#### Cancer care in Northern Ireland: A decade of change



#### **Changing Cancer Services**

- 1994 Northern Ireland Cancer Registry (NICR) established
- 1995 Calman Hine Report (UK)
- 1996 Campbell Report (NI)
- 1999 First cancer incidence data for Northern Ireland covering 1993-1996
- 2004 NI Cancer Network (NICaN) established
- 2006 Cancer Centre Opened
- 2008 Waiting times initiative
- 2009 Development of Cancer Patient Pathway System (CaPPS)
- 2011 Cancer framework launched

The Campbell Report (1996) resulted from the work of many clinicians, service planners and patients who worked together with the aim of improving cancer services.

#### Key report recommendations

- Patients be managed by multidisciplinary teams;
- Appropriate training for staff;
- Establishment of a single Cancer Centre and 4 otherCancer Units (one in each Health Board);
- Radiotherapy services to be moved to the Cancer
- Chemotherapy to be available in each Cancer Unit;
- Review of palliative services:
- Additional investment in oncology services

#### **NICR** audits

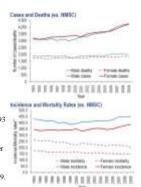
- AIM to document changes in cancer services between 1996 and 2006.
- Conducted at five yearly intervals by reviewing clinical notes of patients registered with NICR
- Cancers covered:
  - Upper GI: Oesophagus and stomach (96,01,05)
  - Colorectal (96,01,06) Breast (96,01,06)
  - Prostate (96.01.06)
  - Lung (96,01,06)

  - Pancreas (01,07) Thyroid (01/02,04/05)
  - Melanoma (06)
  - Ovary and cervix (96,01)
  - Lymphoma & Leukaemia (08)

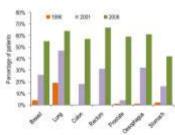


#### Cancer trends

- In 2009 (ex. NMSC)
  - · 4,260 male, 4,209 female cancer
  - · 1,955 male, 1,832 female cancer deaths
- Increase of 74 male and 60 female cases per year
- Increased of 9 deaths per year for each sex
- Change partially due to an increasing and ageing population.
- Male incidence rates, decreased between 1993 and 1999 by 1.7% per year, but increased by 1.5% per year in 1999-2009.
- Female incidence rates increased by 0.6% per year between 1993 and 2009.
- Mortality rates decreased by 1.3% for males and 0.9% for females between 1993 and 2009.

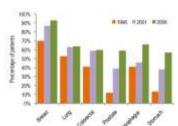


### Multidisciplinary team meetings



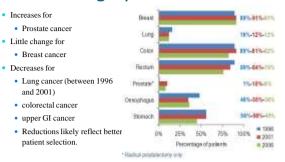
- The proportion of patients recorded as having had a MDT meeting increased year on year between 1996 and 2006
- A maximum of 67% was recorded as having had a MDT meeting (for rectal cancer patients
- It is expected that the use of the CaPPS system will improve recording of MDT meetings further.

# Referral to oncology



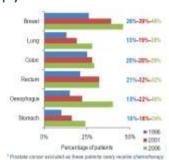
- The proportion of patients referred to oncology increased for all cancer types between 1996 and 2001.
- A further increase was recorded between 2001 and 2006 for:
  - breast cancer
  - prostate cancer
- · cancers of the oesophagus and stomach.
- 2001 levels were maintained for lung and colorectal cancers.

#### **Cancer Surgery Trends**

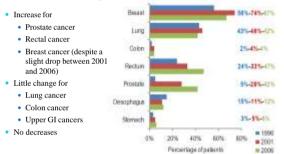


#### **Chemotherapy Trends**

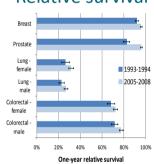




## Radiotherapy trends

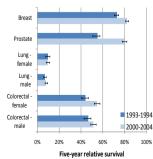


#### Relative survival trends (1-year)



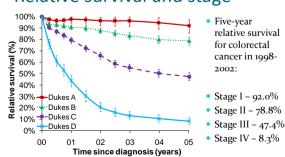
- Improvement in almost all forms of cancer - most not significant but survival did not worsen for any cancer site.
- Significant improvement:
  - 4.0% increase for female breast cancer
  - 13.5% increase for male prostate cancer
  - 5.9% increase for male colorectal cancer
  - 4.8% for lung cancer (both sexes combined)

### Relative survival trends (5-year)



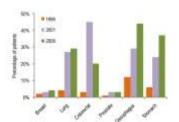
- Improvement in almost all forms of cancer - most not significant but survival did not worsen for any cancer site.
- Significant improvement:
- 9.1% increase for female breast cancer
  - 24.7% increase for male prostate cancer
- 10.6% increase for male colorectal cancer

## Relative survival and stage



#### Referral to palliative care specialist

- Increased between 1996 and 2001 for
  - Lung cancer
  - Colorectal cancer
  - · Upper GI cancers
- Increased again between 2001 and 2006 for upper GI cancers
- Decreased between 2001 and 2006 for colorectal cancer
- Little change for
  - Breast cancer
  - · Prostate cancer

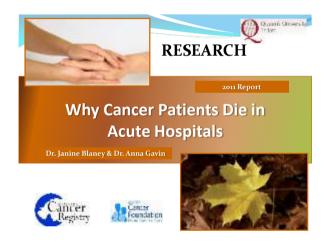


## Research at the Northern Ireland Cancer Registry

- Palliative care
- Early diagnosis
- International survival







## Background

- Over 27% of all deaths (4,300 persons) in N.I. are due to cancer,
- Most cancer patients wish to end their life at home
- On average, only 32% and decreasing % of patients in N.I. achieve home death,
  with 48% dying in a hospital setting



#### **Findings**

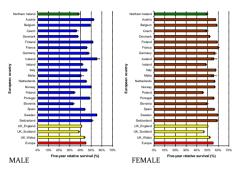
- late Cancer Diagnosis
- ¼ Diagnosed last admission
- ¾ too ill to go elsewhere
- 4 % difficulties care package / suitable hospice bed

FURTHER STUDY PLANNED – what keeps patients at home

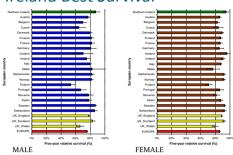
# Late Diagnosis of Cancer is a problem in UK, Ireland & Denmark

- Registry provides data for international studies
- e.g. Comparisons all Europe –Eurocare
- e.g. Comparisons 14 areas including Canada, Australia, Sweden, Denmark, Norway, England and Wales
- International Cancer Benchmarking Project

#### Eurocare-IV results - All Cancers



#### Eurocare-IV results – Melanoma N. Ireland Best Survival



# Cancer survival compared: ICBP

	Colorectal Cancer		Lung Cancer		Breast Cancer		Ovarian Cancer	
	1-Year	5-Year	1-Year	5-Year	1-Year	5-Year	1-Year	5-Year
Australian Registries	84.9	65.9	42.8	17	96.7	88.1	73.5	37.5
Canadian Registries	83.5	63.7	43.1	18.4	96.3	86.3	75.2	41.9
Denmark	77.7	55.8	34.9	10.9	95	82.4	70.6	36.1
Norway	82.4	62	39.2	14.4	96.6	85.5	75.2	39.
Swedish Registries	83.8	62.6	43.6	16.3	98	88.5	-	
UK Registries	74.7	53.6	29.7	8.8	94.2	81.6	65	36.4
England	74.7	53.7	29.7	8.7	94.3	81.6	65.4	36.
Northern Ireland	76.2	55.2	30.6	11	93.7	81.8	63.9	36.
Wales	73.6	52.3	28.5	9	93.4	81	60.5	36.

# International Cancer Benchmarking Partnership

- Studies aim to explain the survival deficit in UK.
  - Awareness & beliefs (population survey of 2000 people aged 50+)
  - Primary care behaviour (survey of primary care beliefs, behaviour and attitudes)
  - Timelines from symptoms to treatment (An audit of delays in diagnosis and treatment for 200 patients in each cancer site)
  - Compliance with treatment guidelines (high resolution note review of treatment of 500 patients in each cancer site)

# Early Detection / Prevention Registry involved in

- ı. Identify high risk persons Genetics Service links
- 2. Monitoring Screening Services Breast / Cervix / Bowel
- 3. Pre Cancer Monitoring
  - Barrett's Oesophagus
  - Bowel Polyps (funded UCF)
- 4. Research into promoting earlier diagnosis

#### What is needed?

- To reduce incidence
  - Improved lifestyle, such as reduction in smoking, improved diet, increased physical activity, reduction in alcohol consumption
- To improve survival
  - · Earlier diagnosis through increased symptom awareness
- Legislative Framework for Cancer Registration