

Australian and New Zealand Emergency Laparotomy Audit - Quality Improvement *Second Report*

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Victoria Perioperative Consultative Council

Workshop on Emergency Laparotomy

Outcomes and Performance

10 November 2022

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Competing interests

- Chair, Working Party
Australian and New Zealand Emergency Laparotomy
Audit – Quality Improvement
- Clinical Director
Western Australian Audit of Surgical Mortality

Acknowledgements

Working Party

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Australian and New Zealand
Emergency Laparotomy Audit –
Quality Improvement
(ANZELA-QI)

Second ANZELA-QI program summary report
1 January 2020 – 31 December 2021

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- 2020 & 2021
- 25 hospitals
- 3,178 Patients
- Australian data only
 - ~11% of all EL

Aims of ANZELA-QI pilot

1. Determine the standard of Emergency Laparotomy (EL) care in Australia and New Zealand
2. Assess the need for an EL Clinical Quality Registry in Australia
3. The feasibility of a national continuous EL Quality Improvement Clinical Quality Registry

Patient compliance with care standards

ANZELA-QI compared to NELA

Care standard	NELA I 2012/13	NELA VII 2020/21	ANZELA-QI 2020/21
Pre-op CT report by consultant radiologist	68%	66% - in house 19% - out sourced	61.6%
Pre-op risk assessment	56%	85%	51.4%
Pre-op lactate (admit via ED)		75% (ELC)	65.3%
Theatre access by urgency			
<2 hours	77%	68%	24.3%
2 to 6 hours	86%	85%	51.3%
<=24 hours			51.3%
Both consultants in theatre RA ≥5%	70%	90%	75%
ICU admission			
RA ≥5%	81%	82%	55.7%
RA ≥10%	89%	88%	64.2%
Seen by Care of Elderly			
Aged ≥80 years	14%	29%	24.5%
Aged ≥65 years			17.4%
Frailty assessed when age ≥65	NA	92%	28.0%

Standard achieved

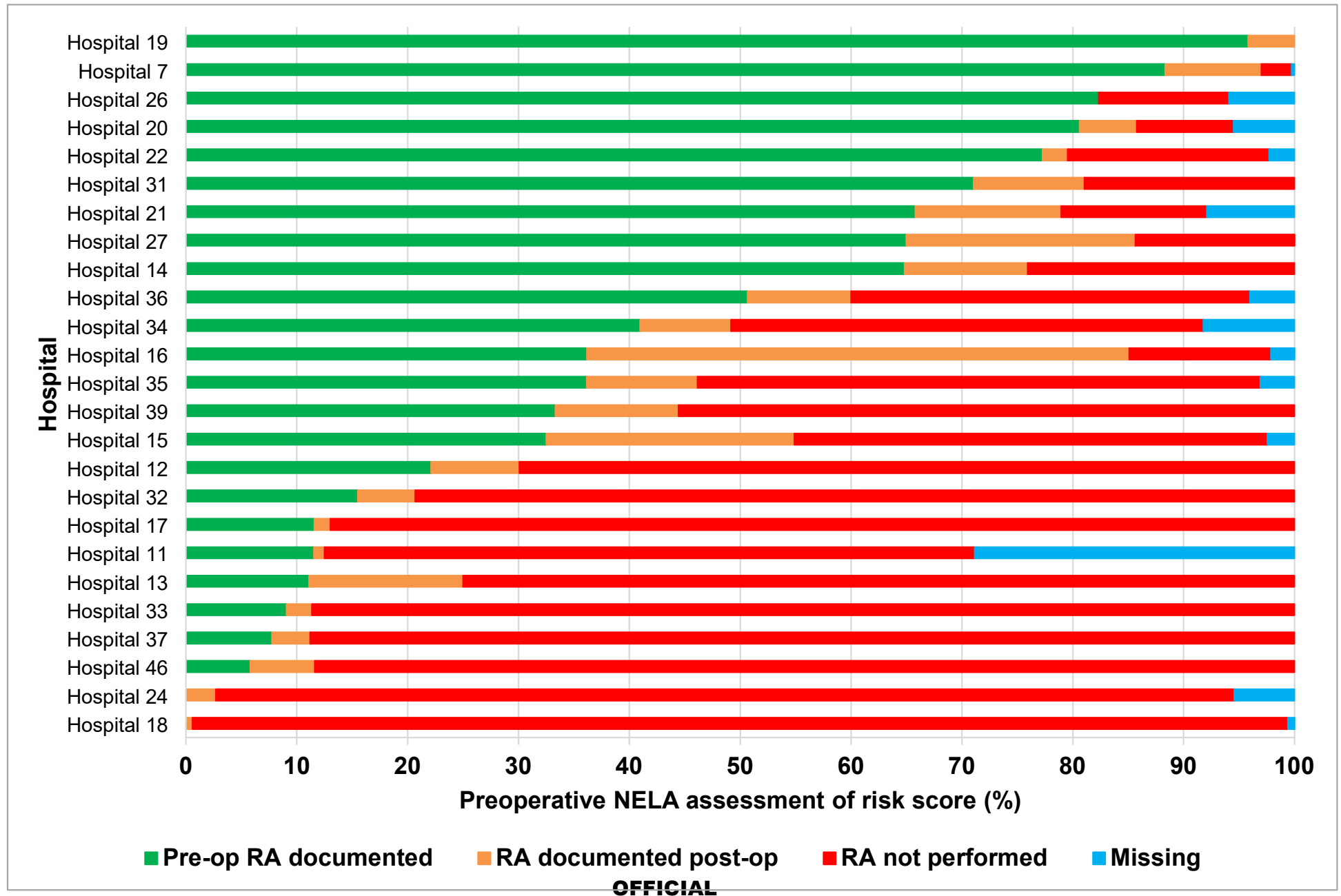
Green ≥80%; Amber ≥50% but <80%; Red <50%

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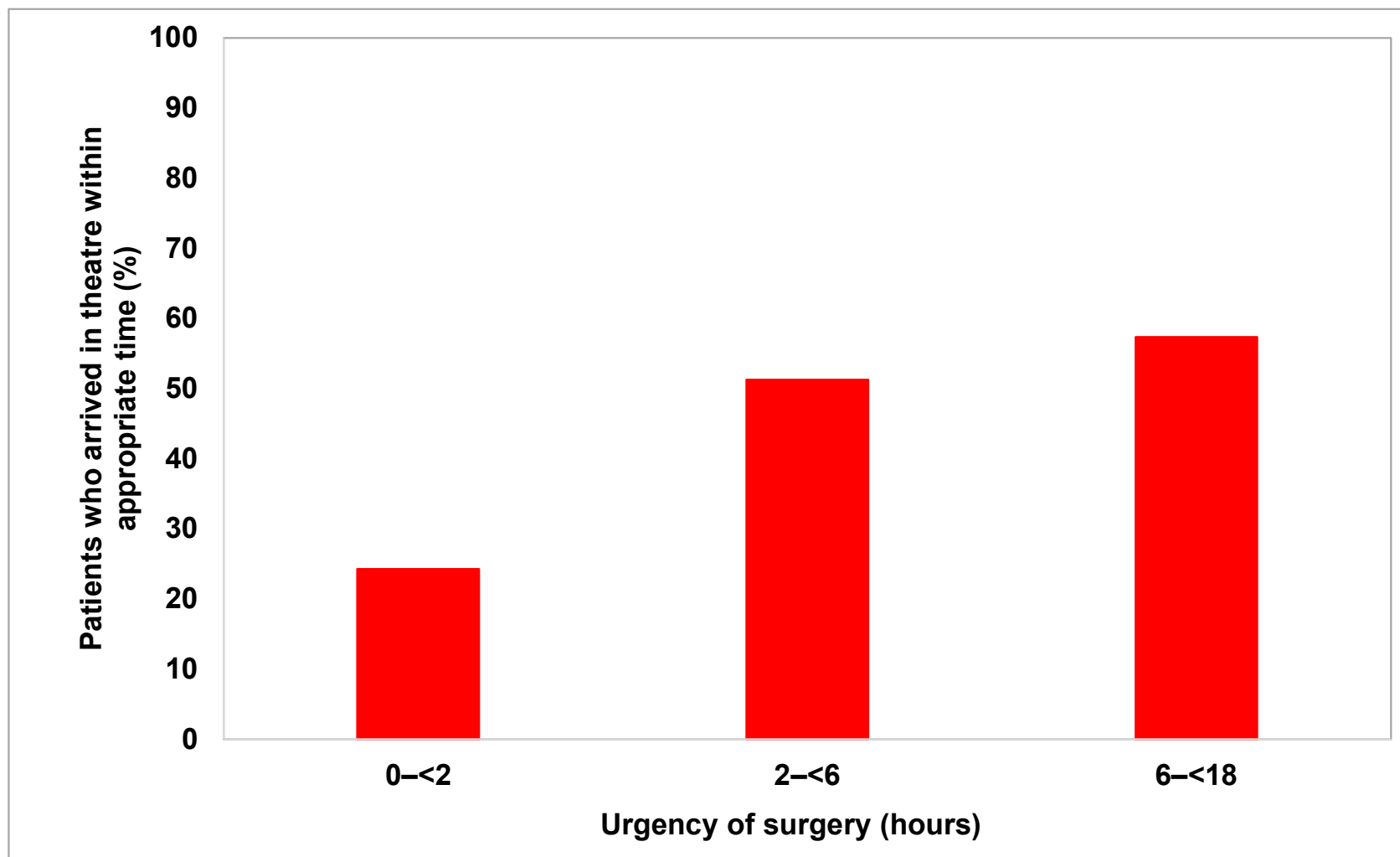
Hospitals achieving green compliance with care standards (≥80% in the 25 hospitals)

Care standard	2018/19	2020/21
Pre-op CT report by consultant radiologist	5	11
Pre-op risk assessment	1	0
Theatre access by urgency	0	0
Both consultants in theatre RA ≥5%	7	16
ICU admission RA ≥10%	8	12
Seen by Care of Elderly Aged ≥65 years	1	0

Risk assessment by hospital

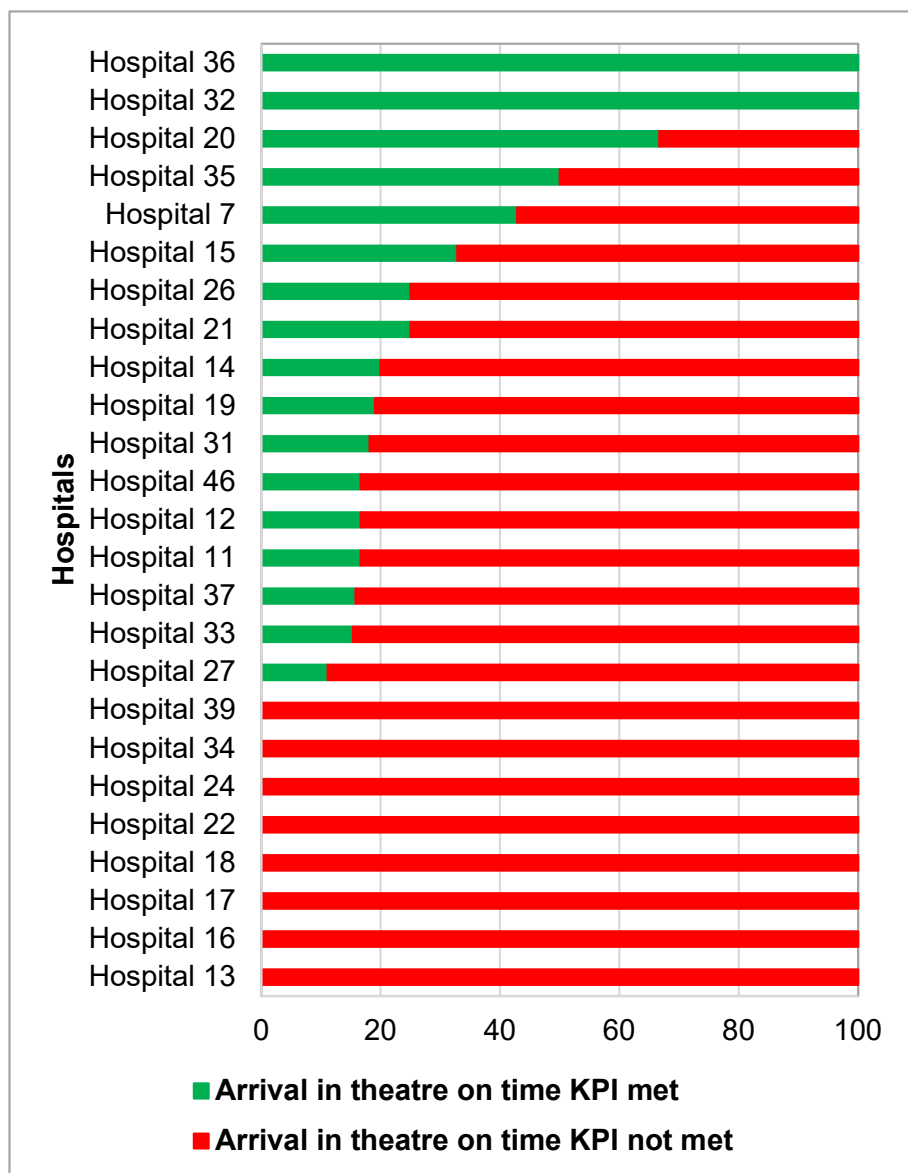


Timely theatre access - overall

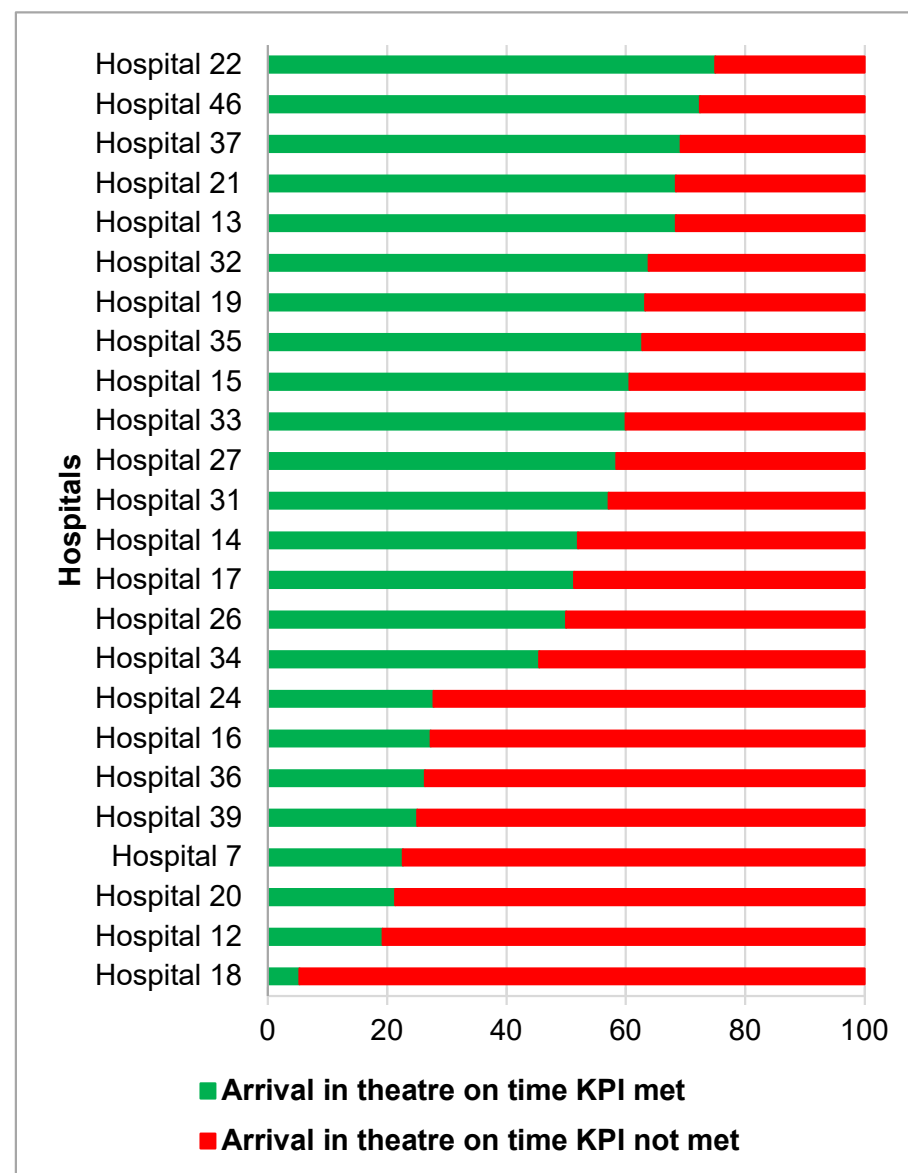


Timely theatre access by hospital

0 to ≤2 hours

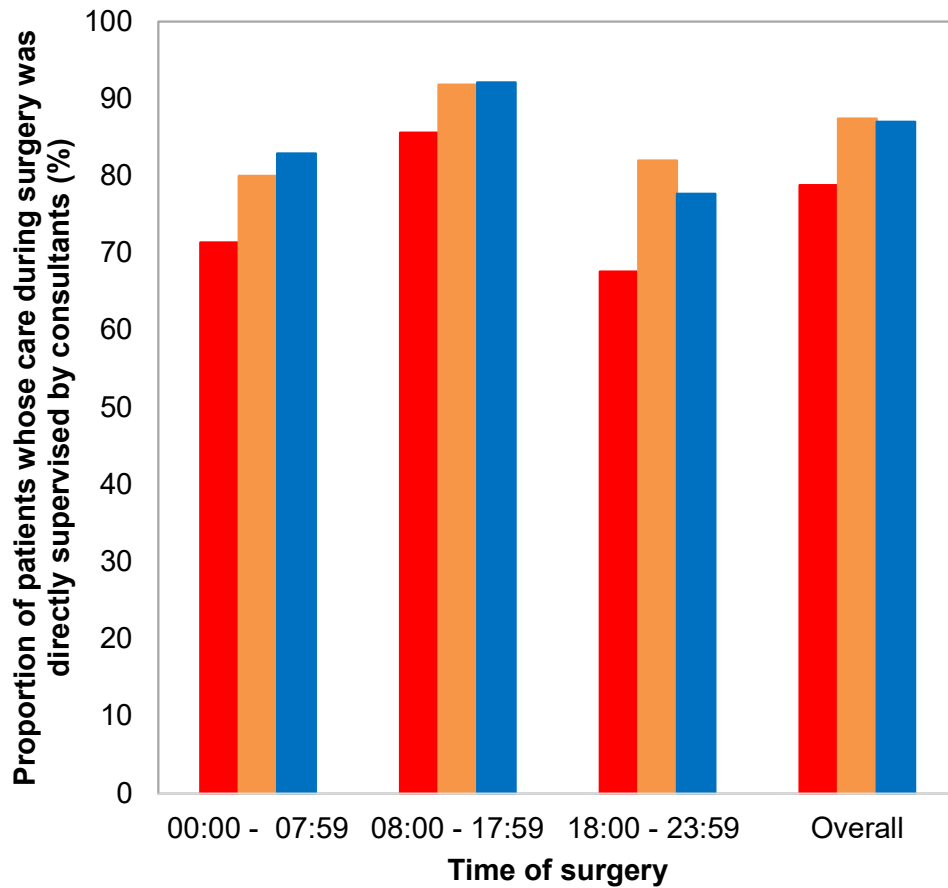


2 to ≤6 hours



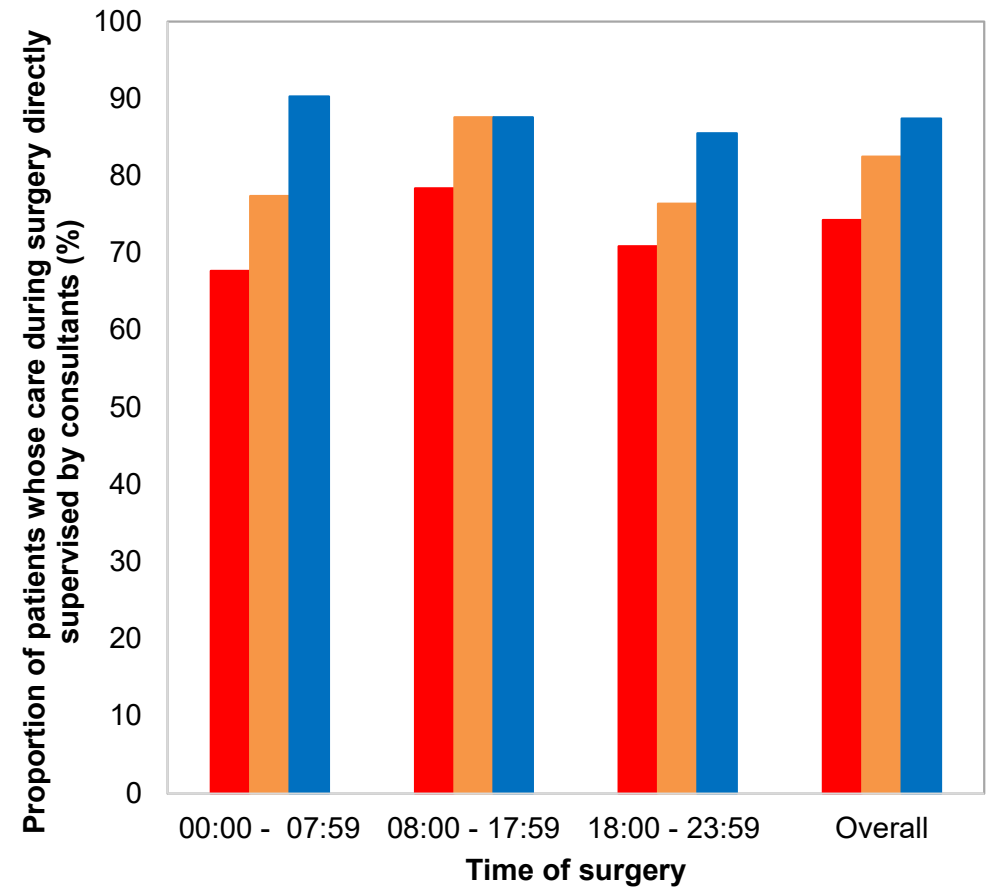
Consultant presence in theatre (risk assessment $\geq 5\%$)

Weekday



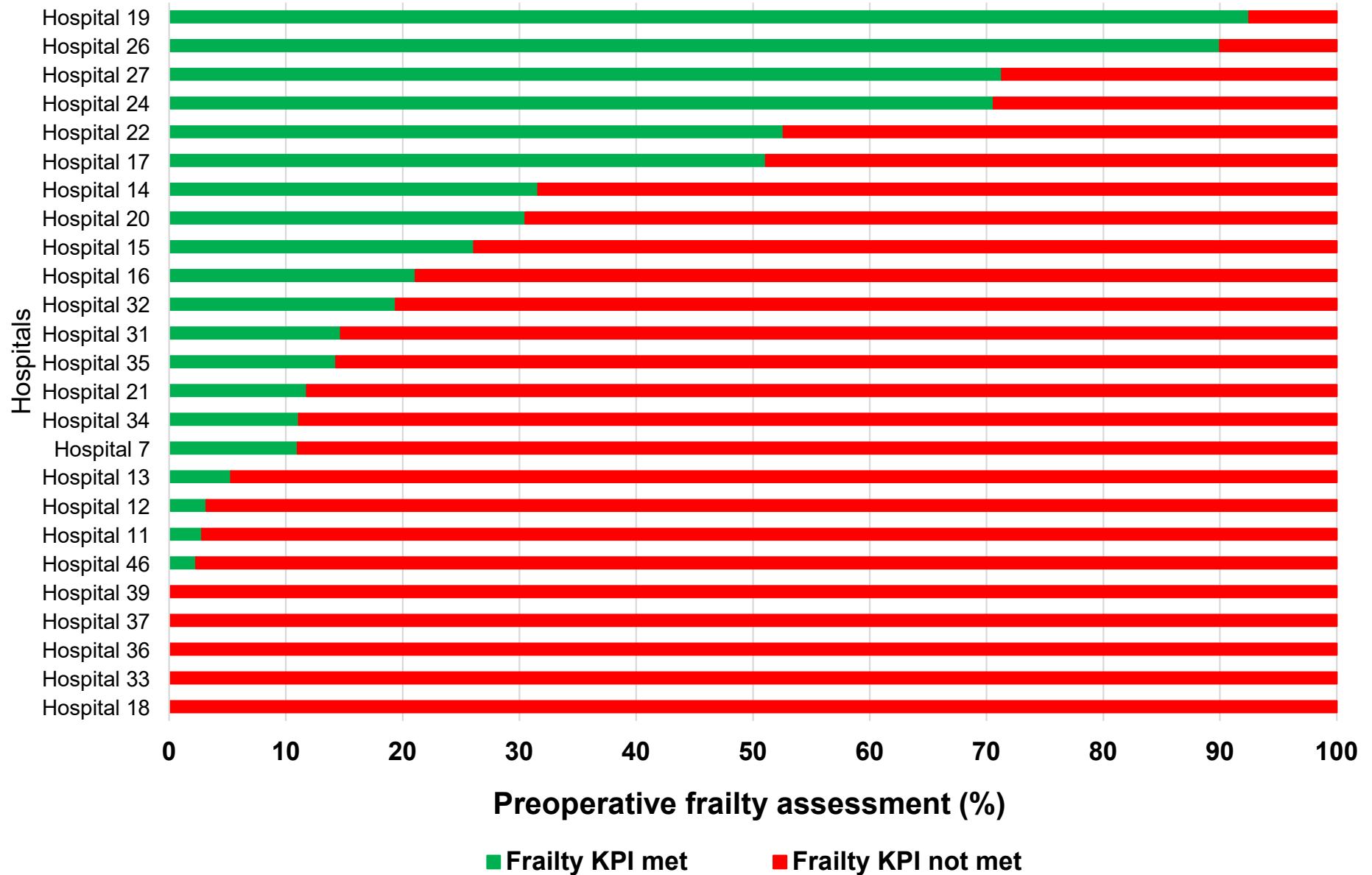
Both consultants
Consultant surgeon
Consultant anaesthetist

Weekend

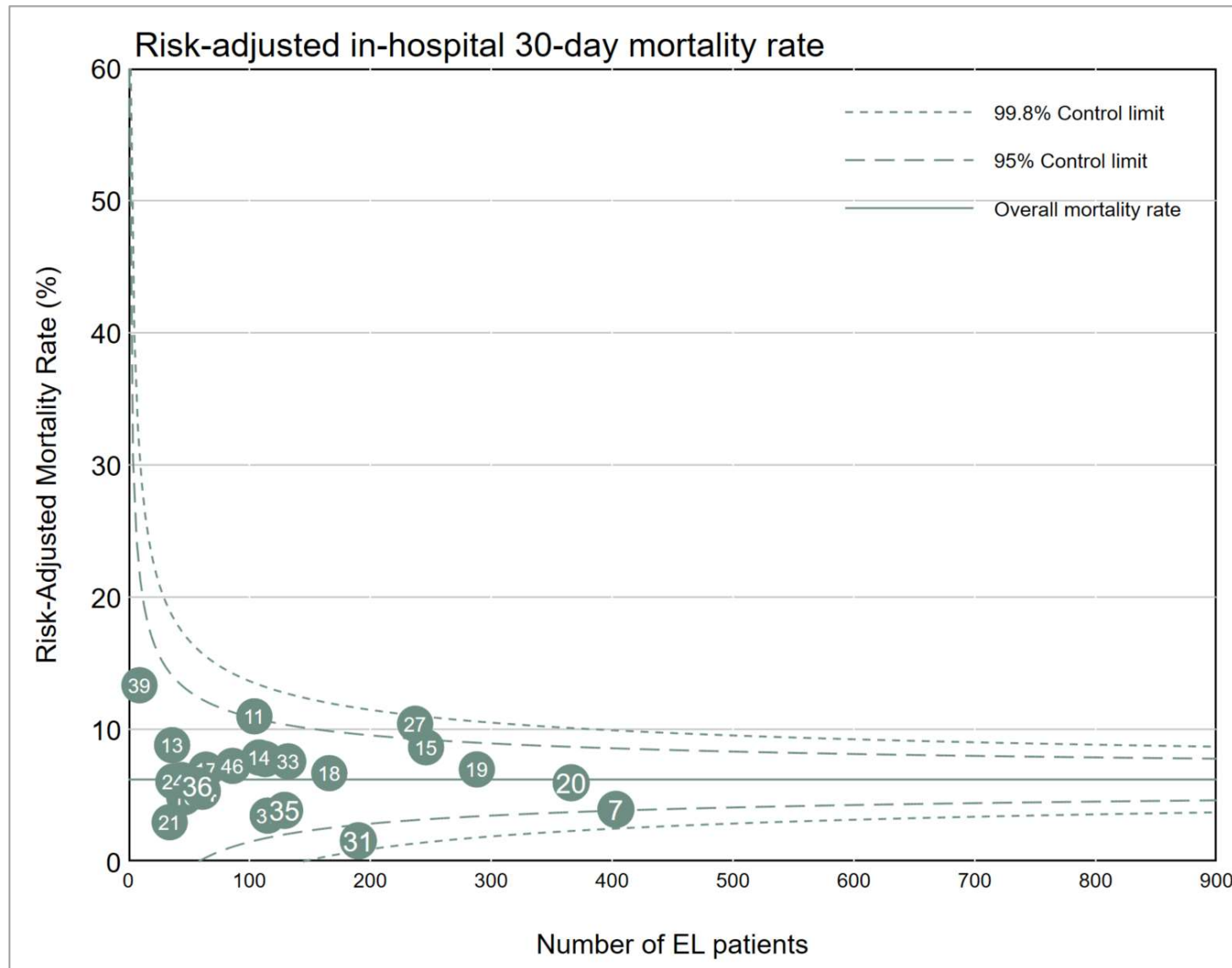


Both consultants
Consultant surgeon
Consultant anaesthetist

Assessment of Frailty in <65 years

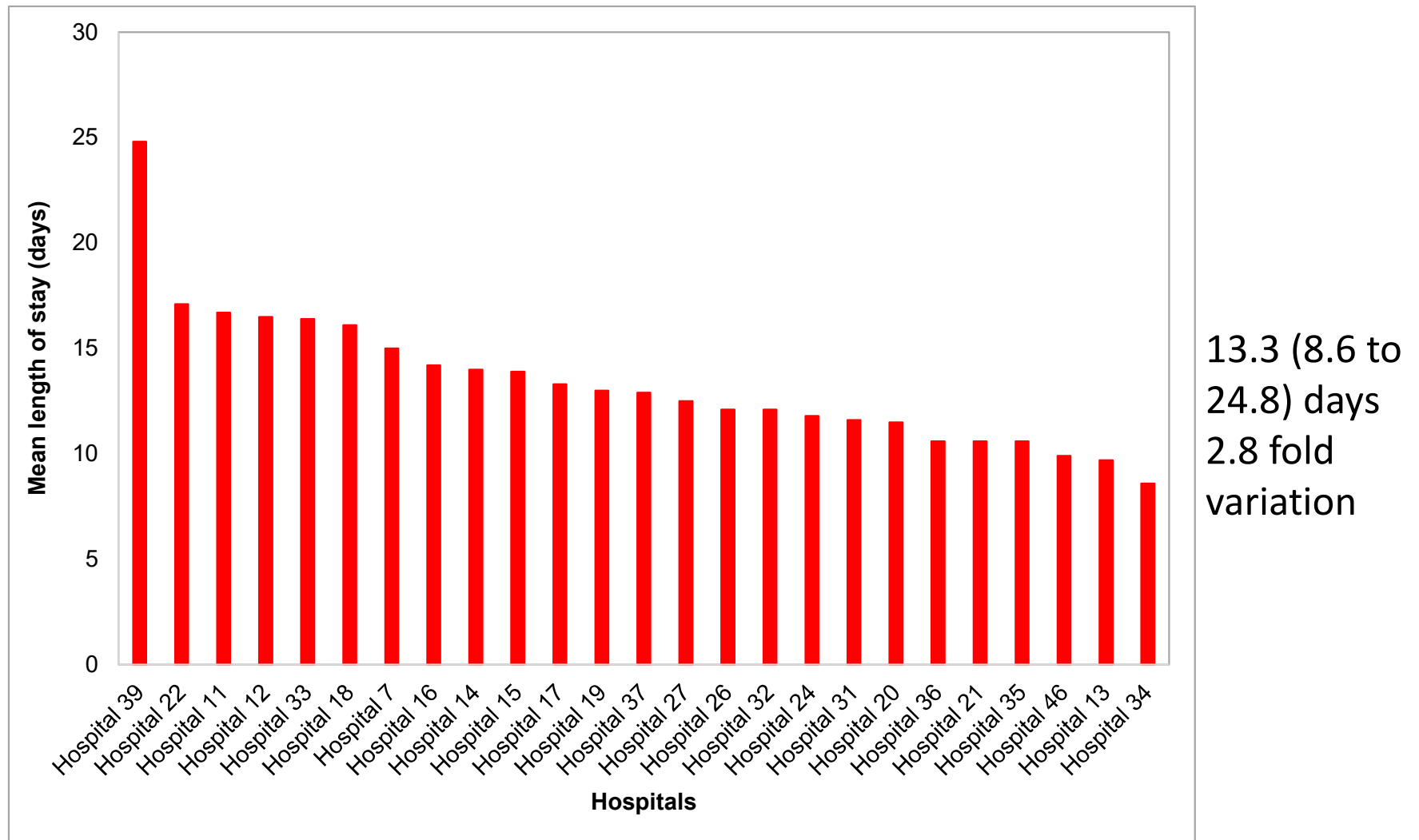


Post-operative in-hospital mortality



In-hospital
mortality
6.2% (1.6% to
13.3%)
8.3 fold
variation

Average length of stay by hospital (stay ≤ 60 days)



Return to theatre

	Elective	Emergency	Total	ANZELA	NELA
Yes - unplanned return	44	445	490	15.4%	4.8%
Yes - planned return	6	108	114	3.6%	2.8%
Both planned and unplanned return	1	12	13	0.4%	8.1%
Total				19.4%	15.7%
Missing/unknown	8	261	269	8.5%	


Failure to Rescue (FTR)

	Died	FTR	NELA
Yes - unplanned return	37	7.6%	14.1%*
Yes - planned return	23	20.2%	
Both planned and unplanned return	5	38.5%	
No	117	'5.1%'	

* 30-day mortality

Conclusion

- Poor compliance with evidence-based care standards
- Wide inter-hospital variation
- A near real time CQR very feasible
- Structural barriers
 - Governance, funding, data sharing, etc
 - Case ascertainment and data completion



...trust me
I'm a doctor

...God I trust,
everyone else
provides data!