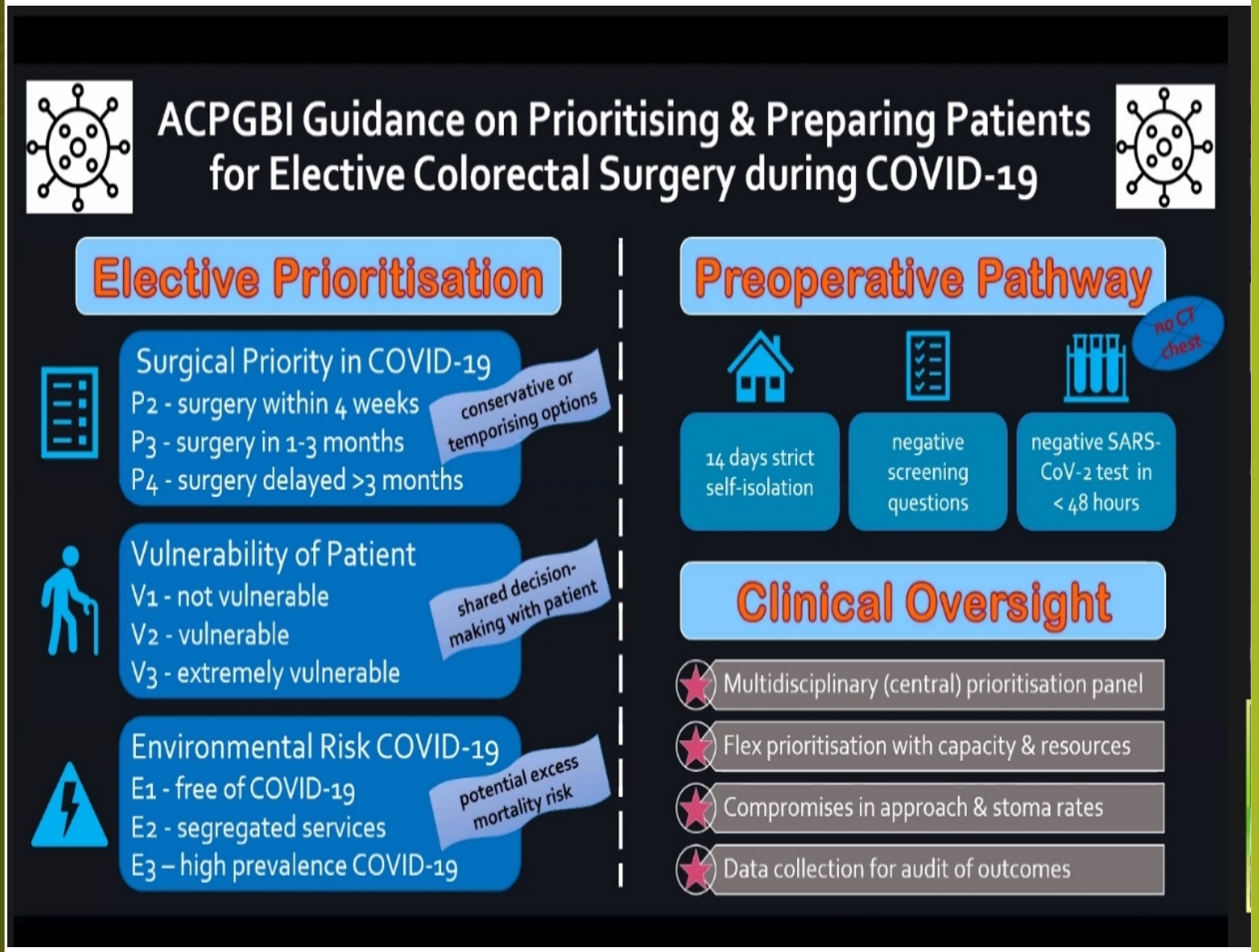
COLORECTAL GREEN PATHWAY – PRINCE PHILIP HOSPITAL AUDIT

Ms. Sujatha Udayasankar, Mr. Anas Qarout, Miss Hannah Wise, Dr. Florentina Smit

Mr. A Deans, Mr. U Mohamed, Mr. P K Dhruva Rao, Mr. Dias

Introduction

- During Covid-19 pandemic, most of elective cancer surgery was cancelled across the country. Hywel Dda University Health Board (HDdUHB) were the last to limit these services.
- When HDdUHB restarted, the challenges were :
  - To identify a green site / pathway for safe elective surgery – Prince Philip Hospital (PPH) only site with closed path .
  - To train staff to care for Elective major colorectal surgery patients.
  - To have green – post operative ITU support where needed allowing for majority of ITU beds to care for COVID-19 patients.
  - The site covered the care for all elective bowel cancer surgery across the Health Board (all 4 sites – large geographical distribution and case load for small team of CR Consultants)
- The elective pathway was designed taking into consideration the local challenges, ACPGBI guidelines, discussed and agreed by the Colo-Rectal Multi Disciplinary Team (MDT) and approved at Bronze level meeting within our Health Board.



As we planned our services, the key components were :

- To select appropriate patients for surgery.
- To ensure patients were protected and screened for COVID-19.

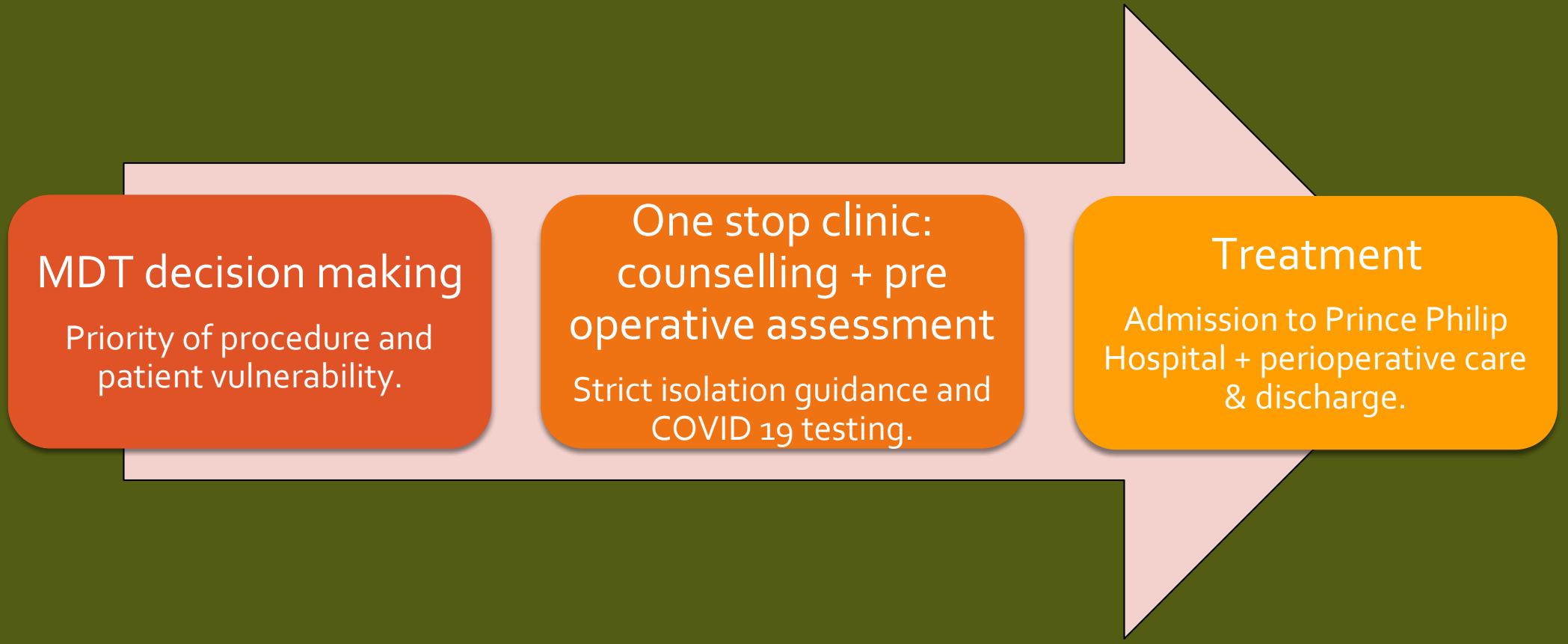
- Develop a safe service provision with safe surgical care outcomes.

Latest guidance on Priority categories during COVID-19

Updated guidance from ACPGBI - Prioritisation of Colorectal Surgery during COVID-19

Surgical Priority Category during COVID-19	Colorectal Procedures
Priority 2	MDT directed cancer surgery, Multi-visceral resections for locally advanced colon cancer, Rectal cancer/liver metastases, Salvage surgery for recurrent anal cancer, Pelvic exenteration, Stricturing / fistulating luminal Crohn's disease not responsive to endoscopic or medical treatments after optimisation of medication and nutritional status.
Priority 3	Seton insertion for symptomatic anal fistula (including perianal Crohn's disease), Colectomy & proctectomy for colitis refractory to medical Rx (excluding acute severe colitis treated urgently), MDT directed full thickness rectal prolapse surgery.
Priority 4	Trans-anal/rectal resection for benign rectal polyp, Colonic resection for benign colonic polyp, Completion proctectomy for IBD, Ileoanal pouch surgery, Reversal of Hartmann's procedure, Closure of diverting ileostomy. Non-urgent proctology procedures.

Diagnosis to Treatment Pathway for Colorectal Surgery.



NATIONAL BOWEL CANCER (NBOCA) 2020 REPORT

NBOCA Report - Key findings:

- Overall 90-day post-operative mortality has remained at 3.0%.
- Considerable variation in post-operative length of stay persists, with a median length of stay of 6 days (IQR 4 to 10 days) in the elective setting.
- The overall rate for 30-day unplanned readmission was 11.6% with two outlying trusts/hospitals following risk-adjustment.
- The 30-day unplanned return to theatre rate was 8.4%. This has remained stable over time with an average rate of 8.2% over the last five audit periods.
- Two thirds of all major resections were carried out laparoscopically.

AIMS

- To evaluate the service - Diagnosis to Treatment pathway.
  Using the local athway for recommencement of elective colorectal surgery guide.

- To assess our short term surgical care outcomes after colorectal cancer surgery with National standards.

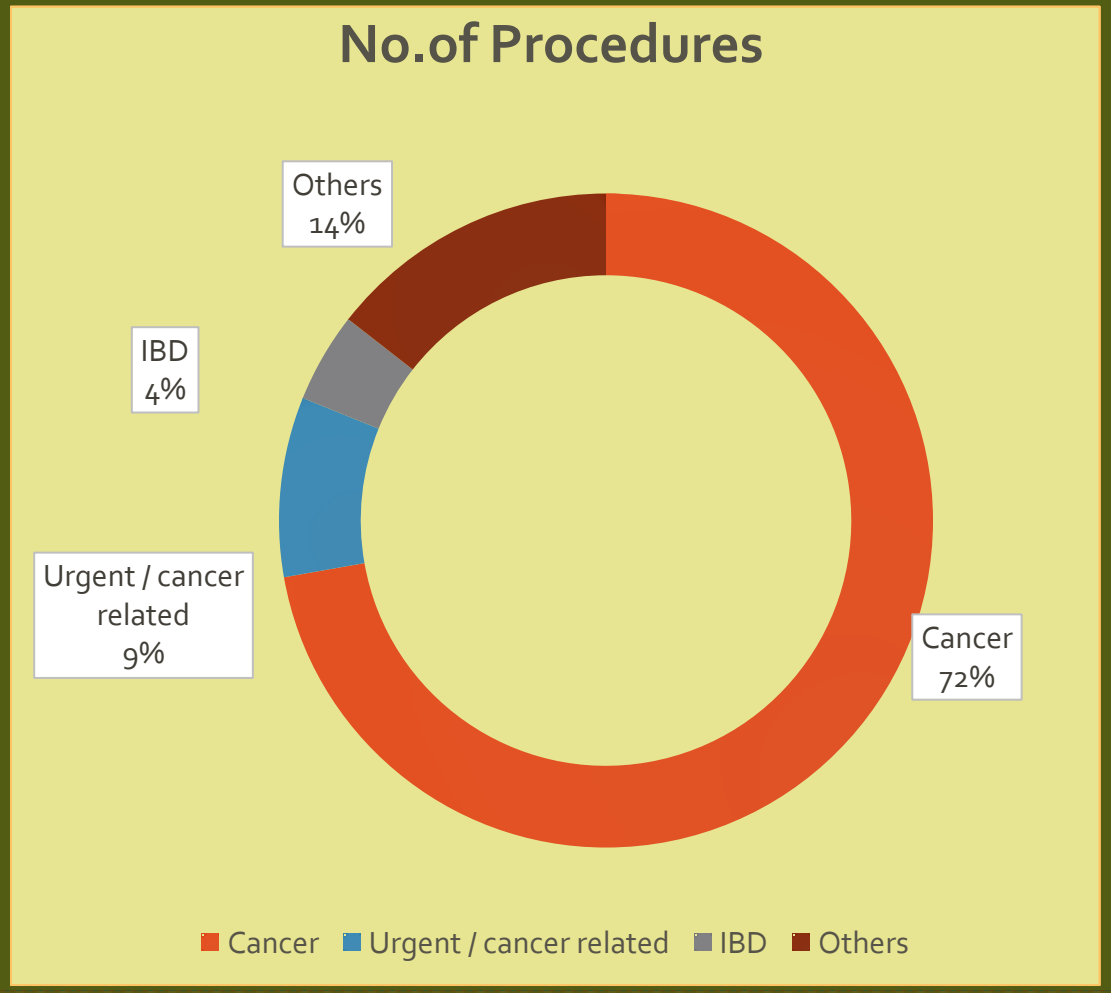
  Using the NBOCA 2020 report as standard.

METHOD

- Colorectal Team: Mr. A Deans, Mr. P K Dhruva Rao, Mr. U Mohamed, Mr. S Dias.
- Between July – December 2020.
- Retrospective data collection from Electronic records to evaluate the components of perioperative care
- Patient demographics, COVID 19 assessment, MDT discussions, reason for surgery, procedure, surgical access, ASA, ITU care, no of days in ITU, Post op complications, LOS in hospital and mortality rate

(Note: All data was collected from electronic records due to limitations on accessing paper medical records during this period.)

RESULTS



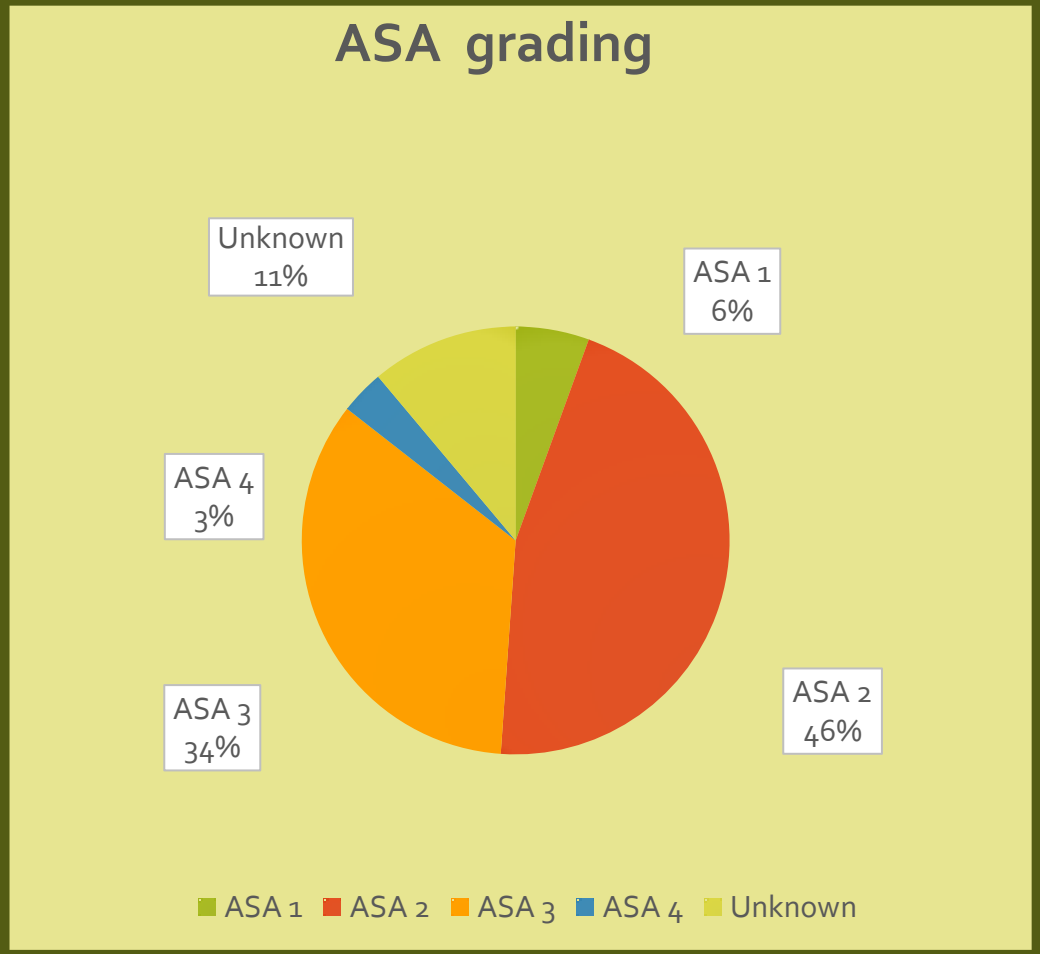
Total number of patients operated under the Colorectal team = 90.

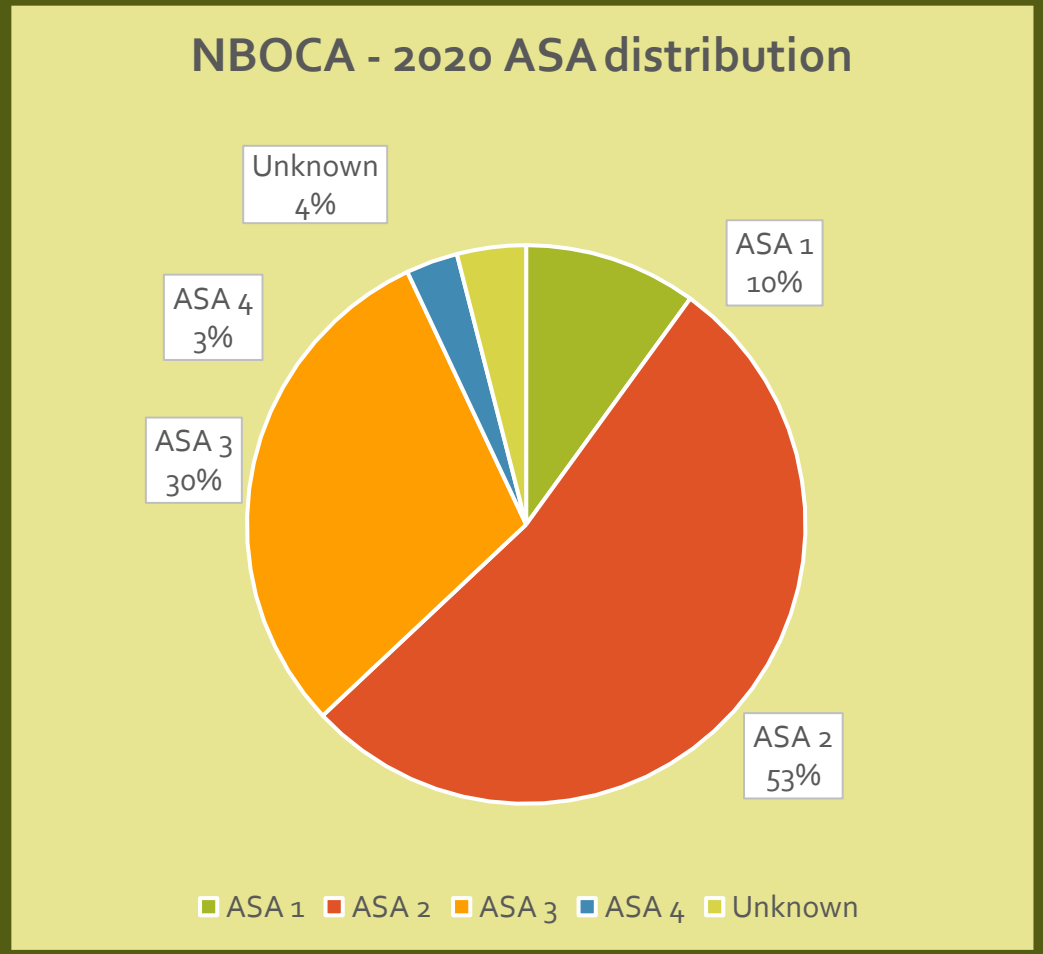
Median age = 73yrs (range - 21 to 94yrs).

86% patients were operated for cancer related procedures (assessment, biopsies and de-functioning stoma) and IBD complications.

Cancer resections formed 72% of the total procedures. (65 out of 90)

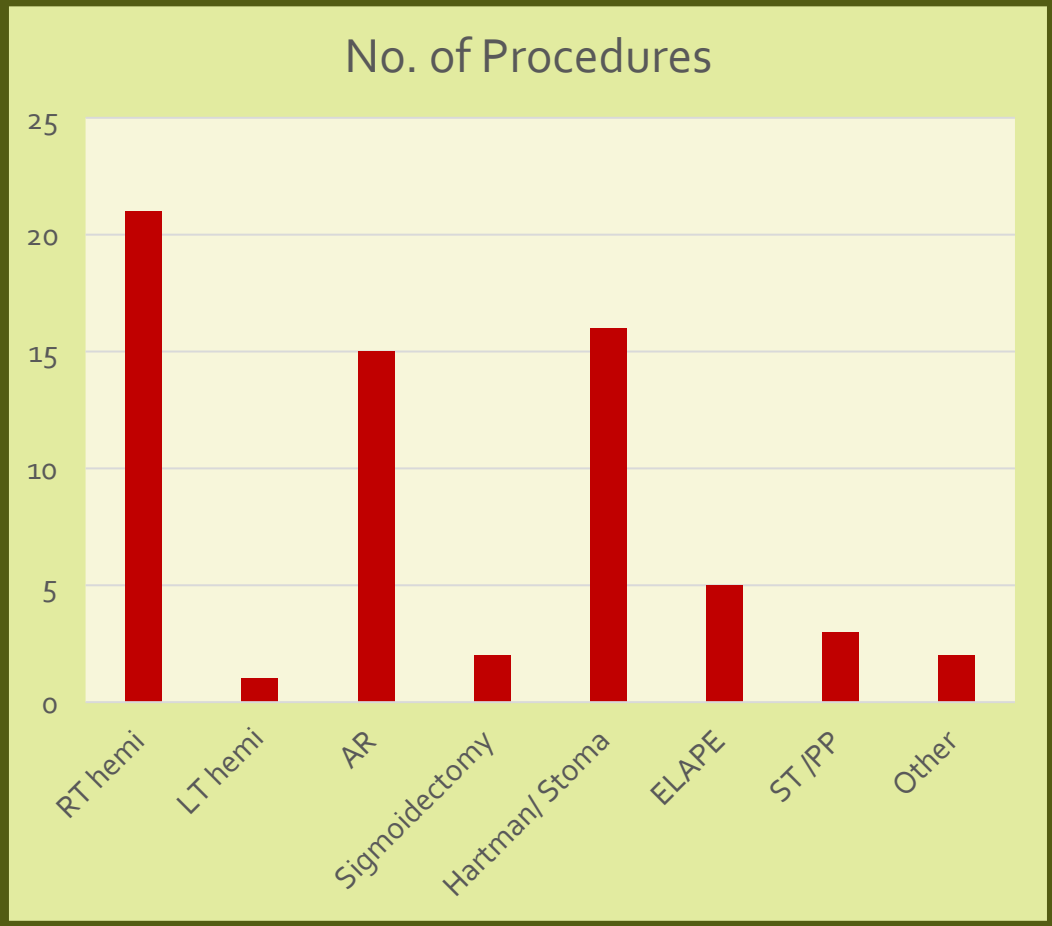
RESULTS


ASA grading
Unknown 11%
ASA 1 6%
ASA 4 3%
ASA 3 34%
ASA 2 46%
ASA 1
ASA 2
ASA 3
ASA 4
Unknown


NBOCA - 2020 ASA distribution
Unknown 4%
ASA 1 10%
ASA 4 3%
ASA 3 30%
ASA 2 53%
ASA 1
ASA 2
ASA 3
ASA 4
Unknown

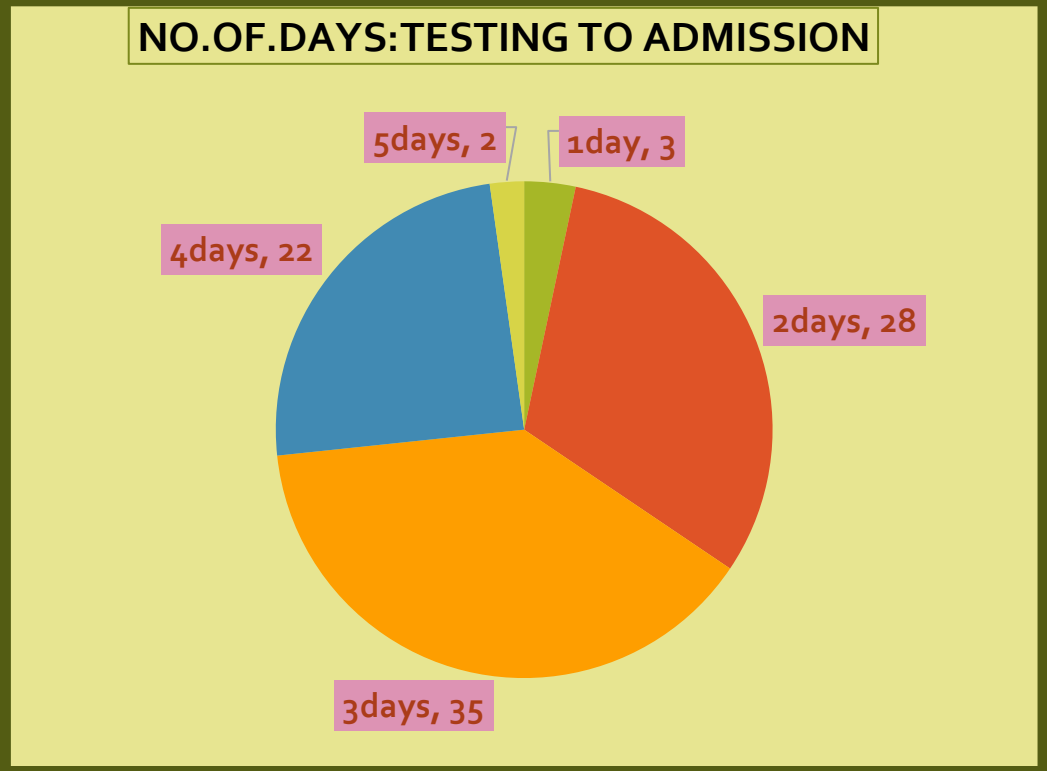
Colorectal procedures undertaken

Cancer Surgery	Right/left Hemicolectomy, Sigmoidectomy, Anterior resection, Subtotal colectomy, ELAPE (+/- stoma formation), De-functioning stoma, Hartmann's.
Cancer related op	Benign lesion excision, EUA + assessment + biopsies.
IBD Procedures	Proctectomy, subtotal colectomy.
Others	Reversal of Hartman's or diverting ileostomies, EUA + dilation, Pilonidal sinus excision, perianal disease treatment – seton insertion, excision of perianal lesions.



COVID-19 Testing

Guideline on the CRC pathway: To have testing done in less than 5 days preferably 48-72hrs.



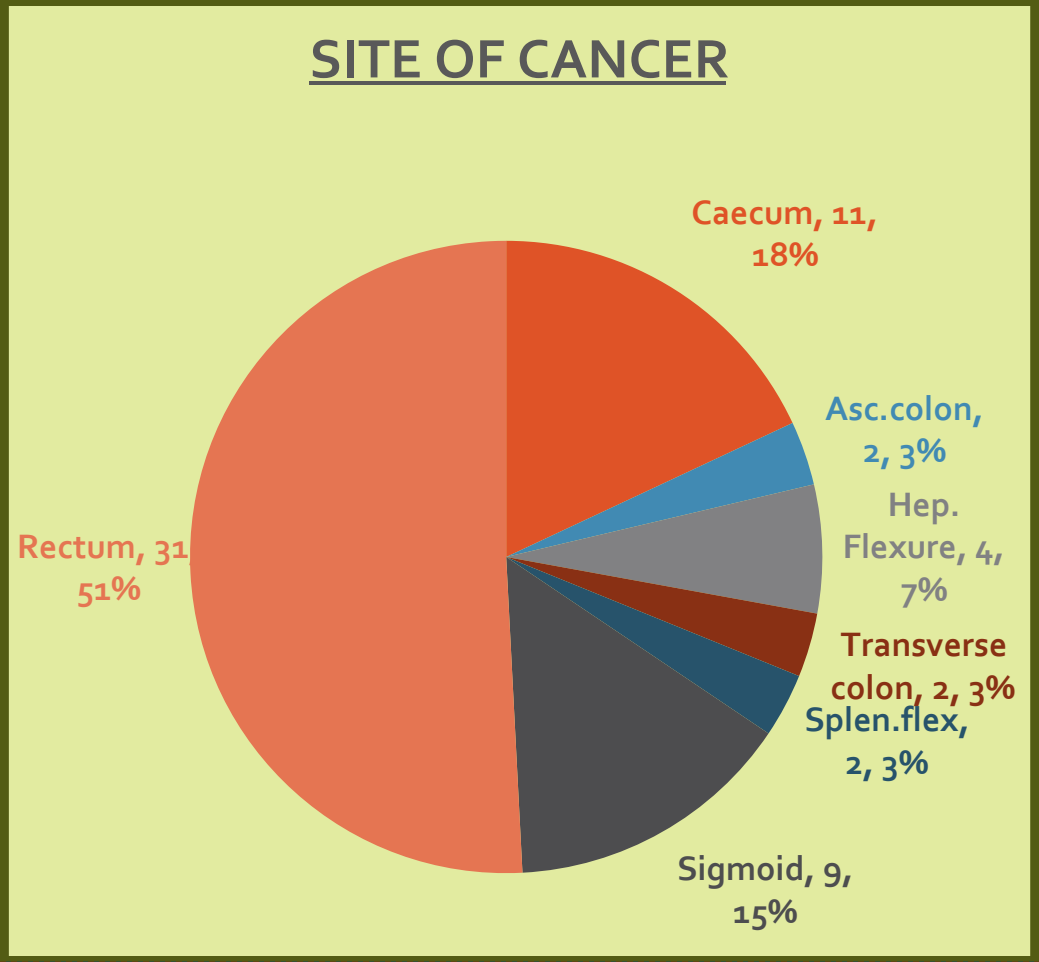
- 97.8 % had testing in less than 5 days.
- 70 % had test less than 3 days.
- 2.2 % had testing at 5 days.

RESULTS - CANCER RESECTIONS (CR)

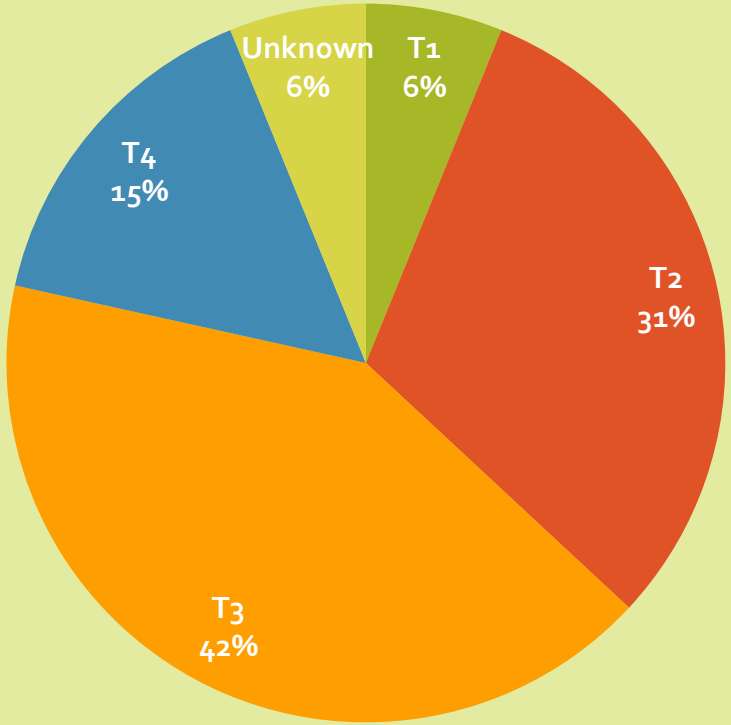
- Total number of Cancer surgeries = 65
- 34 males, 31 females
- Median age = 73yrs (Range – 39 to 94yrs)
- 8 patients had neo-adjuvant chemotherapy, 5 patients had neo-adjuvant radiotherapy. Of these, 3 patients had neo-adjuvant chemo-radiotherapy.
- All cases were discussed at Colorectal MDT prior to making a decision for surgery.
- 39 patients had stoma formation.

RESULTS - CANCER RESECTIONS (CR)

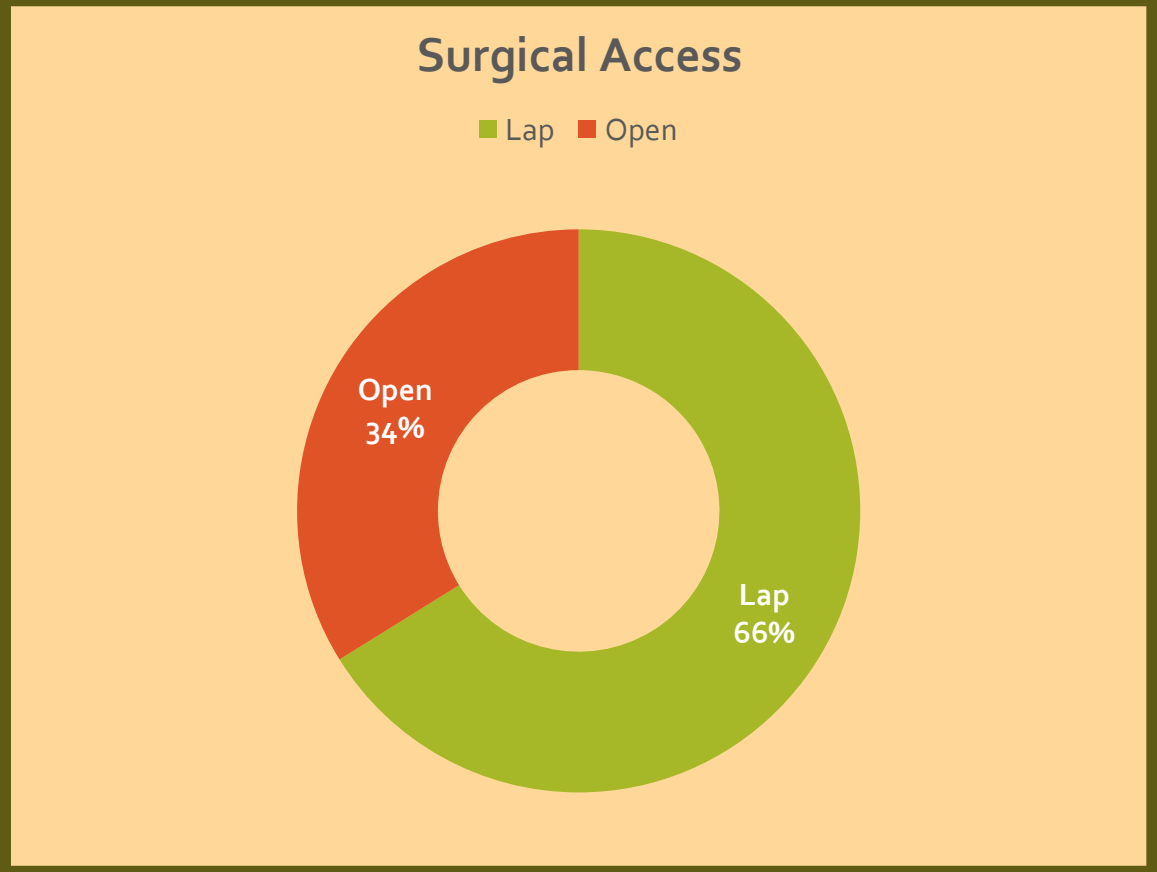
SITE OF CANCER



TUMOUR STAGE

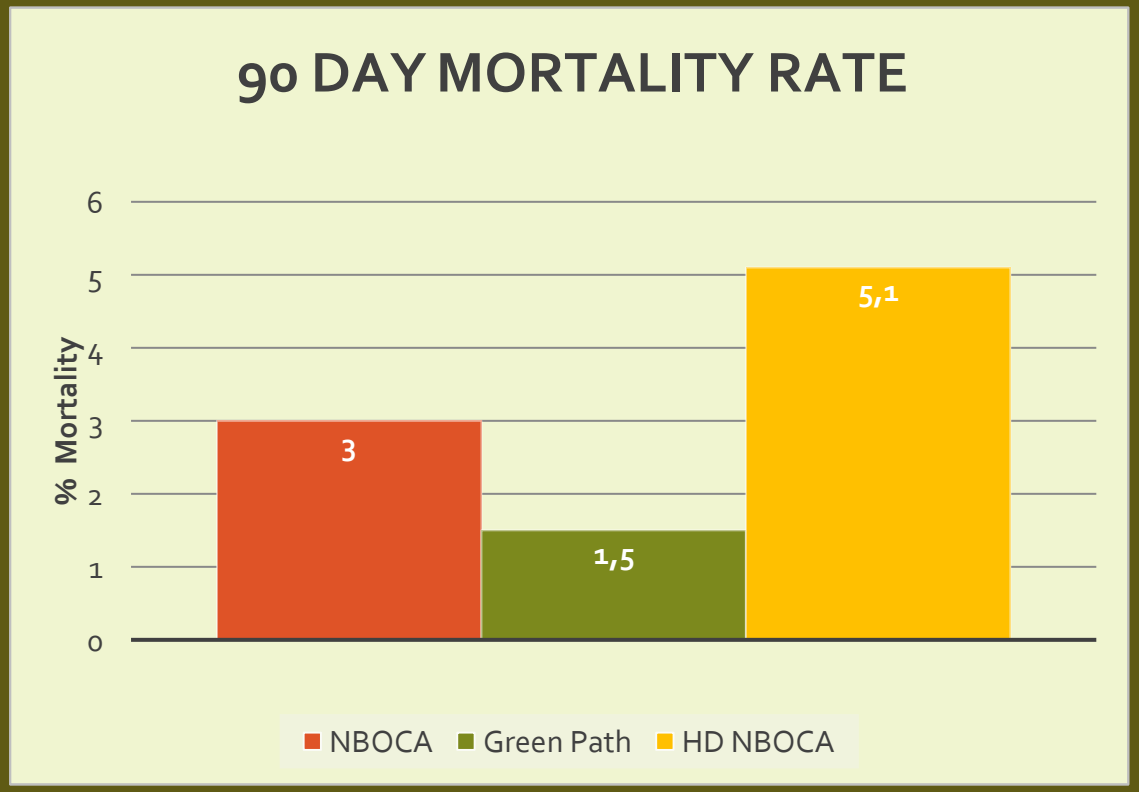


RESULTS - CANCER RESECTIONS (CR)



The All Wales Network attempted laparoscopic surgery rates was 56%.

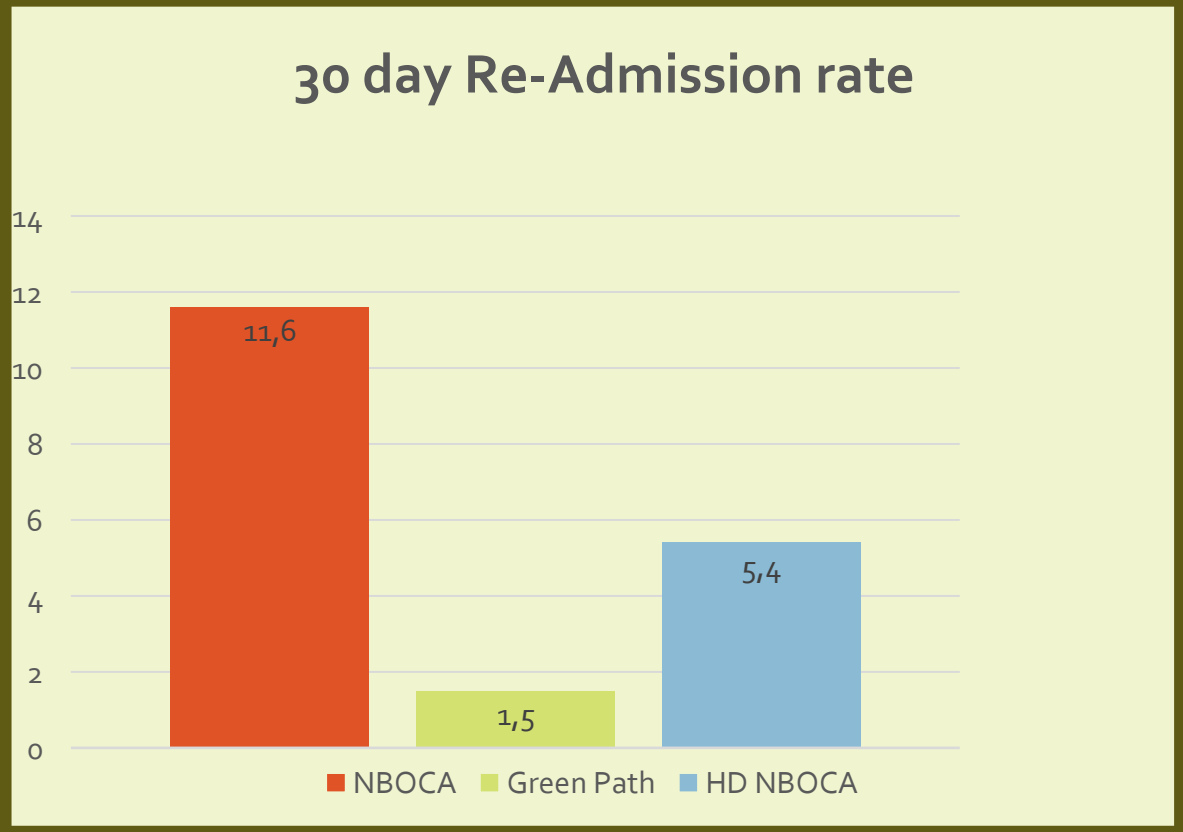
RESULTS - CANCER RESECTIONS (CR)



The All Wales Network 90-day mortality rates were in the range of 0.9% to 9.3%.

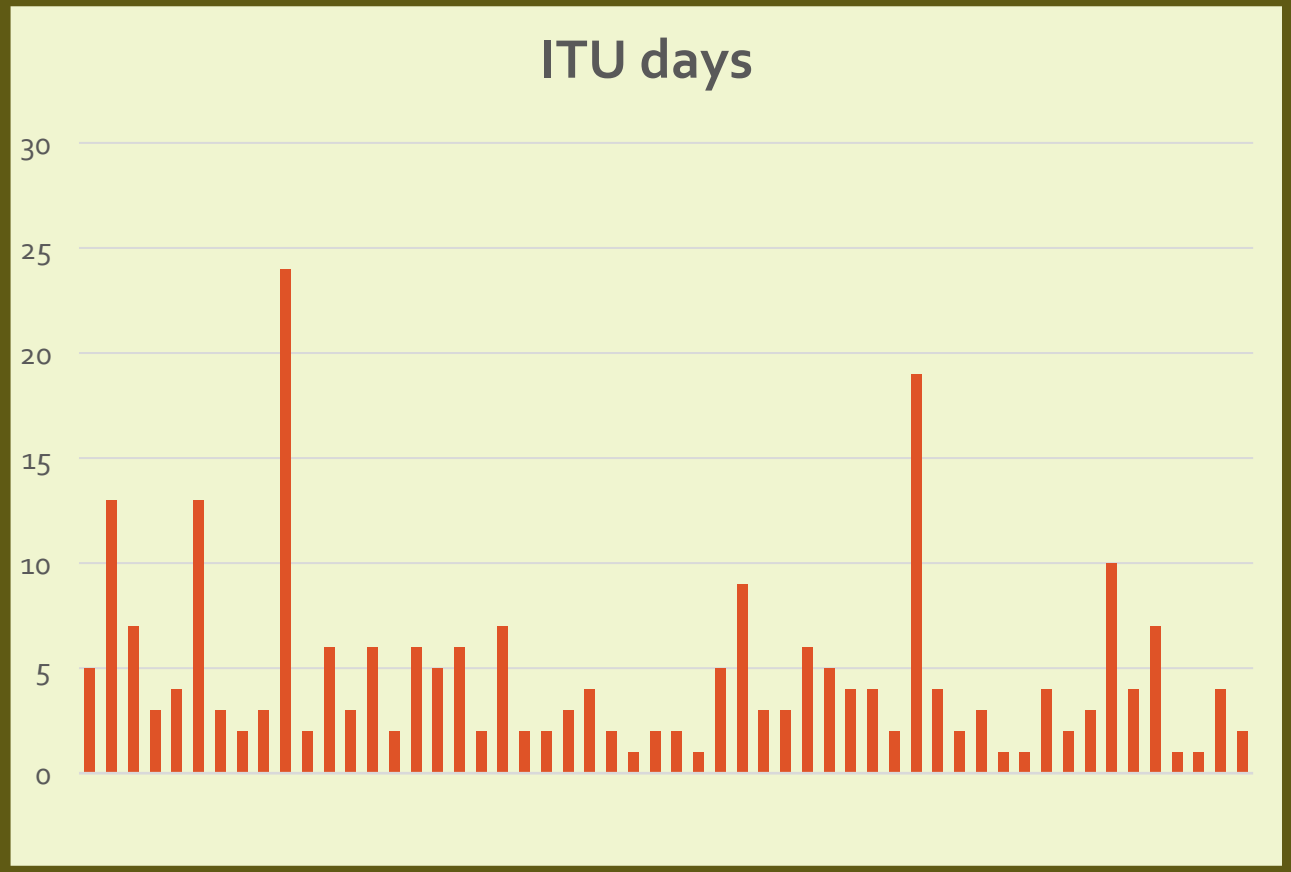
Our 30- day mortality = 0

RESULTS - CANCER RESECTIONS (CR)



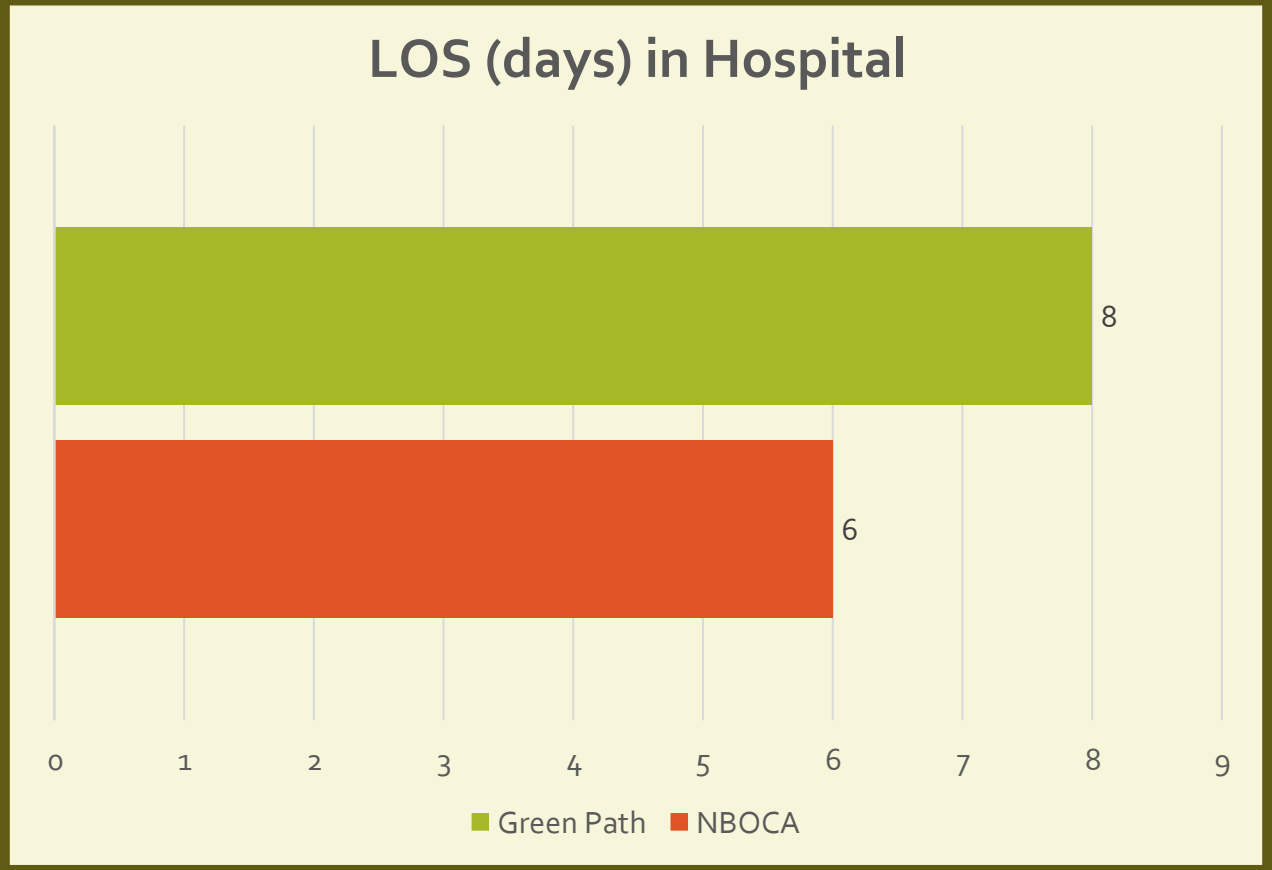
The All Wales Network 30 day re-admission rates were in the range of 6.5% to 16.2%.

RESULTS - CANCER RESECTIONS (CR)



The NBOCA did not report on this aspect. However this was an important aspect within the development of this pathway. 72% patients received ITU care post operatively. Median ITU stay was 3 days.

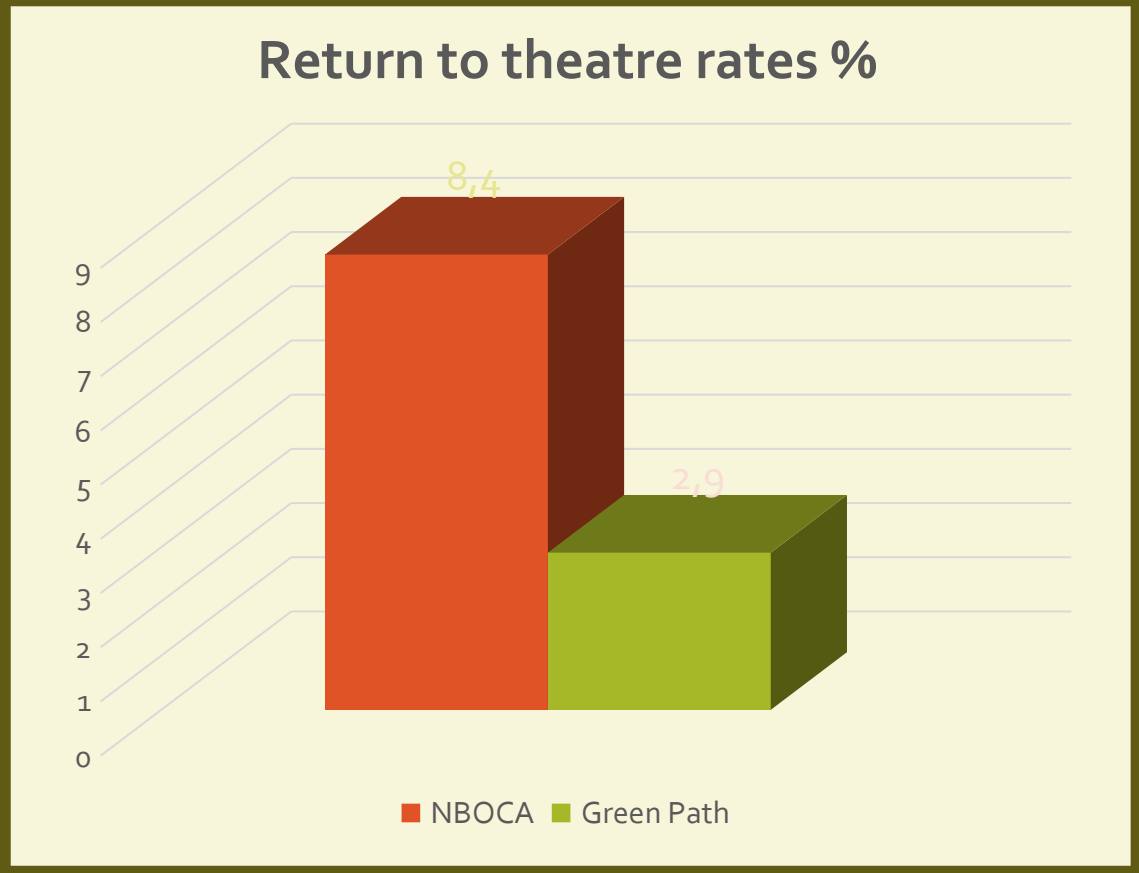
RESULTS - CANCER RESECTIONS (CR)



Possible factors influencing the LoS in our setting:

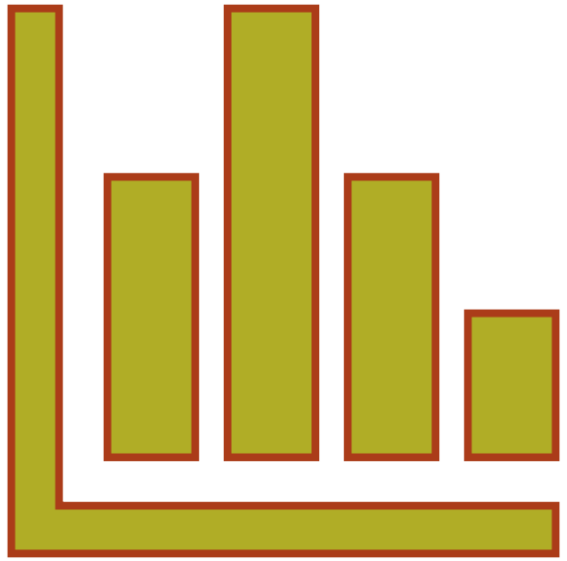
1. **Increased Stoma formation – needs stoma training.**
2. **Ensuring safe discharge for patients attending from large geographical distribution.**
3. **Elderly patient groups – anxiety.**

RESULTS - CANCER RESECTIONS (CR)



Case 1 – Post op SBO secondary to volvulus.

Case 2 – Post op bleeding and hematoma leading to ischemic stoma.



RESULTS

No patient on this pathway developed COVID -19 during their admission.

RESULTS – Summary

- All cancer and Irritable Bowel Disease patients were discussed in MDT prior to surgery.
- Majority of theses procedures fall under the Priority groups 2 and 3.
- 100% compliance to the preoperative components of the pathway.
- COVID 19 swabs were performed within the 4 days of admission inn 97.8% patients.

- **<u>No breach of the pathway.</u>**

RESULTS – Summary

- Short term surgical outcomes were on par with the pre-covid results and national standards (NBOCA).

- The median Length Of Stay (LoS) was marginally higher than expected.

Action

- Improve data recording on WPAS / electronically.
- COVID-19 testing within 72hrs of admission now achievable due to increased access to testing.
- Further analysis of postoperative care (ITU level care, ERAS guidelines) – To facilitate development of the post anesthetic care unit (PACU – Level 1 unit) and reduce Level 1 ITU requirements.
- Prospective data collection and analysis for service evaluation and improvement.

Acknowledgements

We acknowledge the contributions made by our staff who helped in achieving these excellent results

- Consultant Surgeons and the Extended Surgical Team.
- Ward 7 staff, Theatre staff, ITU staff.
- Allied Health care professionals.
- Preassessment team.
- Waiting list teams.
- Management teams.
- Everyone who is part of this pathway.

THANK YOU