

### Using data and information systems

Anne-Marie Brooks & Gillian Roche Research Unit Department of Children & Youth Affairs



An Roinn Leanaí agus Gnóthaí Óige Department of Children and Youth Affairs



# **Overview of workshop**

- Introduction to work of Research Unit, DCYA
- Link to work of CSCs
- Experience to date
- National strategic initiatives
- Overview of existing data resources





# Background

- Research Unit, Department of Children and Youth Affairs
- Established to implement Goal 2 of National Children's Strategy 2000-2010

Children's lives will be better understood, their lives will benefit from evaluation, research and information on their needs, rights and the effectiveness of services.





- Objectives
  - More coherent understanding of children's development and needs among those working with children
  - Develop an evidence-based approach to decision-making at all levels including point of service delivery
  - Improve the commissioning, production and dissemination of research and information
  - Improve evaluation and monitoring of children's services





- Commissioned research
  - Largest study Growing Up in Ireland, the National Longitudinal Study of Children in Ireland
  - Other studies on specialised sub-populations
    - Children in the child protection services
    - Children in hospital
    - Children in situations of domestic violence
    - Children as carers





- Capacity building
  - Research scholarship programme
  - Research placement programme
  - Direct funding for programmes:
    - Children's Research Centre, TCD PhD programme
    - Summer / winter schools via IRCHSS





- Data infrastructure
  - National set of child-well being indicators
  - Dissemination programme
    - <u>www.childrensdatabase.ie</u>
    - Briefing notes from commissioned / funded research (in production)
  - National Strategy for Data and Research on Children's Lives 2011-2016





### National Set of Child-Well Being Indicators

- Development
- Applicability to the work of CSCs
- Coverage and limitations
- Challenges at national level and local level





### National Set of Child-Well Being Indicators: Selection Criteria

- Comprehensive coverage
- Children of all ages
- Clear and comprehensible
- Positive outcomes
- Forward-looking
- Rigorous methods
- Geographically detailed
- Cost-efficient
- Reflective of social goals





# **Applicability to work of CSCs**

- Provide baseline data, nationally and at lowest available level of geography
  - Planning services
  - Targetting resources
  - Assessing impact
  - Measuring outcomes

OR

• Get a picture of children's lives





### National Set of Child-Well Being Indicators: Overview

- Biennial State of the Nation's publication since 2006 most recently Dec 2010
- 42  $\rightarrow$  49 child well-being indicators
- 7 socio-demographic indicators
- Disagregrated by age, gender, social class and geographic location, Traveller status, immigrant status, disability status where possible
- Of those originally not available for initial set
  - Pets and animals V
  - Quality of early childhood care and education  ${\bf V}$
  - Nutritional outcomes (overweight and obesity) V
- NEW! disability and accident and injuries indicators





# **National Service Outcomes**

- Children will be ...
  - Healthy both physically and mentally
  - Supported in active learning
  - Safe from accidental and intentional harm
  - Secure in the immediate and wider physical environment
  - Economically secure
  - Part of positive networks of family, friends, neighbours and community, and
  - Included and participating in society



# Linking the indicators and outcome areas HILDREN

National Service Outcome 1	Children will be healthy, both physically and mentally
Area	Indicators
Sexual health and behaviour	The number of births to girls aged 10-17
Youth suicide	The number of suicides among children aged 10-17
Disability	The number of children under 18 years registered as having an intellectual disability
Disability	The number of children under 18 registered as having a physical or sensory disability
Low birth weight	The percentage of babies born weighing less than 2,500 grams (live and still births)
Breastfeeding practice	The percentage of newborn babies who are breastfed on discharge from hospital
Health and hospitalisation	The principal conditions resulting in hospitalisation among children
Screening for growth and development	The percentage of mothers of newborn children visited by a Public Health Nurse (PHN) within 48 hours of discharge from hospital
Screening for growth and development	The percentage uptake of developmental screening at 7 to 9 months
Ante-natal care	The distribution of timing of first antenatal visit by trimester for all women delivering live or stillborn babies
Childhood immunisation	The percentage uptake of the recommended doses of vaccines in children at (a) 12 months and (b) 24 months of age
Accessibility of basic health services	The number of children on hospital waiting lists.
Mental health referrals	The number of admissions to psychiatric hospitals among children
Nutritional outcomes	The percentage of children aged 7 in the following BMI categories: normal, overweight, obese
Self-esteem	The percentage of children aged 9-17 who report feeling happy always or very often with the way they are.
Self-reported happiness	The percentage of children aged 9-17 who report being happy with their lives at present.
Physical activity	The percentage of children aged 9-17 who report being physically active for at least 60 minutes per day on a) at least 2 days and b) more than 4 days per week.
Nutritional habits	The percentage of children aged 9-17 who report eating breakfast on 5 or more days per week



# **Challenges in national reporting**

- Data availability
- Data disaggregation
- Data timeliness
- Data quality





#### **Challenges in national reporting**

Data Source	Data Type	Period	Last collected/ published	Geographic
Census of the Population	Census	Quinquennial	2006/2011 upcoming	Electoral division
Programme for International Student Assessment	Survey	Triennial	2009	Not specified
European Survey of Income and Living Conditions	Survey	Annual	2010	NUTS III
Health Behaviour in School-Aged Children	Survey	Quadrennial	2006	
Quarterly National Household Survey: Childcare	Survey	Not fixed	2007	NUTS III
Triennial Assessment of Housing Need	Administrative	Triennial	2008	Local Authority
Population estimates and projections	Survey	Annual	2009	
National Intellectual Disability Database	Administrative	Annual	2008	County/ Local Health Office
National Physical and Sensory Disability Database	Administrative	Annual	2008	County/ Local Health Office
National Psychiatric In-Patient Reporting System	Administrative	Annual	2008	County
Hospital In-Patient Enquiry	Administrative	Annual	2008	County
National Perinatal Reporting System	Administrative	Annual	2007	County
Vital Statistics (birth, deaths and marriages)	Administrative	Annual	2009	County
Immunisation Uptake Statistics	Administrative	Annual	2009	Local Health Office
Childcare Interim Dataset	Administrative	Annual	2008	Local Health Office
National Education Welfare Board Statistics	Administrative	Annual	2007/08	County
An Garda Siochana Statistics	Administrative	Annual	2009	Garda Region and Division



# **Reporting at local level**

- Similar issues, but even more so....
  - Data availability, disaggregation, timeliness, quality
  - Data protection
  - Disclosive data (youth suicide, teen births)
  - Data harmonisation
  - Data reporting (local vs. national report, audience, reporting period)
  - Data handling capacity / expertise
  - Bigger questions:
    - Relevance of national indicators (national vs local priorities)
    - Requirement for local indicators (how important is comparability across CSC's, new / differing data systems)





# **Issues identified by CSCs**

- Availability of information
- Where to find it
- Time and resources to pull it together
- Over reliance on local authority and HSE
- Lack of communication info subgroup and CSC
- Lack of national approach to data collection and harvesting





# Things that worked well for CSCs

- National Indicator set
- Availability of data such as
  - Census data, Local Authority data, ECCE data, Pobal, Dept. of Education
- Information subgroup set up between HSE and local authority
  - Joint chairs of Information Subgroup
  - Data Collection
  - Driving the direction of the subgroup
- Using existing resources within organisations
  - In-house expertise, experience, resources etc
  - Access to wider range of data through Information Subgroup
- Greater integration of projects
  - Avail of data collected through other projects





# National initiatives to improve quality and availability of data on children's lives

- Strategic approaches
  - National Strategy for Data and Research on Children's Lives
  - Irish Statistical System (NSB / CSO)
- Improved use and dissemination
  - Central Statistics Office
    - Administrative Data Centre
    - Databank / Census SAPMAPs
  - All Ireland Research Observatory





- Developed by Research Unit, Dept of Children and Youth Affairs
  - Commitment in Towards 2016
  - Initial focus on data esp. childcare data
  - Broadened to more comprehensive understanding of children's lives & to include research as well as data
  - Evidence based policy, consultation and exisitnd data holdings
  - Extensive consultation at all stages of development.

An Roinn Leanaí agus Gnóthaí Óige Department of Children and Youth Afl



- Thematic structure
  - Five themes based on National Service Outcomes
    - Healthy both physically and mentally
    - Supported in active learning
    - Safe from accidental and intentional harm and secure in the immediate and wider physical environment
    - Economically secure
    - Part of positive networks of family, friends, neighbours and community, and Included and participating in society





Objective		Action Area		
A	To generate a comprehensive and coherent understanding of children's	1	Build and improve both survey and administrative information around children's lives	
	development, needs and appropriate supports and services	2	Support and promote maximal use of existing information	
		3	Support and inform the generation of new information	
В	To develop research capacity in the area of children's data and research	4	Build capacity in the area of children's research and information	
С	To develop, support and promote good infrastructure in the area of children's research and data	5	Contribute to and inform national developments around data and information on children's lives. Provide a mechanism for the continued development of appropriate methodologies and concepts in relation to data on children's lives.	
		6	Develop an overarching governance structure for research around children including ethical review	
D	To improve evaluation and monitoring of children's services in Ireland at local, national and international level	7	Develop coherent approaches to evaluation of services, supports and interventions around children's lives	
E To support a continuum of research and data use within policy and practice settings.		8	Improve awareness, knowledge and understanding of the potential of research and data in these settings, contribute to change in attitudes perceptions and ideas in relation to utilisation of information around children's lives. Provide resources and support for utilisation of information and research in policy and practice.	





- Action plan
  - Structured under the five objectives / eight action areas
  - Each action linked to one of the five themes
  - ~125 actions across 22 statutory bodies
  - Focus on making use of existing data, improving information systems, building analytical capacity
- Due for publication by end 2011





# **Irish Statistical System**

- Strategic direction of National Statistics Board
- Whole System Approach to official statistics
  - Informing decisions/policy
  - Statistical infrastructure
  - Person identifier,
  - Postcodes,
  - Standard classifications
  - Exploiting administrative data for statistical purposes





# **CSO – Administrative Data Centre**

- Administrative data for statistical purposes
- Strengths
  - Comprehensive about an administrative population, regular, cost
- Weakness
  - Designed for administrative purposes, not necessarily what you are interested in, access, timeliness, understanding (transaction based), upfront cost
- Examples
  - Live register, ECCE, Post primary schools database
  - Data linkage
  - Exponential increase in value





# **CSO – Administrative Data Centre**

- Person Activity Register
  - Record for each year, each persons administrative activity with the state.
  - Birth, receive child benefit, ECCE, primary, Secondary, Third level, FETAC, FAS, Employment, Self employed, unemployed, retired
  - Structural analysis of population
  - Track cohorts within population for statistical analysis
  - Key for more in depth analysis of population cohorts





# CSO – SAPs data

- SAPS Small Area Population Statistics
- Available by different geographic areas
- Themes relating to demography, socio-economic status, occupations and industry, education, lifestyle, household structure.
- Available through interative tables or mapping interface

http://census.cso.ie/censusasp/saps/boundaries/sap <u>s.htm</u>





# **All-Ireland Research Observatory AIRO**

- Research unit and interactive spatial data portal National University of Ireland, Maynooth
- Joint initiative of the National Institute for Regional and Spatial Analysis (NIRSA) and the National Centre for Geocomputation (NCG)
- Includes National Child Well-being Indicators
- Census data
- Live Register data
- Local data holdings

#### <u>www.airo.ie</u>

