

# Emergency Laparotomy

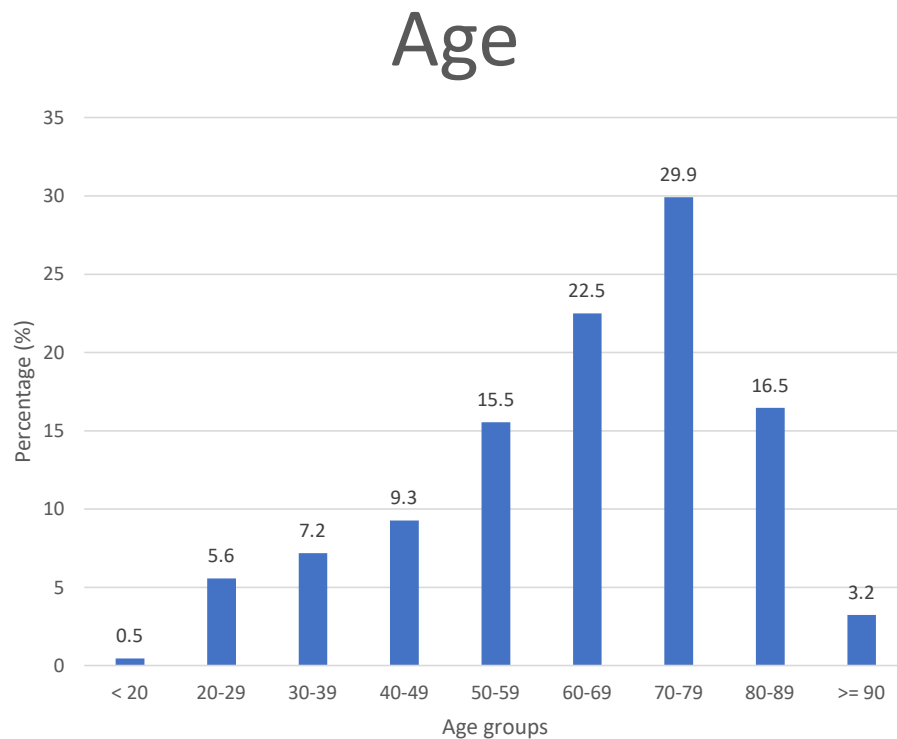
University Hospital Geelong

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Thursday November 10<sup>th</sup> 2-5pm

# Demographics



- M = 45.3%

- F = 54.7%

- Admission Source

- Emergency Department = 87%

- Transfer = 3%

- Medical wards or other unit = 5%

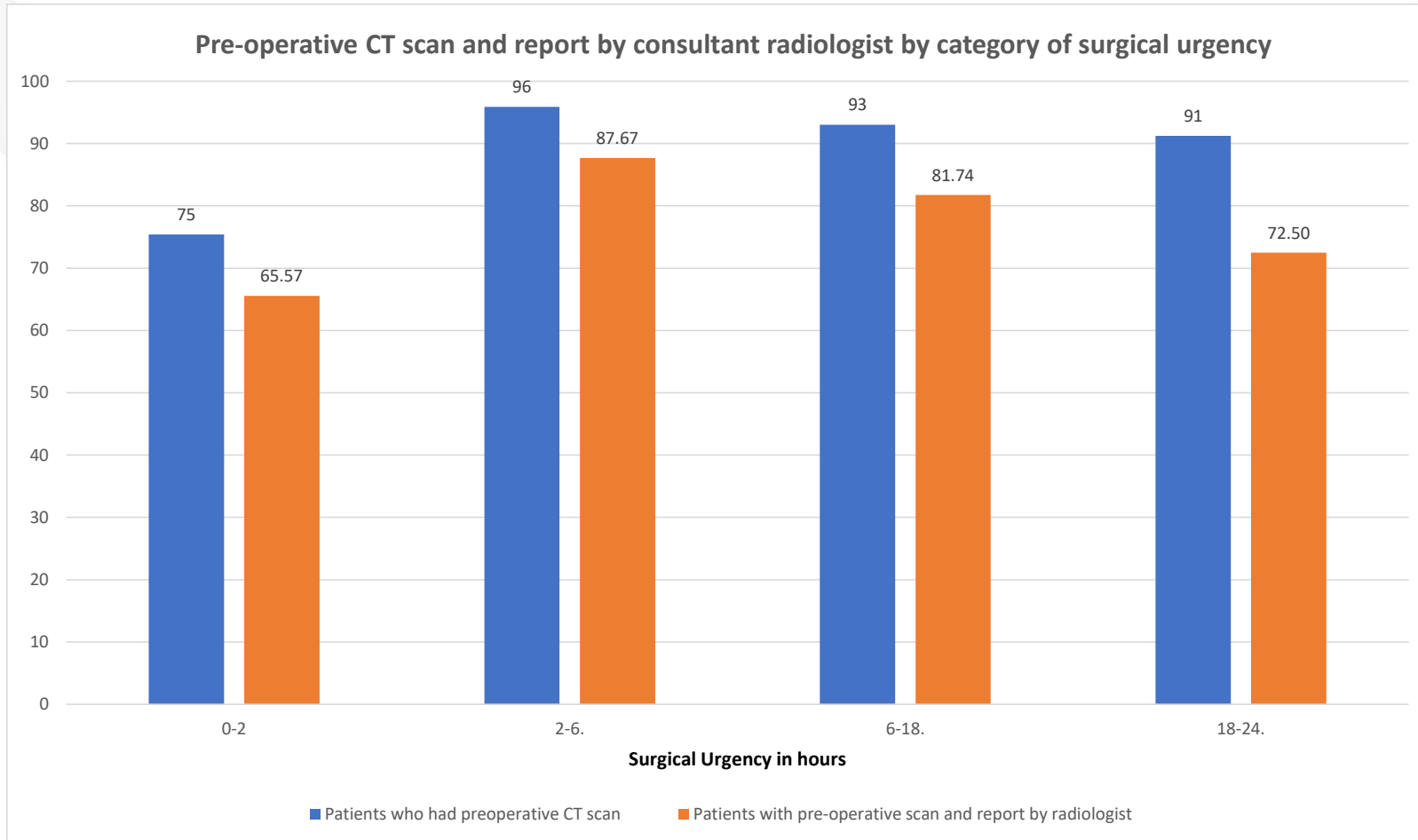
- Rooms/Clinic = 2%

- URTT following elective surgery = 3%

# Performance against ANZELA KPI's

KPI	2018-2019	2019 -2020	2020 - 2021	2021 – 2022	Total
<b>Number of patients</b>	127	76	154	118	475
<b>Before</b>					
CT scan reported < 1 hr	79	48	108	82	317
Lactate available at referral	101	57	99	97	354
Preoperative risk documentation	97	43	79	102	321
Preop frailty assessment >65 years	17	27	62	50	156
Arrival in theatre within time	84	58	114	98	354
<b>During</b>					
Consultant surg in theatre > 5%	65	33	72	62	232
Consultant anaes in theatre > 5%	68	38	75	63	244
Both surg and anaes > 5%	65	33	72	62	232
<b>After</b>					
Direct CCU admit > 10% risk	34	20	38	32	124
Elderly Medicine review > 65 yrs	20	13	31	34	98

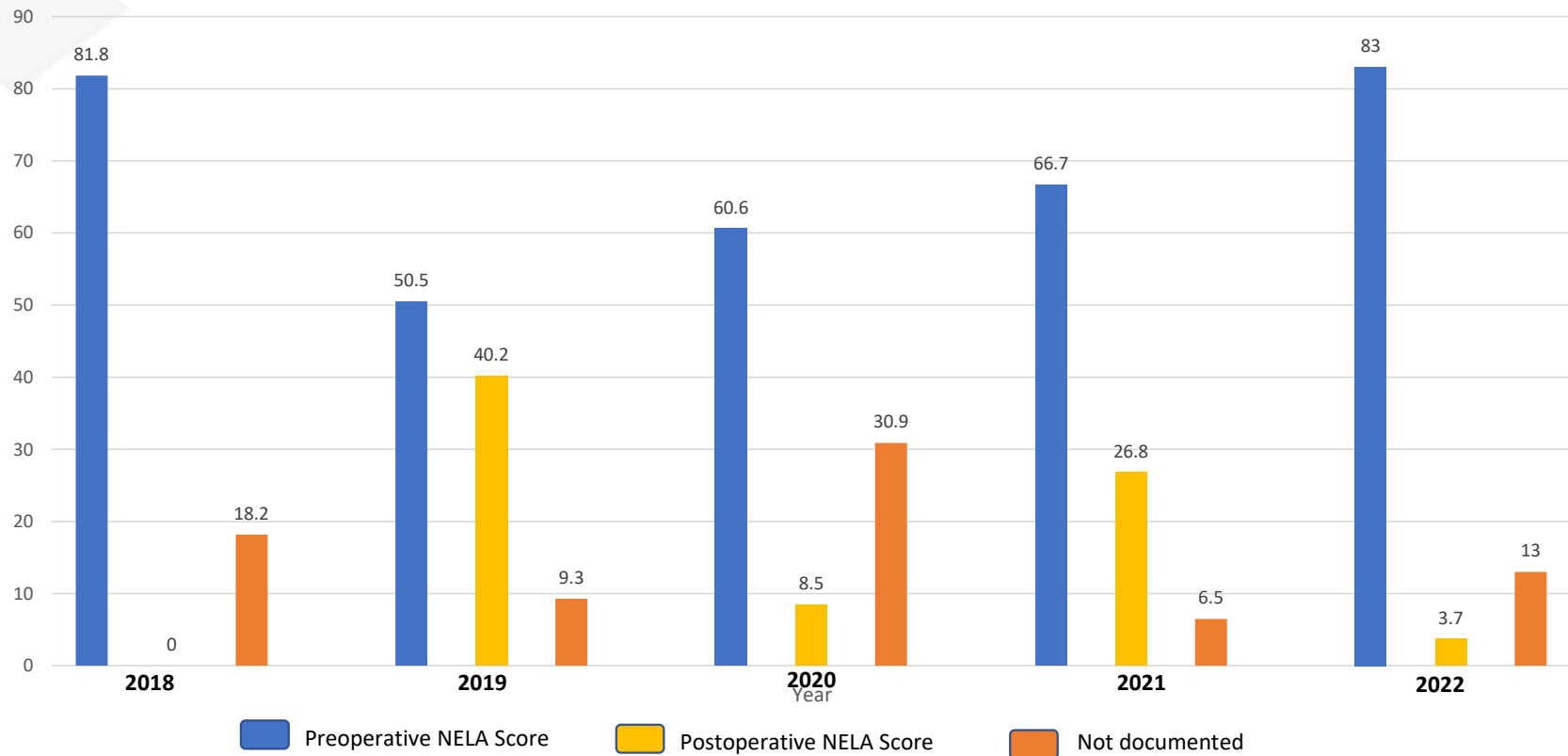
# Radiology



# Risk Assessment

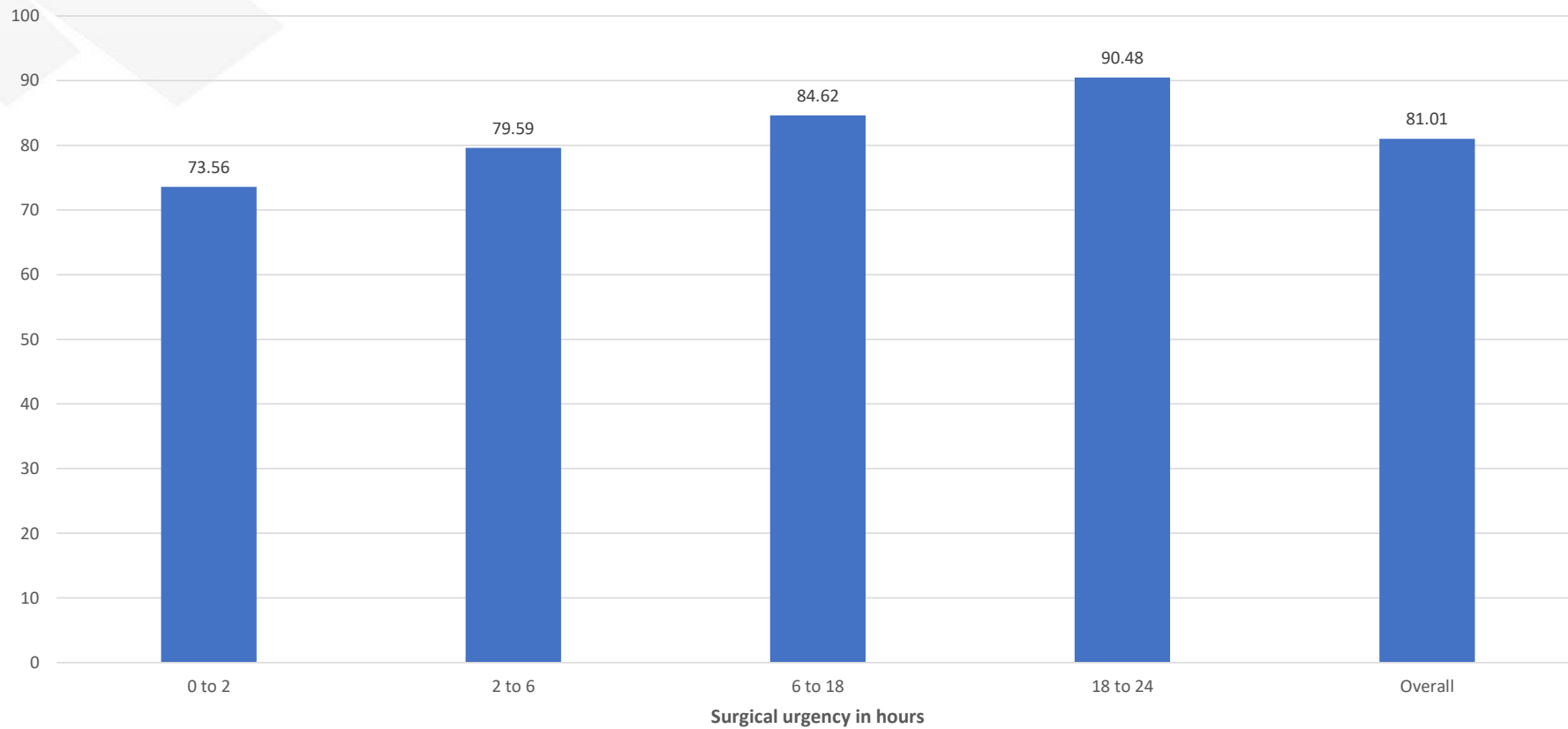


## NELA Scores



# Timeliness to theatre

Proportion of patients arriving in theatre within the appropriate timeframe



# Proportion of consultant surgeon and anaesthetists in theatre



**Most senior surgeon in OT 94.3% (5.7% - FELLOW)**

**Most senior anaesthetist in OT 98.7 % (0.5 % FELLOW)**



# Postoperative admission to critical care

## Post Operative Destination

**ICU/HDU**

265 (55.8%)

**Ward**

209(44%)

**Ward → ICU**

11/209 (5.3%)





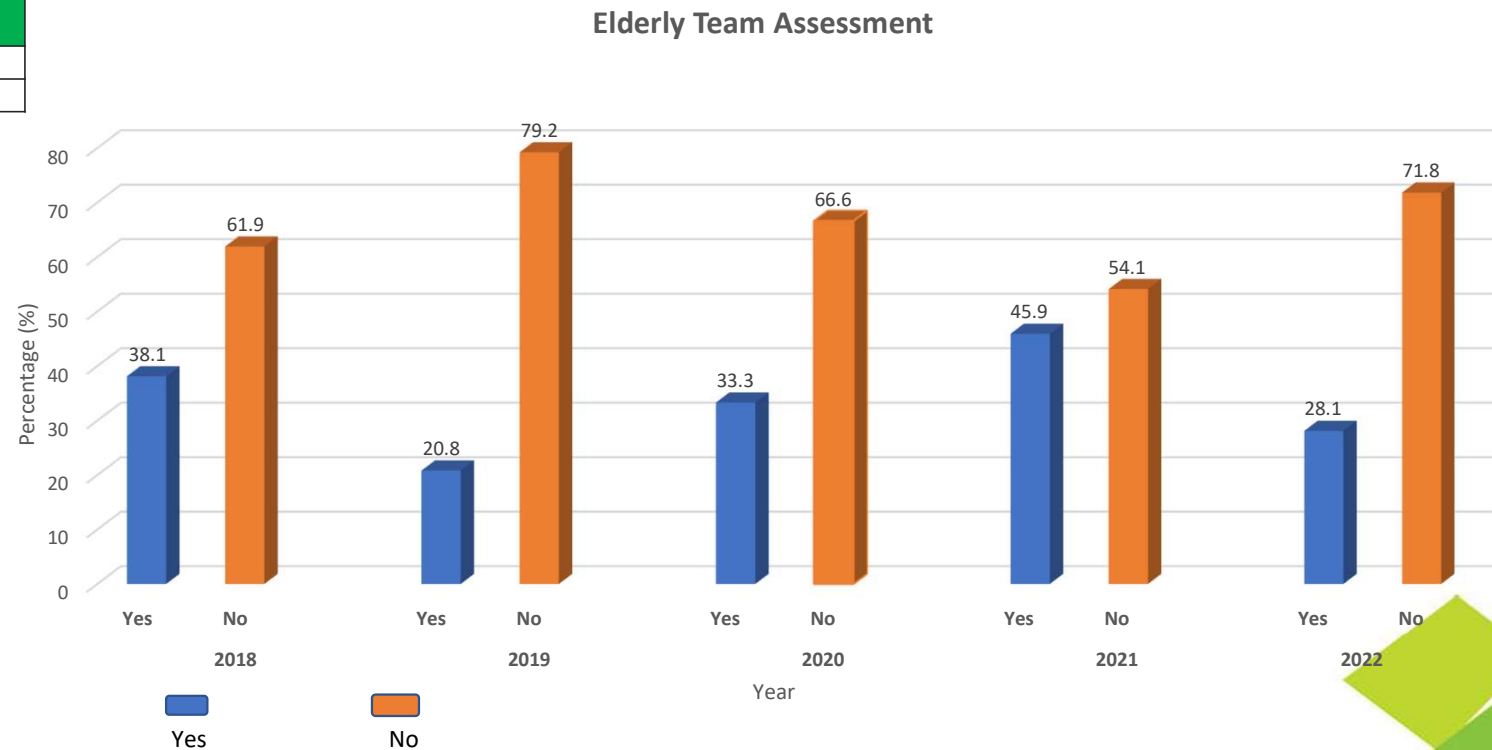
## Postoperative destinations that do not correspond to their NELA scores

- 163 out of 475 patients went to their postoperative destinations that do not correspond to their NELA scores
- **27/151 (17.9%)** patients with  $NELA \geq 10$  who went to the ward postoperatively (4 died with 3 transferred to ICU prior)
- **136/322 (42.2%)** with  $<10\%$  NELA score went to ICU (61 had NELA of 5-10)



# Proportion over the age of 65 assessed by geriatrician

ELDERLY TEAM ASSESSMENT			
Overall	Yes	148	43.1
	No	195	56.9



# Emergency Laparotomy Outcomes V Risk

Risk Factor	Total Number	Mortality (In-hospital)	CCU admit rate	Av LOS	URTT during admit/re-admit	Discharge home (%)
NELA < 5%	230	1	74	14.1	21	95
NELA 6-10%	92	9	64	14.0	11	74
NELA 11-15%	50	6	35	15.5	10	58
NELA 16-20%	23	2	19	21.1	3	52.2
NELA 21-30%	39	11	32	19.0	6	38.5
NELA 31-40%	15	0	13	26.9	4	33.3
NELA 41-50%	13	4	13	15.3	5	46.2
NELA > 50%	13	6	13	21.9	2	30.8
Frailty Score 1-2	29	1	14	16.9	8	79.3
Frailty Score 3-5	115	13	82	16.1	16	63.5
Frailty Score 6-9	18	2	13	15.6	2	59

Mortality = 30 day mortality (please state if in-hospital mortality only as this is often higher than POMR 30)  
 NB Victorian Rate: in hospital deaths 6.9% [889/ 12767] versus 30 day deaths = 788 or 6.17%)

# Mortality by condition requiring EL

Condition	Number	No of deaths and (%)
Small bowel obstruction	152	7 (4.6)
Hernia	30	3 (10)
Large bowel emergencies	45	6 (13.3)
Upper GI emergencies	22	3 (13.6)
Peritonitis	73	5 (6.8)
Post op complications URTT	34	7 (20.6)
Mesenteric Ischaemia	30	8 (26.7)
Metastatic disease		
Total	386	39

## Emergency Laparotomy Mortality by procedure

Procedure Group	Number	No of deaths (%)
Small bowel obstruction without resection	90	4 (4.4)
Small bowel procedure with resection	63	7 (11.1)
Colon resection with anastomosis	24	1 ( 4.2)
Colon resection with stoma	153	11 (6.2)
Gastroduodenal procedure	22	3 (13.6)
Peritonitis	33	4 (12.1)
Other emergency laparotomy procedure	91	9 (9.9)
TOTAL	476	39