on just two waves of data
  - Results based on AMF: GP visits are top-coded
  - Cannot (yet) examine impact of gaining a GP visit card

- Key question for future research using longitudinal data:
  - Do user fees discourage healthcare use, and impact on health and other outcomes?

# Policy Impact Analysis
# Application 2 (Provider Payment)

# Policy Impact Analysis
# Provider Payment Method

- Large theoretical and empirical literature on impact of reimbursement method on provider behaviour

- Essentially, three main methods of payment:
  - Per unit of service: fee-for-service (FFS)
  - Per patient: capitation
  - Per unit of time: salary

- Trade-offs involved in choosing one method over another

- Concerns over supplier-induced demand associated with FFS

# Provider Payment Method: Trade-offs

- Trade-offs involved in choosing one method over another

| | Fee-for-Service | Capitation | Salary |
|---|---|---|---|
| Activity | + | ~ | - |
| Access | + | ~ | - |
| Preventive Care | - | + | ~ |
| Cost Containment | - | + | + |

# Policy Impact Analysis
# Provider Payment Method

- Change in reimbursement of GPs for medical card patients in 1989

- Previously, GPs received a FFS payment for medical card and private patients
  - Change to capitation for medical card patients in 1989
  - Motivated in part by concerns over supplier-induced demand

- So did the change in reimbursement have an impact on GP behaviour?

# Policy Impact Analysis
# Provider Payment Method

- Ideally, directly observable data on doctor behaviour would be available
- In reality, infer doctor behaviour from data on GP visiting patterns
- Hypothesis: as a result of the change in reimbursement, GP visiting rates for medical card patients should fall, while those for private patients should not change
- Data
  - 1987, 1995 and 2001 micro-data on GP visiting patterns

# Policy Impact Analysis
# Provider Payment Method

- Difference-in-difference analysis

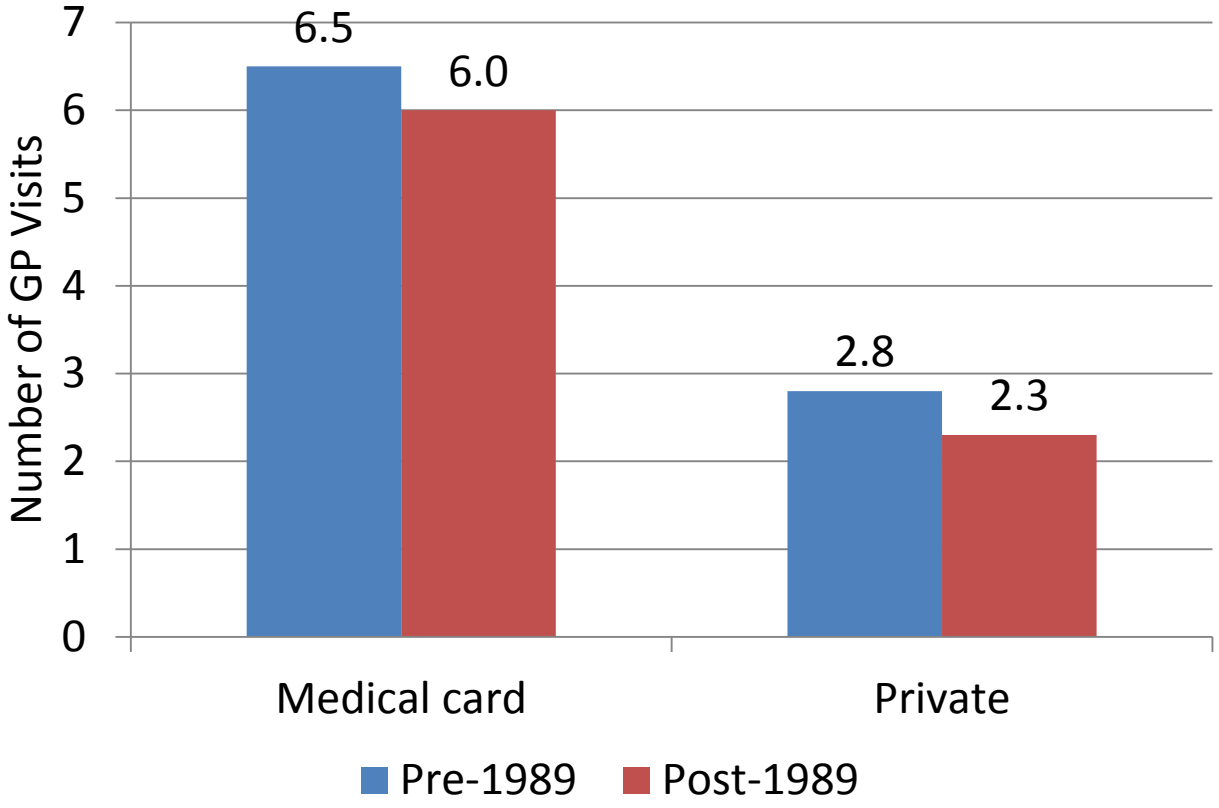
- Compare the outcomes of control and treatment groups before and after the policy change, i.e.,

  $(\text{GP visits}_{\text{mc,post-1989}} - \text{GP visits}_{\text{mc,pre-1989}}) -$
  $(\text{GP visits}_{\text{private,post-1989}} - \text{GP visits}_{\text{private,pre-1989}})$

- If GPs were engaging in demand-inducing behaviour prior to 1989, we would expect to see a negative DID effect

# Policy Impact Analysis
# Provider Payment Method

Average number of GP visits per annum



# Policy Impact Analysis
# Provider Payment Method

- So what did we find?
- Positive but largely insignificant DID effect
- Visiting rates fell for both the control and treatment groups, but by a greater amount for the control group
- Why?
  - Due to GPs increasing their prices for private patients?
  - Due to GPs changing other aspects of care (quality rather than quantity of visits)?
  - Due to private patients substituting other health care services for GP services?
  - Anticipation effects?

References:

Madden, D., Nolan, A. & Nolan, B. (2005) GP reimbursement and visiting behaviour in Ireland. *Health Economics*, 14 (10), 1047-1060

Madden, D. (2007) Doctors' fees in Ireland following the change in reimbursement: did they jump? *Economic and Social Review*, 38 (2), 259-274

# Cost of Illness

# Cost of Illness

- No consideration of benefits

- Used to estimate the cost of illness
  - Increasingly used in public health (e.g., cost of smoking, obesity, *etc*.)
  - Can aid prioritisation

- Components
  - Quantification of direct costs
  - Quantification of indirect costs
  - Sensitivity analysis

# Cost of Illness Application (Cost of Stroke)

# Cost of Stroke in Ireland

- Carried out by the ESRI for the Irish Heart Foundation (IHF)
- Assembled baseline data on the economic burden of stroke and transient ischaemic attack (TIA) in Ireland
- Also estimated the potential costs of key interventions
- Also carried out projection exercises to consider the impact of demographic and epidemiological change on costs
- Report available from:
  www.esri.ie/UserFiles/publications/bkmnext170.pdf

# Cost of Stroke in Ireland

- Prevalence-based study over one year (2007), i.e., aggregating stroke-related costs for all those who already have, or develop the disease
- Adopts a societal perspective (i.e, State, individuals, *etc*.)
- Three components:
  - Incidence and prevalence data
  - Direct costs
  - Indirect costs
- Direct costs estimated using a bottom-up approach
- Indirect costs estimated using the human capital approach
- Intangible and transport costs not estimated

# Cost of Stroke in Ireland

- Total direct and indirect costs estimated between €489m (low prevalence) and €805m (high prevalence)
  - Direct costs account for approx. 70 per cent of the total
- Amounted to between 2-4 per cent of total health expenditure and 0.2-0.3 per cent of GNP (2007)
  - In line with international estimates
- Nursing home care accounted for a higher proportion of cost in Ireland (45 per cent)
- Sensitivity analysis examined impact of differences in incidence rates, costing methods and costing parameters
  - Based on different assumptions, costs ranged from €470m-€1,008m

# Cost of Stroke in Ireland

- Also estimated the cost of stroke (and benefits; strokes avoided and deaths averted) under 4 alternative interventions:
  - better management of atrial fibrillation (preventive care)
  - improved access to thrombolytic therapy
  - increased availability of organised stroke unit care
  - improved community rehabilitation

- Also estimated the cost of stroke in 2021 based on population projections
  - Cost of stroke estimated to be between €743m to €1,266m

- Also estimated the cost of stroke in 2021 based on population projections and changes in stroke epidemiology
  - Cost of stroke estimated to be between €881m to €1,500m

# Summary

# Summary and Conclusions

- Challenging macroeconomic environment
- Requires difficult decisions for resource allocation
- Economic evaluation a key tool
- Economic evaluation in health:
  - Health technology assessment
  - Policy impact analysis
  - Cost of illness
- Questions/discussion?

# Contact

Anne Nolan

Economic and Social Research Institute

Whitaker Square,

Sir John Rogerson's Quay,

Dublin 2

Anne.Nolan@esri.ie

# Additional Material

# 2014-2017 Public Expenditure Allocations

| | 2015 | 2016 | 2017 |
|---|---|---|---|
| Total public health expenditure (€bn) | 13.079 | 13.253 | 13.292 |

- Small increases in public health expenditure forecast (but
- Document available from: http://www.per.gov.ie/en/comprehensive-review-of-expenditure/

# Comptroller & Auditor General VFM Reports

- VFM reports a key driver of accountability in the use of public resources
- Reports presented to Committee on Public Accounts
- VFM reports of relevance to health:
  - 2014 (83): Managing Elective Day Surgery
  - 2010 (70): Emergency Departments
  - 2007 (55): Medical Consultants' Contract
  - 2006 (52): Provision of Disability Services by Non-profit Organisations
  - 2005 (51): Development of Human Resource Management System for the Health Services
  - 2005 (49): Waste Management in Hospitals
  - 2003 (44): Waiting List Initiative
  - 1998 (20): The Emergency Ambulance Services
  - 1998 (19): Prescribing Practices and the Development of General Practitioner Services

# Comptroller & Auditor General VFM Reports

- C&AG also produces annual *Report of the Account of Public Services*
- Discusses matters arising from audit of Departmental accounts
- Health a common feature of in-depth analyses
  - For example, the 2014 report examined
    - Compliance with prompt payment legislation in the health sector
    - Management of private patient income in the health sector
    - Control over the supply of high-tech drugs and medicines
- Reports available from:
  www.audgen.gov.ie/

# 2001 VFM Audit of the Health Service

- Identified the challenges to VFM in the Irish health service:
  - Governance and accountability
  - Strategy and service planning
  - Service delivery
  - Organisation structure
  - Performance measurement

- Critical of the planning and evaluation record of the DoHC:
  'it is our view that there has been an overall inconsistent and irregular (in terms of frequency) approach to monitoring and evaluation' (DoHC, 2001; 152)

  'the assessment of funding of developments is quite often not fully costed..' (DoHC, 2001; 153)

- Impact of loose budget constraint on evaluation (or lack of)

- Highlighted the importance of quality information systems to aid evaluation

- First to recommend a 'Health Information and Evaluation Agency'

- Report available from:
  http://www.dohc.ie/publications/pdf/vfmmain.pdf?direct=1

# 2001 Health Strategy

- 4 goals
  - Better health for everyone
  - Fair access
  - Responsive and appropriate care
  - High performance

- High performance:
  - A key objective is that 'evidence and strategic objectives underpin all planning/decision-making'
  - Decisions will be based on:
    - research findings
    - statistical qualitative or quantitative data
    - other documented trends and behaviours
  - Decisions in all areas must be supported by reference to this kind of evidence or to agreed standards, protocols or models of best practice.
  - A Health Information and Quality Authority will be established to drive the quality agenda at national level

- HIQA established in 2007

- Report available from:
  http://health.gov.ie/blog/publications/quality-and-fairness-a-health-system-for-you/

# 2006 VFM & Policy Review Initiative

- Objective is ‘to analyse Exchequer spending in a systematic manner and to provide a basis on which more informed decisions can be made on priorities within and between programmes’ (DoF, 2007;  4)

- Evaluation carried out by officials in relevant Department/Agency; now overseen by officials in Central Expenditure Evaluation Unit of DoPER

- Health-relevant reviews for 2009-2011 cycle:
  - Efficiency and Effectiveness of Disability Services
  - Economic Cost and Charges Associated with Private and Semi-Private Treatment Services in Public Hospitals

- Relationship with CAG function?

# 2012 Value for Money and Policy Review of Disability Services

- Conducted as part of the 2009-2011 Value for Money reviews

- It carried out an evaluation of the efficiency and effectiveness of disability services in Ireland wholly or partly funded by the HSE, including the statutory and non-statutory sectors.

- Particularly critical of information deficiencies
  - Impossible to evaluate the efficiency and effectiveness of large increases in expenditure in the sector during the 2000s

- Document available from:

  http://health.gov.ie/blog/publications/value-for-money-and-policy-review-of-disability-services-in-ireland/

# 2009 Report of the Special Group on Public Service Numbers and Expenditure

- Identified total savings of €5.3bn (€1.2bn in health)

- Critical of evaluation capacity and record of Government departments

  'The management focus across departments generally still seems to be on securing and retaining the maximum value of expenditure for particular areas, and on accounting for Departmental activities in financial terms; details on outputs and actual performance seem secondary' (McCarthy, 2009; 22)

- Made a number of recommendations in relation to CBA procedures, role of CAG, conduct of ex-post evaluations, *etc*.

- Report available from:

  http://oldwww.finance.gov.ie/viewdoc.asp?DocID=5861

# 2010 Expert Group on Resource Allocation and Financing in the Health System

- Highlighted the crucial role of economic evaluation in supporting an efficient, equitable and sustainable health system

  'There is little evidence of a system of economic evaluation currently underpinning the health-care system in Ireland. One recent exception is the move by the HSE to undertake an economic evaluation of new drugs ….. The Group's view is that the introduction of a more transparent economic evaluation system, covering both capital and current expenditures, is overdue' (Ruane, 2010; 68)

- Recommendation in respect of economic evaluation of drugs and medicines

- Report available from:

  www.dohc.ie/publications/resource_allocation_financing_health_sector.html

# 2011 Programme for Government

'We will insist that major capital projects are subjected to proper cost-benefit analysis and evaluation, improving future productivity and growth prospects, and that the value-for-money obtained is significantly enhanced compared to the most recent period'

'We will change the current emphasis on performance reporting to performance management. All medium to long-term projects that involve significant public spending will be subject to cost benefit analysis, and to on-going evaluation'

- Commitment to broaden the powers of the CAG; performance monitoring
- 2011 Comprehensive Spending Review
- Document available from:

  http://www.taoiseach.gov.ie/eng/Publications/Publications_2011/Programme_for_Government_2011.pdf

# 2012/2013 Programme for Government Supporting Documents

- Supporting documentation for PfG proposals
  - Future Health
  - The Path to Universal Healthcare
  - The Establishment of Hospital Groups
  - Money Follows the Patient

- Evidence-based decision-making?
  - Some literature reviews

- Documents available from:

  http://health.gov.ie/future-health/delivering-the-reform-programme/

# 2013 Healthy Ireland

- Framework for health and well-being in Ireland 2013-2025

- Sets out a set of high-level goals, principles and action themes

- Two of the six action themes relevant:
  - Theme 5: Research and Evidence

    'An important feature of Healthy Ireland is its focus on research, to ensure that goals, programmes and funding decisions are based on robust evidence about the determinants of health and best practice approaches in addressing them'

  - Theme 6: Monitoring and Evaluation

    'An Outcomes Framework will be developed that will specify standard indicators requiring regular measurement so as to monitor and drive the achievement of Healthy Ireland's targets and performance indicators'

- Document available from:

  http://health.gov.ie/healthy-ireland/