

Northern Ireland

Pancreatic Cancer Audit

Measuring the quality of care for patients diagnosed 2019-2020



Background to Pancreatic Cancer audits

- Regular audits of cancer services in Northern Ireland not routinely undertaken.
- Last NI Pancreatic Audits - 2001 and 2007
- England and Wales: Funding for a National Audit recently announced and expected to begin soon
- Scotland: No Audit for this site.



Care of pancreatic cancer patients in Northern Ireland diagnosed 2007 (with comparisons 2001)



2007 Pancreas



Aims



- Northern Ireland-wide data on pancreatic cancer patients - to compare with other national audits
- To monitor how cancer services compare with **NICE guidelines** - diagnosis, multidisciplinary team management and management.
- To assess how pancreatic cancer services have **changed from previous population-based audits** (2001 and 2007) and identify areas for improvement
- To evaluate potential inequalities in treatments received by patients according to Trust, Socio-Economic status, age, sex, etc.
- The impact of **the COVID-19 pandemic** on services, patient presentation and outcomes with comparison to the pre-COVID-19 era

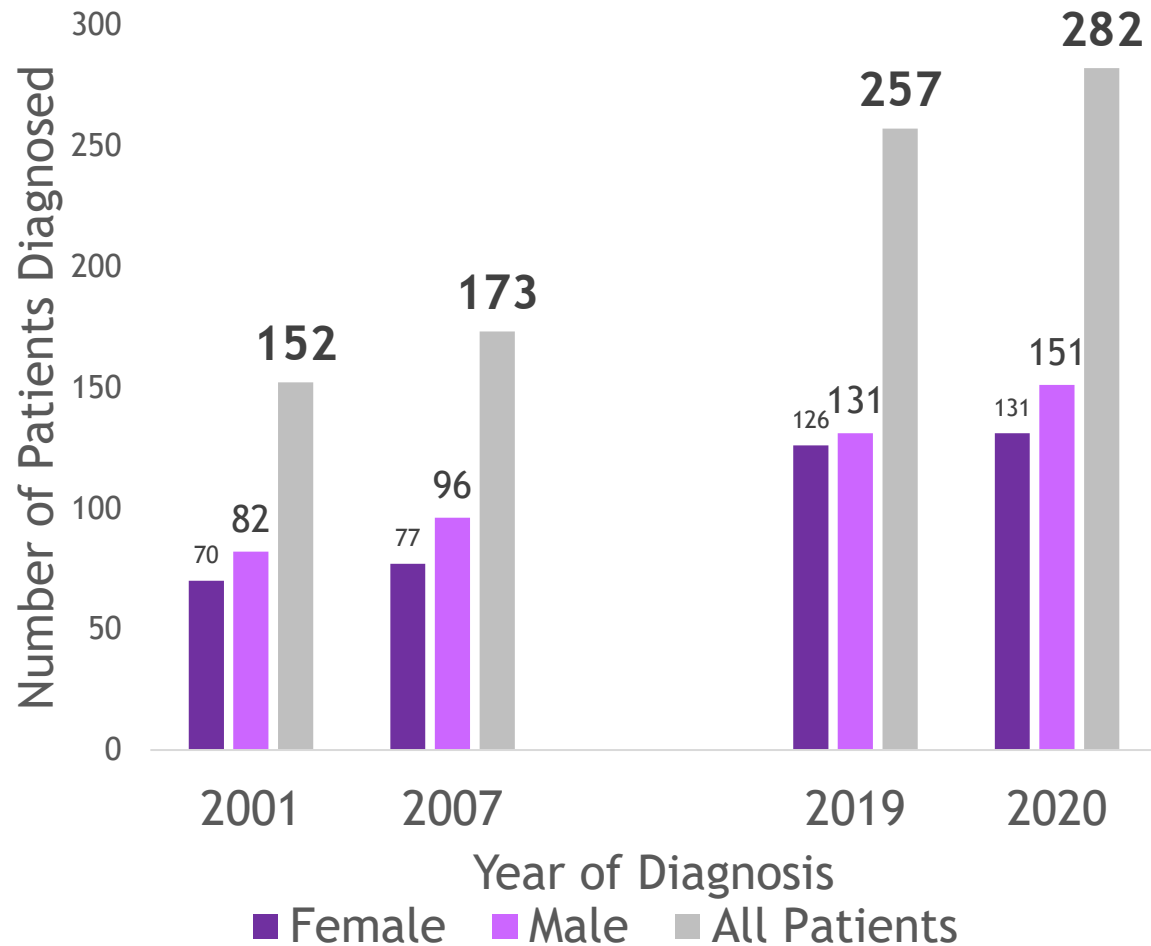
Methodology



Data items for collection identified through:

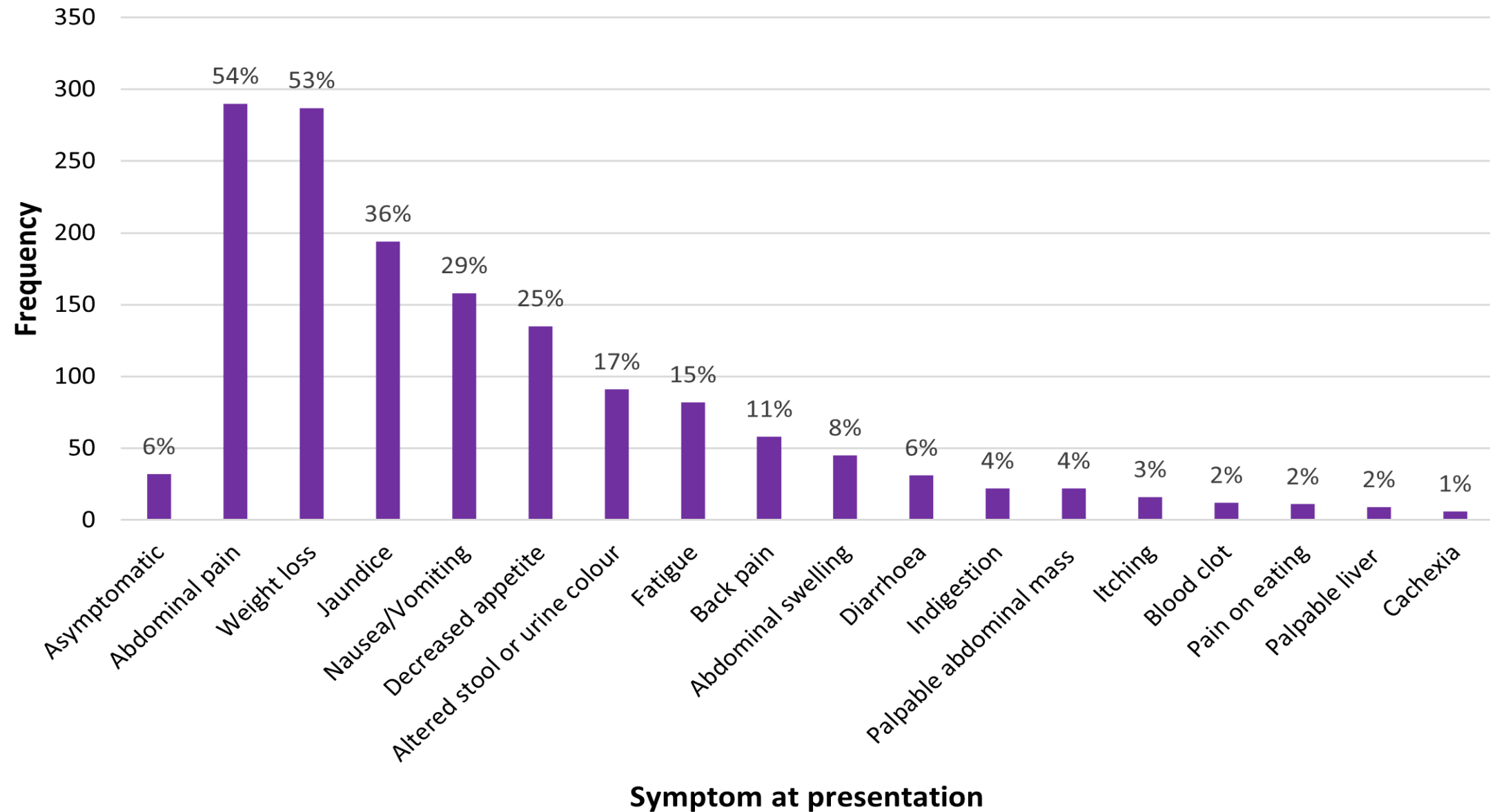
1. **Data dictionaries of 2007 NICR audit**
 2. **Input from NICR epidemiology professionals, nursing and surgical colleagues.**
 3. **Review of evidence-based guidelines e.g. NICE.**
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- Incidence data (ICD10 C25) - extracted from NICR
 - Three CIOs (Bernadette Anderson, Marsha Magee and Brid Morris-Canter) manually added clinical data using electronic sources - e.g. NIPACS (Radiology), Labcentre (Pathology), CaPPS (MDT data)
 - Surgical, nursing and clinical colleagues added further clinical data - for items CIOs could not view.

Number of patients by sex and audit year



- In total for 2019-2020 - 539 patients - of which 257 diagnosed in 2019 and 282 diagnosed in 2020.
- **Patient numbers increased by 86%** from 2001 audit.
- **Despite** health service restrictions due to **COVID 19 - higher number of incident pancreatic cancers** in 2020 compared to previous years.

Symptoms at presentation



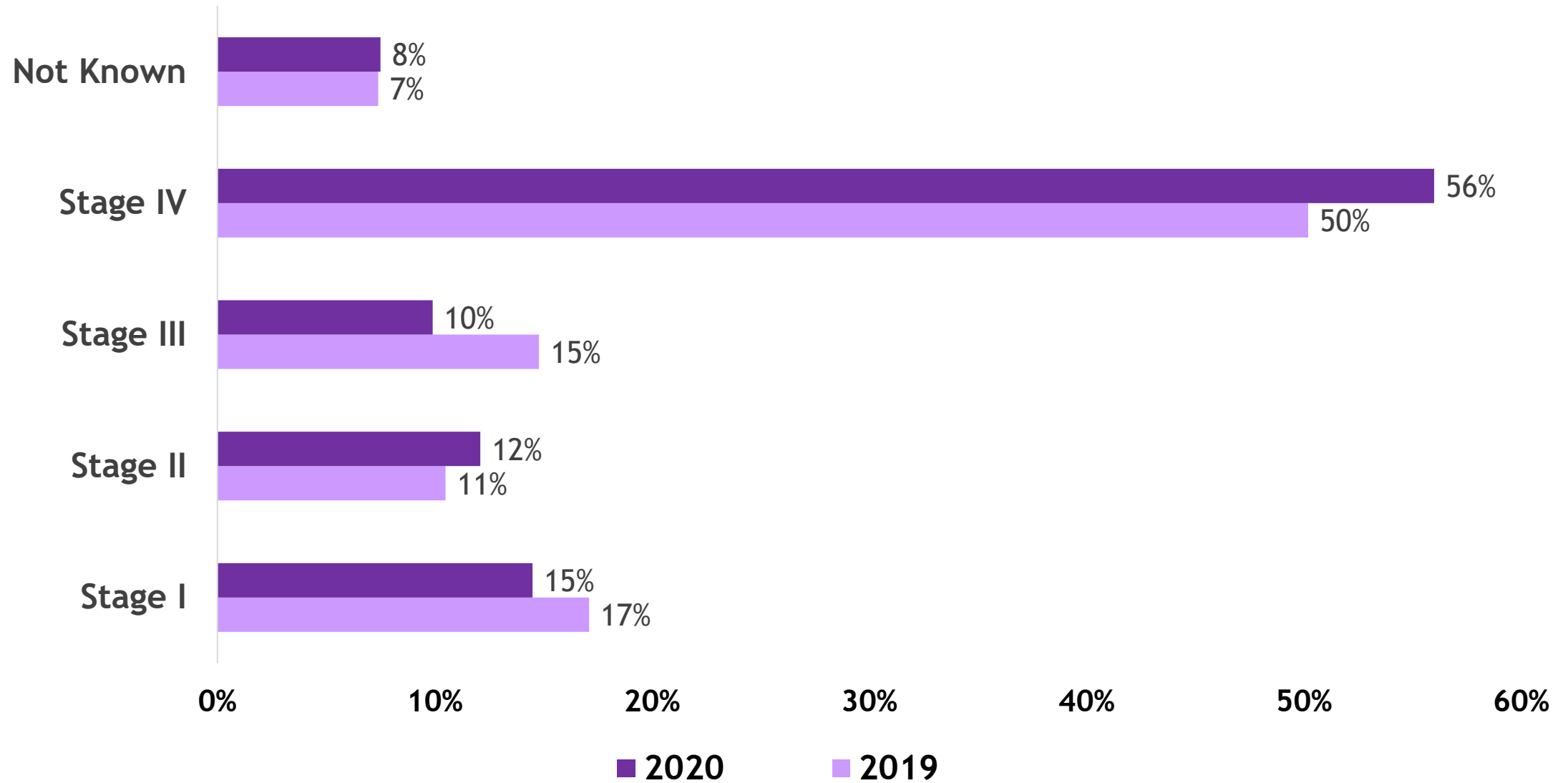
Source of Referral by Year of Diagnosis

Source of referral	2019 n=*(%)	2020 n=270**(%)
Direct from GP	66 (27%)	101 (37%)
GP to A&E	<5	15 (6%)
Emergency Admission	106 (43%)	115 (43%)
Referral to outpatients via other outpatient clinic	31 (13%)	22 (8%)
Other	34 (14%)	17 (6%)
Not Known	6 (3%)	0 (0.0%)

Symptom Status

	2019	2020
Asymptomatic	23 (9%)	13 (5%)
Not Asymptomatic/Symptom status not known	234 (91%)	270 (95%)

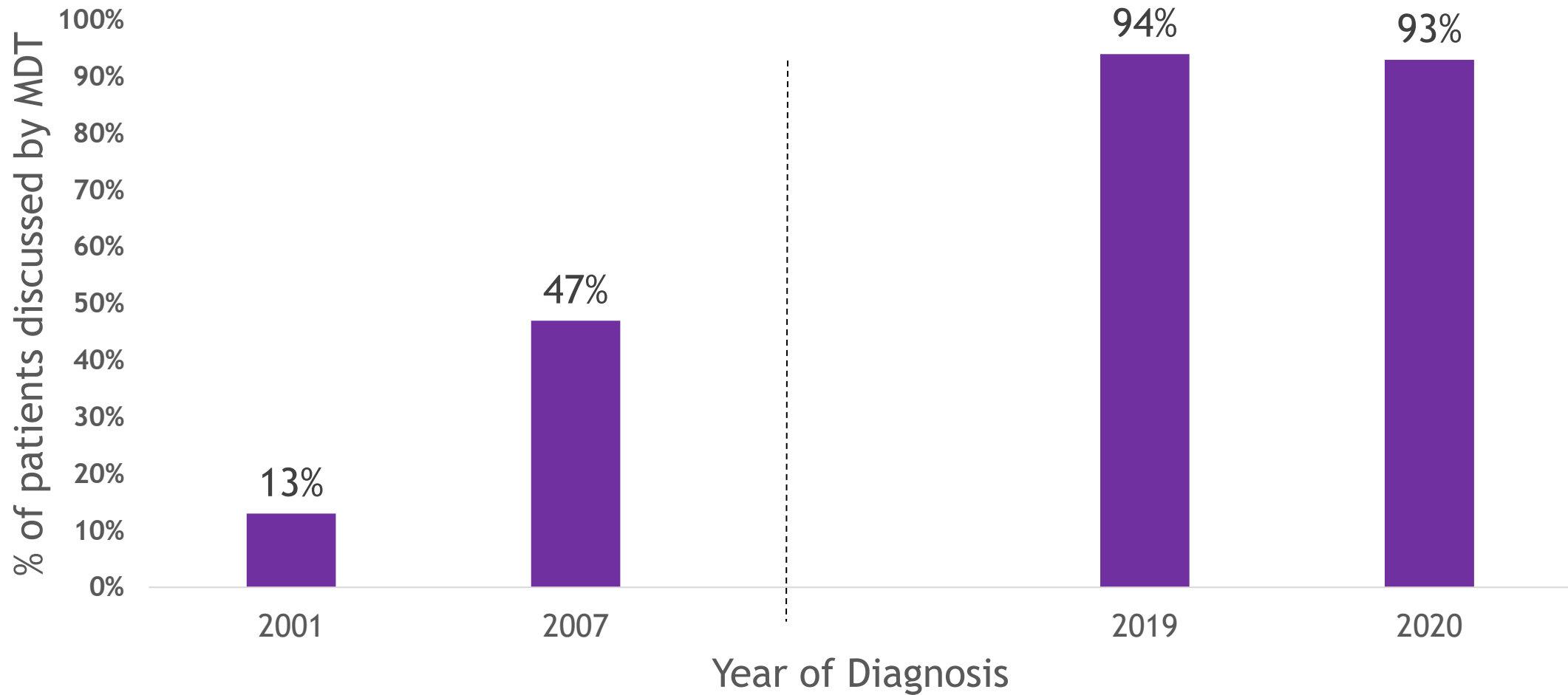
Stage at diagnosis



Hospital Stay (for any reason 30 days prior to diagnosis)

Hospital Stay	Stage I-III n=206 (%)	Stage IV n=287 (%)	Stage Not Known n=38 (%)
Emergency Admission n=192 (%)	50 (26%)	128 (67%)	14 (7%)
Elective Admission n=218 (%)	110 (50%)	98 (45%)	10 (5%)
No Hospital Stay n=121 (%)	46 (38%)	61 (50%)	14 (12%)

Multi-Disciplinary Team Meeting



PET-CT

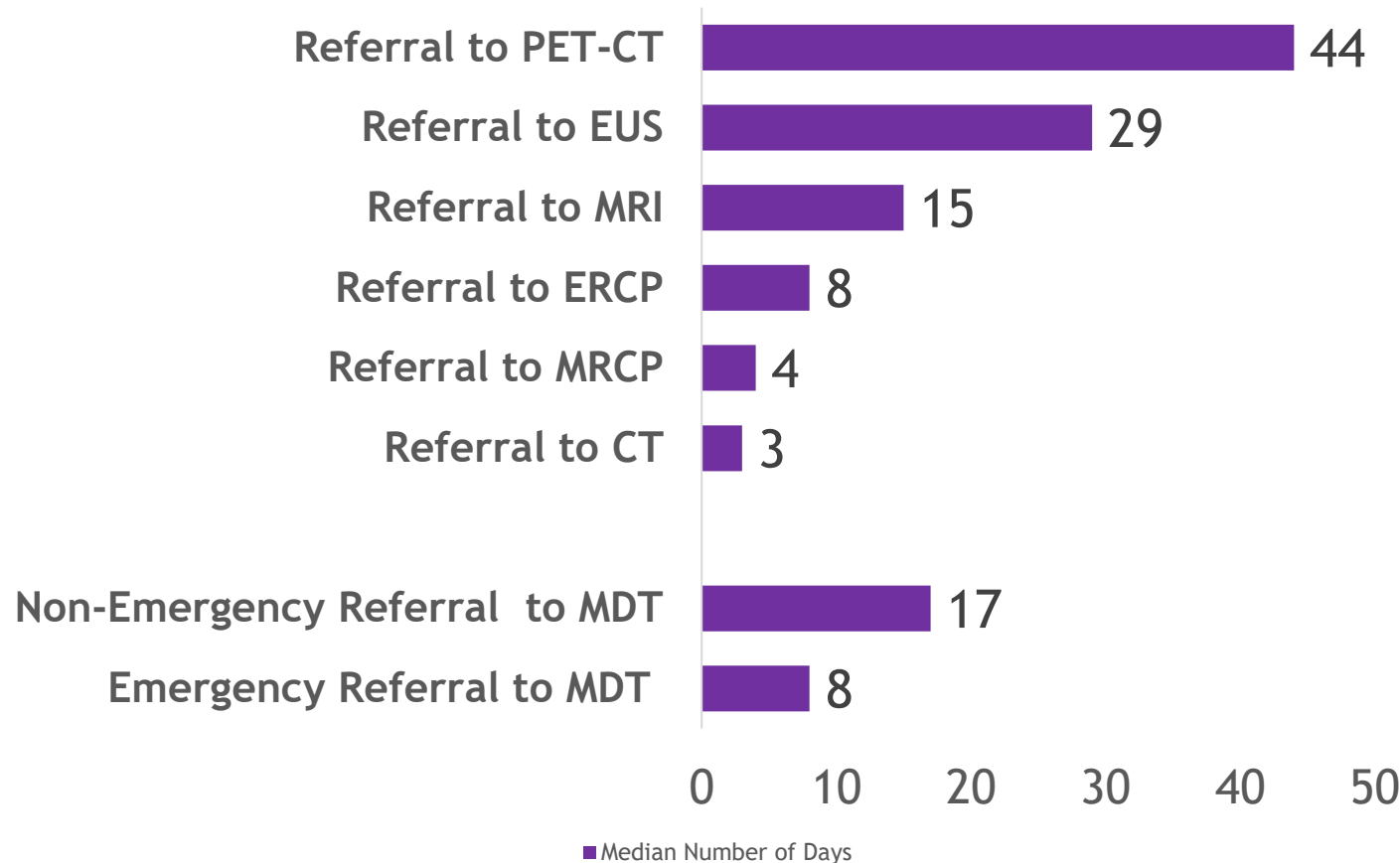


NICE guidelines NG85 (2018) recommend that fluorodeoxyglucose positron emission-CT-scanning (FDG-PET/CT) is offered to patients who have localised disease on CT scanning who will be having treatment (surgery, radiotherapy and systemic therapy).

Frequency of patients with incident stage I-III pancreatic cancer treated with curative intent (surgery, radiotherapy or chemotherapy) who received FDG-PET/CT diagnosed 2019-2020, NI

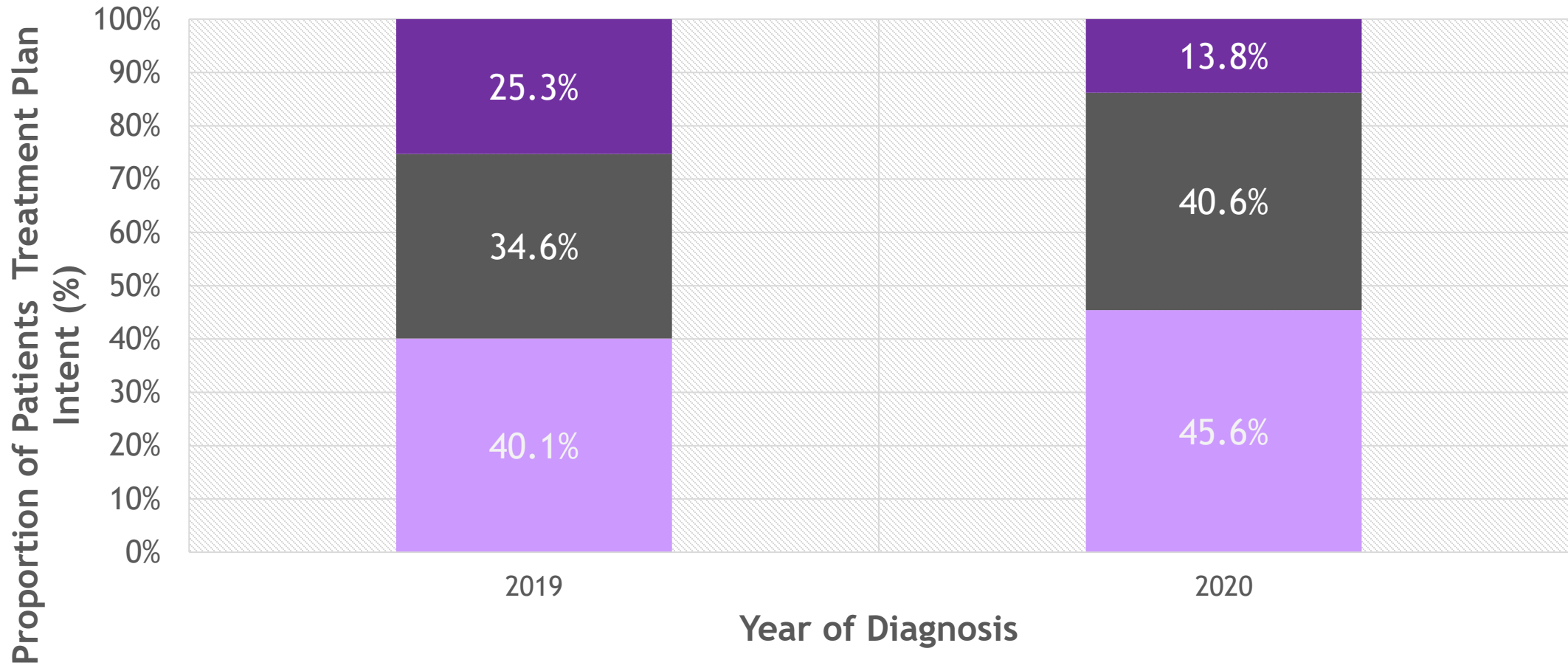
	2019 n=* (%)	2020 n=36(%)	Total n=90 (%)
Patients that received FDG-PET/CT	<5	12 (33%)	15 (17%)

Time from referral to diagnostic intervention



- Patients referred via emergency services have MDT quicker than patients via non-emergency routes.
- In 2020 - improvements in time from referral to; CT scan, ERCP, MRCP and MRI.
- Longest time from referral to staging investigation - PET-CT (44 days) and EUS (29 days)

Treatment plan intent for patients diagnosed with pancreatic cancer 2019-2020, NI




■ Best Supportive Care ■ Non-Curative Anti Cancer ■ Curative Intent

Median wait times (in days) from referral to first treatment, by treatment type and treatment intent for pancreatic cancer patients diagnosed 2019-2020, NI

		Referral to First Treatment		
First Treatment Type	Year of diagnosis	Total number in analysis	Median	IQR p25-75
Curative Surgery 1 st Treatment	2019	n=44	60 days	33-118 days
	2020	n=23	59 days	41-99 days
Curative definitive or neo-adjuvant oncology	2019	n=12	72 days	57-92 days
	2020	n=14	79 days	61-104 days
Palliative Oncology	2019	n=49	68 days	53-97 days
	2020	n=56	65 days	54-84 days

Changes in Treatment 2019-2020

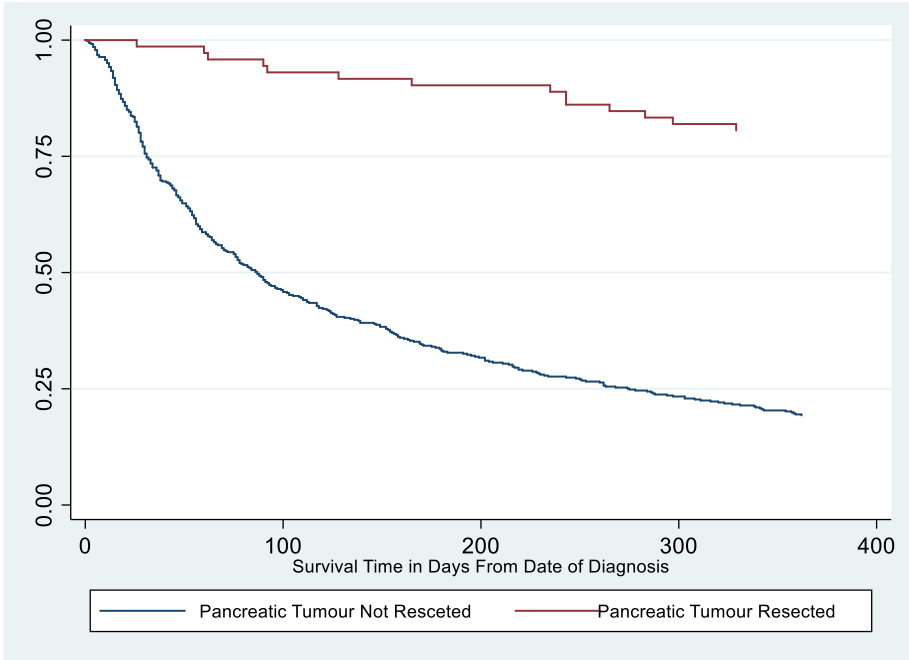


Treatment Type	2019 n=257	2020 n=283
Curative Surgery	54 (21%) 	33 (12%)
Oncology	86 (33%)	88 (31%)

Reasons for hope...

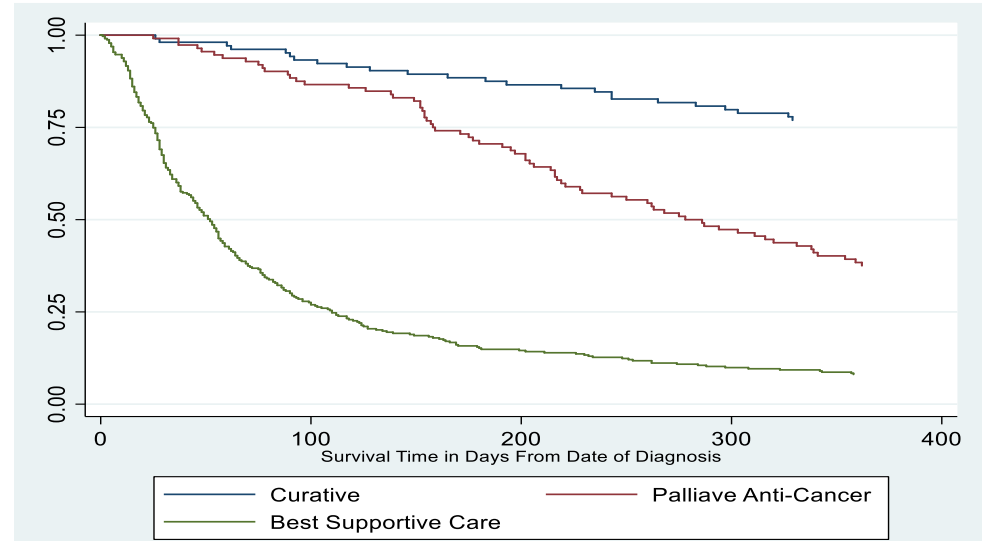
Survival for pancreatic cancer patients diagnosed 2019-2020 by treatment status

KM Survival for pancreatic cancer patients diagnosed 2019-2020 by resection status



Resection Status	Time	Survival (%)
Pancreatic Tumour resected	3 months	93%
	6 months	88%
	1 year	76%
Pancreatic Tumour not resected	3 months	46%
	6 months	31%
	1 year	16%

KM Survival for pancreatic cancer patients diagnosed 2019-2020 by treatment plan received.



Treatment Plan received	Time	Survival (%)
Curative	3 months	93%
	6 months	86%
	1 year	72%
Palliative Anti-Cancer	3 months	89%
	6 months	70%
	1 year	36%
Best Supportive Care	3 months	28%
	6 months	13%
	1 year	6%

How to create impact with results



- In order to create impact.... **Audits need to be cyclical** to monitor changes over time ...in particular where recommendations have been made for improvement.
- In order for results to have greater meaning partnership with peer nations is important with the view to **benchmarking results** for further understanding of patient care
- To use our data-source intensively to aid the pursuit of **Research!**

Future Plans



- Our results - unique, novel & important.... no similar pancreatic audit ... We will present and discuss results with newly established English/Welsh pancreatic audit team to inform their audit development (next week, RCS London).
- Utilising dataset for further research.... CPH/summer studentship
- Rich dataset as basis for further exploration including survival analysis.
- Proformas, data capture plan & analytical code - can be adapted for further audits + improve efficiency
- Data can be linked to other datasets, e.g. Biobank, for long term studies.

Acknowledgements



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- Thank you to clinical colleagues Mr Stephen McCain, Ms Jess Lockhart & Ms Dorothy Johnson who collected data.
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