

## HOW INTELLIGENCE INFORMS PEER REVIEW

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### National Cancer Peer Review What is it?

- Quality Assurance process
  - clinical
  - patient experience
    - quality of life
    - dignity
  - service commissioning
- Integral part of Improving Outcome
  - catalyst for change

## Background to National Cancer Peer Review Programme



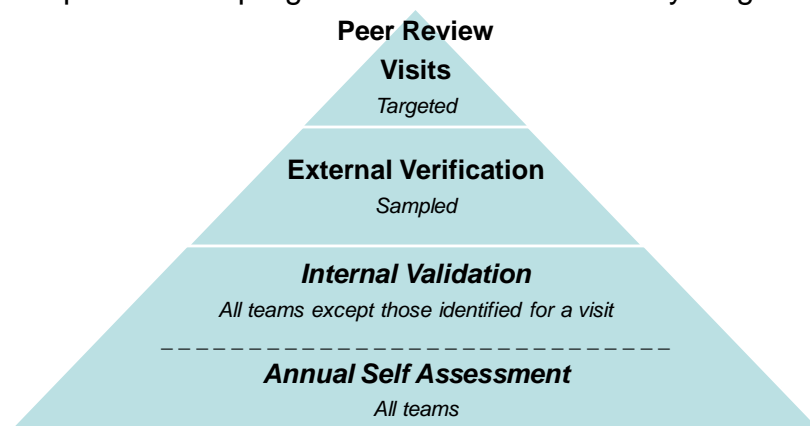
### Standards/measures

- ▶ First national 'standards' published in 2001
- ▶ Major revision as 'measures' in 2004
- ▶ Ongoing updating and extension as new national guidance becomes available (e.g. NICE Improving Outcomes Guidance)
- ▶ Revision in 2008
  - ▶ reduction in number of measures with removal of levels
  - ▶ revision of measures; some more challenging

## Methodological changes introduced for 2009/2010 NCPR



The peer review programme consists of four key stages:



## What has Peer Review achieved?

### National Cancer Peer Review Reports

- IOG Measures and Standards
- Team Structure
- Team Function
- Centre / Unit Facilities

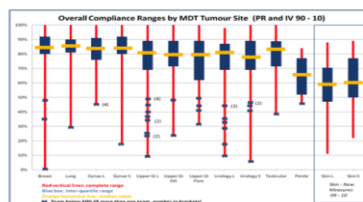
## Overall compliance per MDT tumour site



Fig: Overall compliance ranges per tumour site Peer Review 04 - 08 Adjusted



Fig: Overall compliance ranges per tumour site 2009 - 2010



## Upper GI Outcomes against the Measures - 2011-12



Teams Compliance	SA	IV	PR
100%	0	0	0
90-99%	9	0	0
80-89%	13	1	2
70-79%	6	1	2
60-69%	0	0	2
50-59%	0	0	1
40-49%	0	0	0
0-39%	0	0	0
Median	85%		
Range	52-97%		
Interquartile Range	79-88%		

## Oesophago-Gastric Specialist Teams Good Practice - 2011-12



- Availability of minimally invasive and laparoscopic surgery
- Introduction of nurse led clinics
- Availability of EUS
- Increase of availability of specialist dietetic advice
- Increased contribution to the AUGIS dataset

## Oesophago-Gastric Specialist Teams Immediate Risks and Serious Concerns - 2011-12



- No formal 24 hour on-call
- Endoscopic Ultrasound Service (EUS) availability
- No radiology access to images prior to discussion at SMDT
- Communication and pathways between local and specialist teams
- Lack of dietetic support
- Data collection
- Number of surgeons leading to too few procedures per surgeon
- Lack of cover for gastroenterologist
- Surgery undertaken at local units without IOG arrangements
- CNS support; Oncology support; Gastroenterology support, no dietician cover, no palliative care (all one MDT)

## NATIONAL CANCER PEER REVIEW



## Problems with Peer Review

- Huge burden of structure and process
- Resource intensive process
- Limited outcome data
- Box ticking exercise
- Limited feedback to clinicians

## Clinical Lines of Enquiry



- Clinical Indicators
- National and Local Data on Indicators
- Focus process on good clinical outcomes

## Principles of Clinical Indicators



- The data should be available nationally or readily available locally. Not intended to require further audit in themselves
- Metrics which can be used as a lever for change and for reflection on clinical practice and outcomes
- They may be lines of enquiry around clinical practice, or around collection of data items, rather than enquiry focused on the data itself
- May cover key stages along the patient pathway, including diagnosis, treatment and follow up
- There should be some consensus on national benchmarking data which can be used to inform the discussions

## Data Sources



- Hospital Episode Statistics (HES)
- National Cancer Services Analysis Team
- National Cancer Waits
- National Cancer Data Repository
  - Cancer Registry
  - UK Cancer Information Service
- National Specialty Audits
- National Cancer Research Institute

## Centre Workload



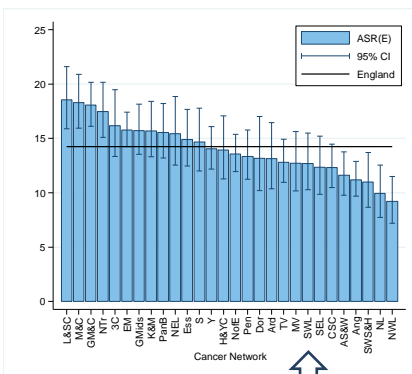
- Activity – number of new patients referred annually and number discussed at MDM
- Approaches to data recording – methodology for recording National Core Data Set
- Involvement in National and local Audit – approaches to data entry and evaluation
- Rates of trial entry



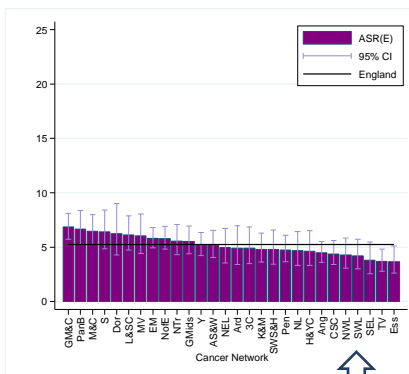
## Incidence of Oesophageal Cancer



### Males



### Females



## Overall Incidence



	Oesophageal cancer			Stomach cancer		
	(ICD10 C15)			(ICD10 C16)		
	Number of cases	Percentage	England %	Number of cases	Percentage	England %
Persons	151			141		
Males	101	66.9%	66.9%	85	60.3%	65.3%
Females	50	33.1%	33.1%	56	39.7%	34.7%
<b>Age group</b>						
0-59	32	21.2%	17.3%	28	19.9%	14.7%
60-69	32	21.2%	26.1%	20	14.2%	19.4%
70-79	43	28.5%	29.1%	56	39.7%	32.8%
80+	44	29.1%	27.5%	37	26.2%	33.2%

## Age Distribution for Oesophageal and Gastric Cancer London Cancer Alliance



	OESOPHAGEAL			GASTRIC		
	< 60	60-69	> 70	< 60	60-69	> 70
<b>NW</b>	29.1%	27.6%	43.3%	21.6%	23.5%	54.9%
<b>SW</b>	21.2%	21.2%	57.6%	19.9%	14.2%	65.9%
<b>SE</b>	16.8%	24.8%	58.4%	24.1%	16.3%	60.6%
<b>England</b>	<b>17.3%</b>	<b>26.1%</b>	<b>56.6%</b>	<b>14.7%</b>	<b>19.4%</b>	<b>65.9%</b>

## Routes to Diagnosis Gastric Cancer



	WLCN	SWCLN	SELCN	ENGLAND
Two Week Rule	7%	14%	18%	23%
GP / OP Referral	22%	25%	19%	17%
Emergency	32%	35%	41%	33%
Other OP	11%	7%	8%	8%
Inpatient Elective	13%	8%	7%	13%
Death Certificate	1%	1%	1%	1%
Unknown	14%	10%	7%	5%
No. of cases	359	411	476	18,613

# National Oesophago – Gastric Cancer Audit



The Royal College of Surgeons of England



British Society of  
Gastroenterology

AUGIS



## Data collected

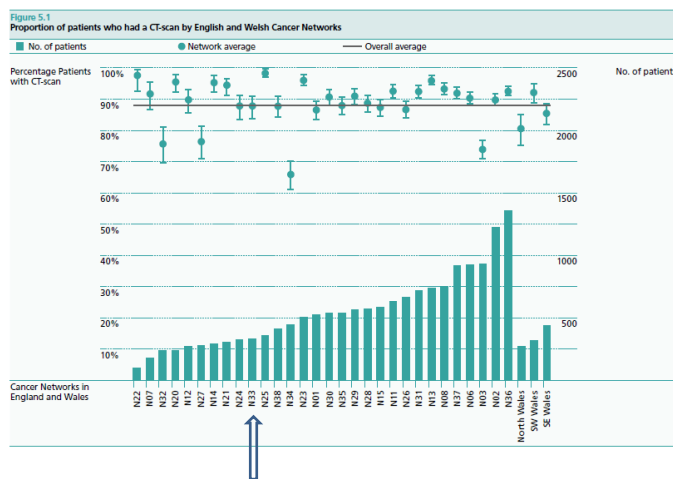
- Data on all patients:
  - Referral route
  - Date of diagnosis, staging investigations
  - Planned treatment
- Other data depends on treatment received:
  - Curative and palliative surgery
  - Endoscopic / radiological palliative therapy
  - Chemotherapy / radiotherapy
  - Post-operative pathology after curative surgery

## Centre Services



- Diagnostics / Staging – availability of PET-CT; MRI; EMR; pancreas biopsy cytology / histology
- Audit of preoperative staging compared with intra-op and postop findings: prediction operability (open and close rates; bypass rates when resection planned)
- Pathology review following surgery
- Dietician support

## Proportion of Patients who had CT-Scan

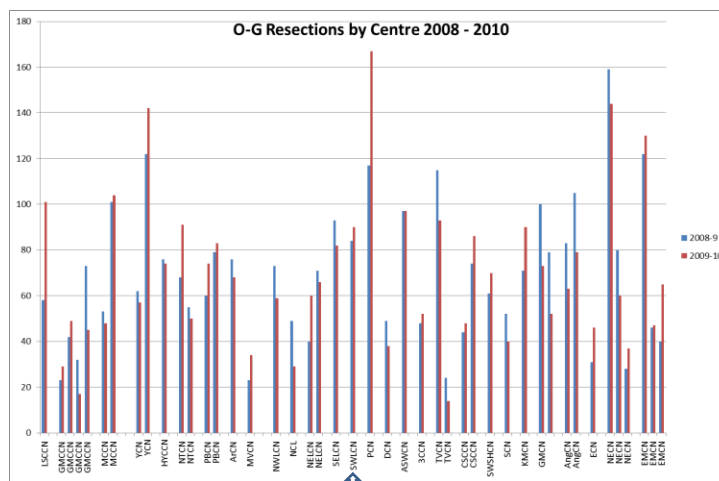


## Treatment Planning



- Rates of radical and palliative treatment
- Radical – resection rates; multimodality treatment
- Palliative – use of chemotherapy and/or radiotherapy
- availability of novel palliative interventions eg cyber knife
- availability of non-surgical treatments eg radiofrequency ablation – liver mets and Barrett's
- rates of best supportive care only; community links
- use of stents

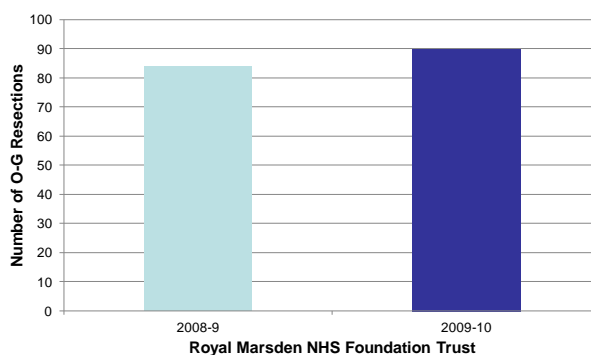
## Oesophageal and Gastric Resections by Network



## Oesophageal and Gastric Resections



South West London Cancer Network



## Treatment Planning



- Surgeon volume
- Morbidity and mortality (reoperation rates, anastomotic leak rates)
- Number of lymph nodes resected
- Resection margins

## Outcomes



Oesophagectomy	Open (n = 783), %	MI (n = 314), %
30 – day mortality	3.1	3.4
Anastomotic Leak	7.8	10.6
Re-operation	10.7	12.4

Gastrectomy	Open (n = 641), %	MI (n = 96), %
30 – day mortality	4.2	4.2
Anastomotic Leak	6.3	9.4
Re-operation	8.0	7.1

## National OG Cancer Audit Morbidity and Mortality



	Audit									
	Case Ascertainment		Mortality*		30 day mortality		90 day mortality		Reoperation	
	Expected cases over 21 month period	Patients with a tumour record	Number of patients		Crude	Adjusted	Crude	Adjusted	Crude	Adjusted
The Royal Marsden NHS Foundation Trust (Specialist Centre)	100 to 200	103	84		0.0%	0.0%	0.0%	0.0%	7.1%	7.0%
Epsom and St Heller University Hospitals NHS Trust (Local)	100 to 200	60								
Kingston Hospital NHS Trust (Local)	<100	56								
Mayday Healthcare NHS Trust (Local)	<100	74								
St George's Healthcare NHS Trust (Local)	<100	62								

## Survival



- Radical treatment: 1,2 and 5 year
- Palliative treatment: 6 and 12 mo and median
- admissions after palliative treatment (number and length of stay)
- patient reported outcomes

## Survival Oesophageal Cancer



Cohort analysis of relative survival (RS)

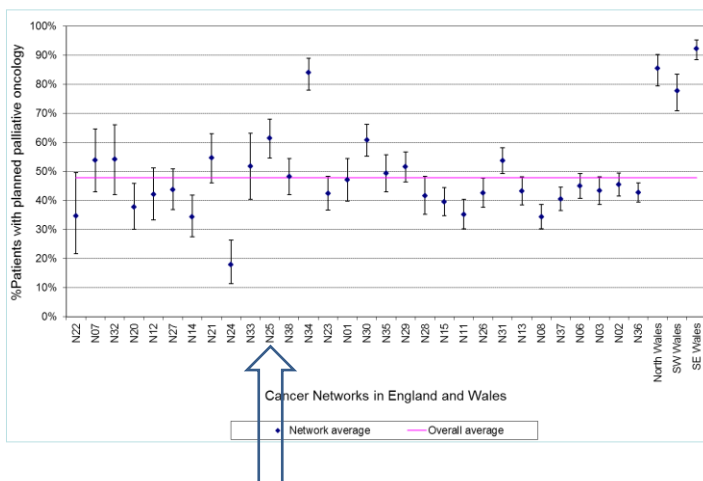
One-, two-, and five-year relative survival (RS) (%) with 95% confidence interval by cancer network of residence and sex.

Oesophageal cancer (ICD10 C15)

Survival	One-year survival						Two-year survival						Five-year survival					
	Period of diagnosis 2004-2008						Period of diagnosis 2003-2007						Period of diagnosis 2000-2004					
	followed up until end of 2009						followed up until end of 2009						followed up until end of 2009					
	Males			Females			Males			Females			Males			Females		
	RS	LCI	UCI	RS	LCI	UCI	RS	LCI	UCI	RS	LCI	UCI	RS	LCI	UCI	RS	LCI	UCI
South West London	42.0	37.0	47.0	43.6	36.4	50.9	25.2	20.6	29.8	24.4	18.0	30.8	14.0	10.3	17.7	18.0	12.2	23.9
England	43.3	42.5	44.0	37.8	36.8	38.8	23.8	23.2	24.5	20.8	19.9	21.7	12.3	11.8	12.9	12.5	11.8	13.3



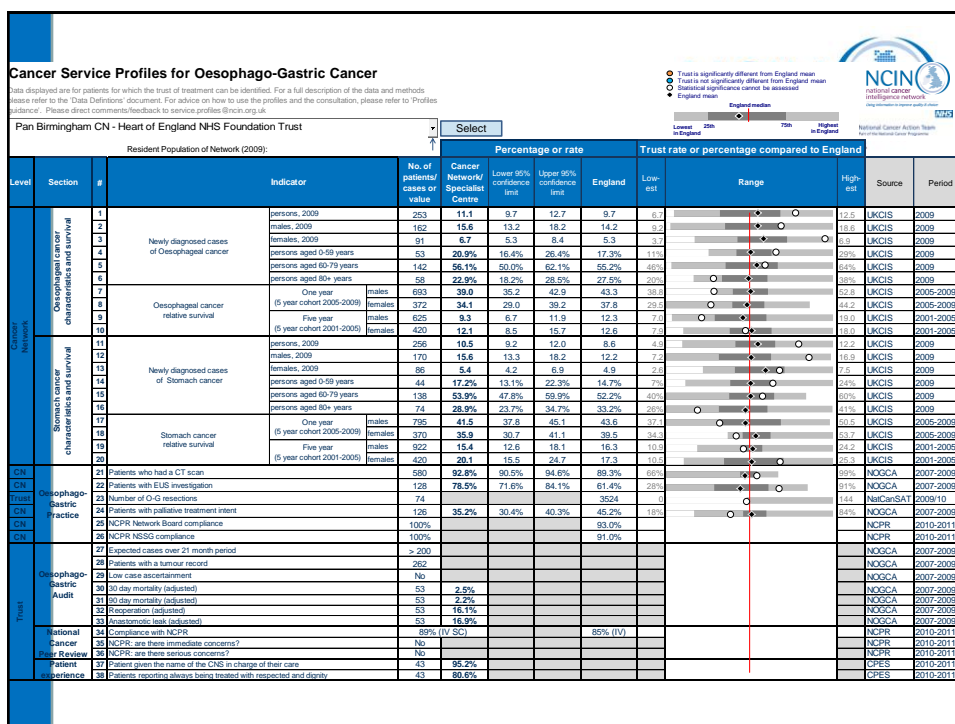
## Proportion of Patients with Palliative Treatment Intent



## NCPR & NPES Data



	NCPR				Patient Experience Survey	
	Percentage Compliance	Overall National Percentage	Immediate Risk	Serious Concern	Patient given the name of the CNS in charge of their care*	Always treated with respect and dignity by staff*
The Royal Marsden NHS Foundation Trust (Specialist Centre)	95% (IV)	85% (IV)	No	No	96.7%	80.6%
Epsom and St Helier University Hospitals NHS Trust (Local)	No report published					
Kingston Hospital NHS Trust (Local)	91% (IV)	86% (IV)	No	Yes		
Mayday Healthcare NHS Trust (Local)	94% (IV)	86% (IV)	No	No		
St George's Healthcare NHS Trust (Local)	91% (IV)	86% (IV)	No	No		



## Conclusions



- Wealth of data
- NCPR
- Commissioning Specialist Services
- Improve Outcomes