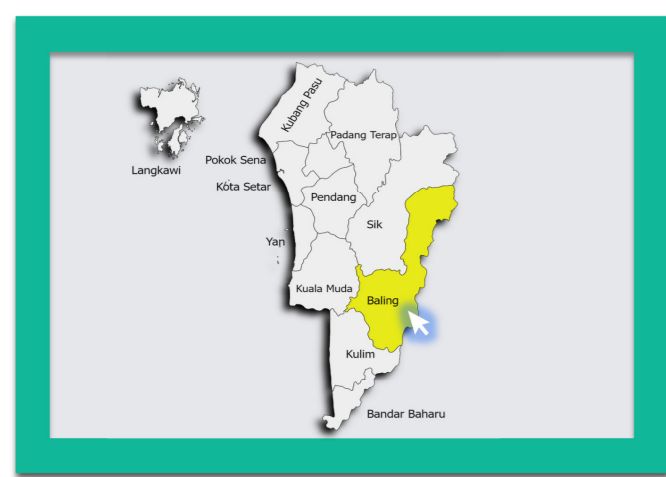


Global Surgery Initiative at District Hospital in Kedah, Malaysia

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BACKGROUND



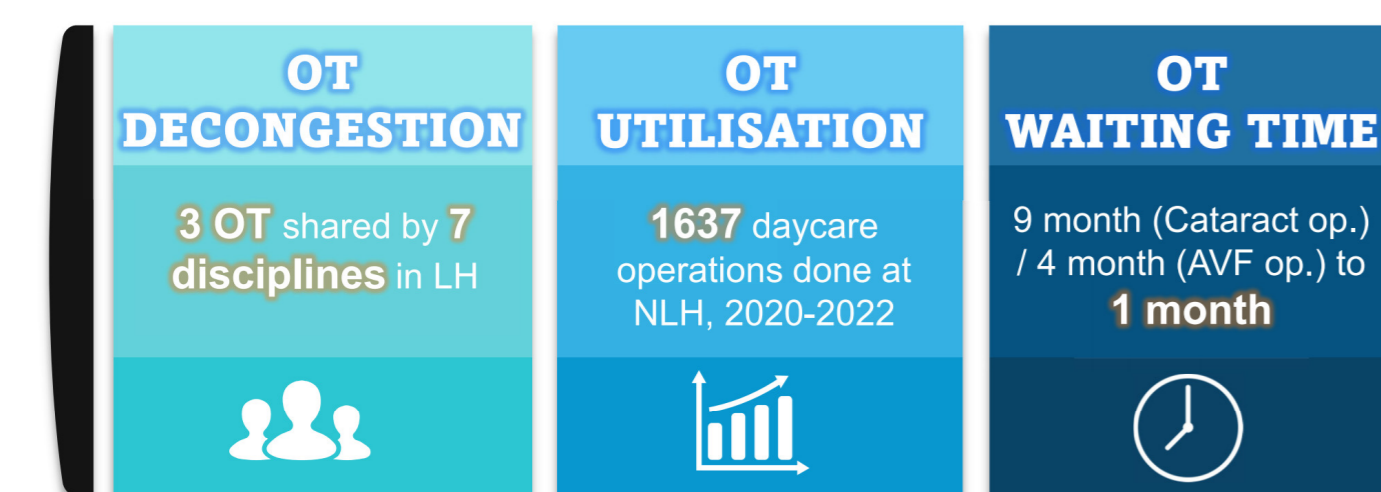
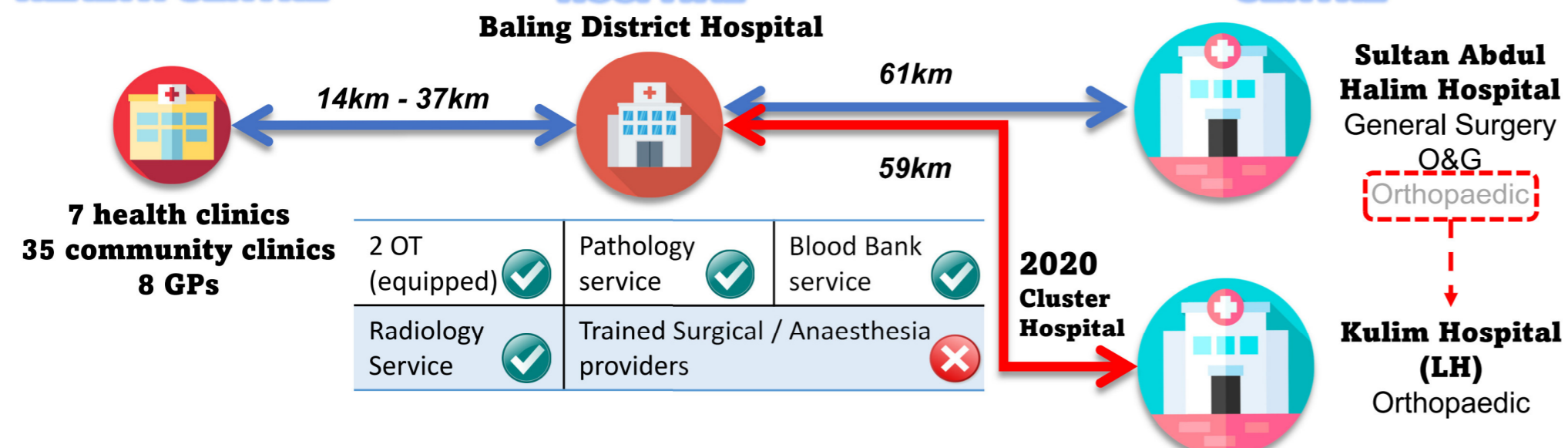
- Population - 156,400
Density 101/km²
- Area - 1529km²
- Main economic activity - farming & rubber tapping
- Among the poorest districts in Kedah in 2019

- Baling District Hospital (BDH) as first-level hospital without surgical or anaesthesia providers.
- The nearest surgical and anaesthesia care is at least one hour travelling by car.
- Burden of referral is shared in between two tertiary centres.

PRIMARY HEALTH CENTRE

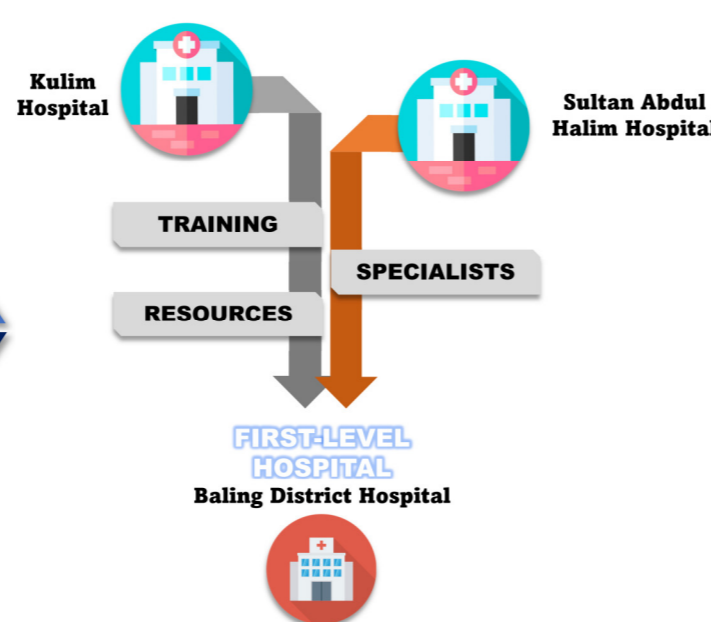
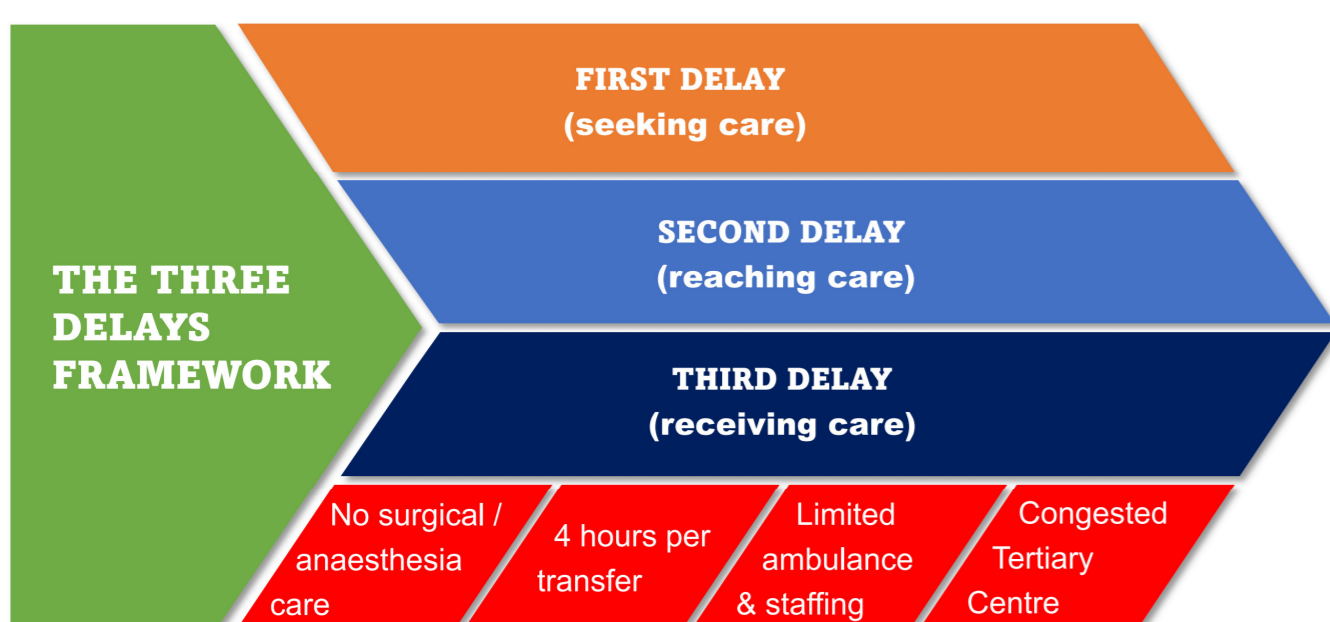
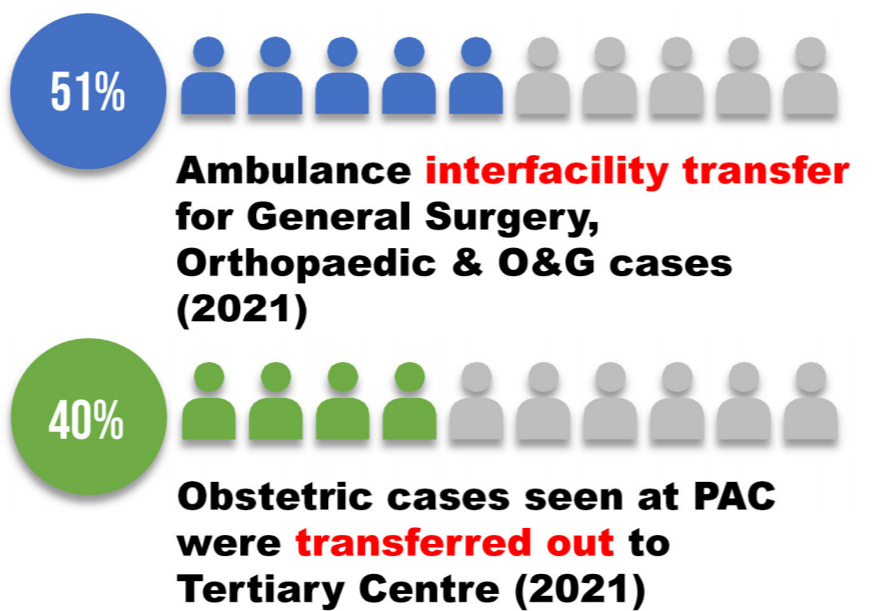
FIRST-LEVEL HOSPITAL

TERTIARY CENTRE



SOUTHERN KEDAH CLUSTER HOSPITAL NICHE SERVICES

- Service improvements at BDH (NLH) through Cluster Hospital Initiative (CHI) were limited to Cataract & AVF surgery.
- Interfacility transfers from NLH for surgical-related cases are still quite significant.
- Limited providers at LH limit further surgical service expansion at NLH under CHI.



- Provision of surgical and anaesthesia service at BDH under Global Surgery Initiative (GSI) may improve the third delay.
- Providers from Kulim Hospital and Sultan Abdul Halim Hospital.



14/1/2022 MOH Work Visit and Briefing on Global Surgery Framework and Ecosystem at Baling District Hospital

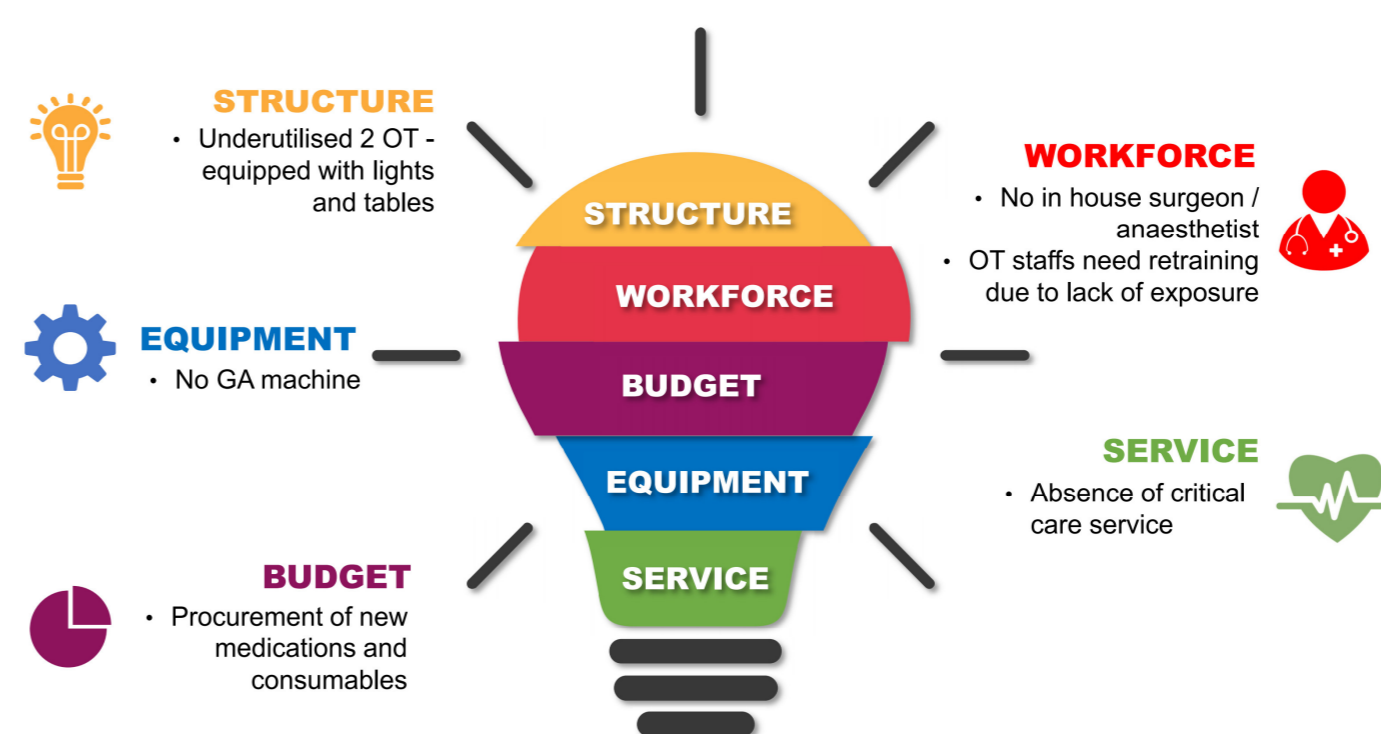
Global Surgery Initiative meeting and planning 22/2/2022

12/4/2022 First operation under Global Surgery Initiative performed at Baling District Hospital

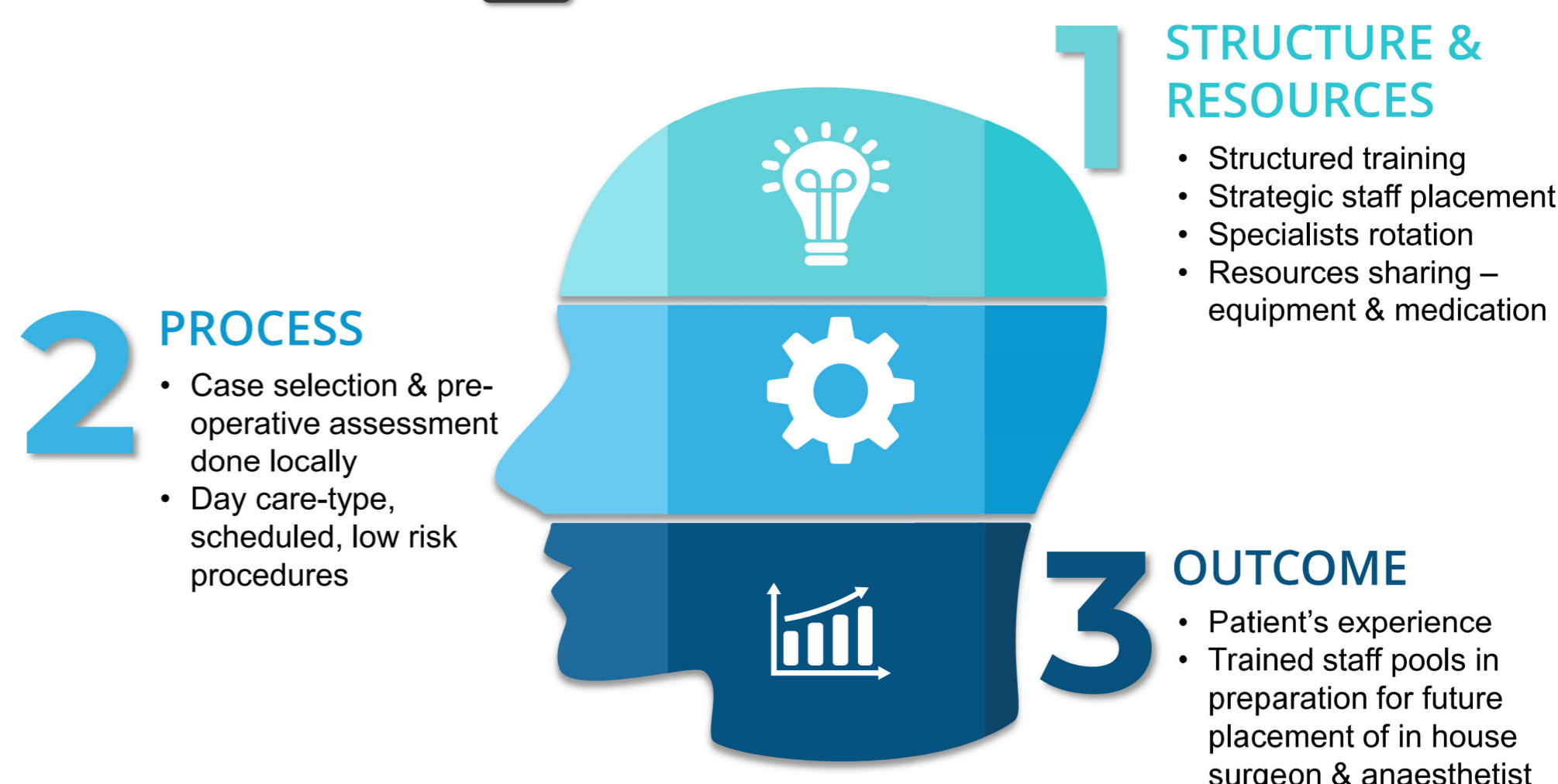
AIMS

- How GSI was implemented at BDH?
- What are the challenges faced?
- How these challenges were overcome?

RESULTS



- Lack of trained workforce is one of the major challenges.
- This, together with the absence of critical care service, limit the type and number of procedures performed under GSI at BDH to ensure surgical safety.



- Under GSI, in total 26 elective surgical procedures were performed from April to December 2022, with no complications reported.
- 73.1% of patients live within 30km distance from BDH, with majority are male and aged 60 years old and below.
- Majority of procedures were hernia repair (65.4%), with spinal as the most common anaesthesia category used (57.7%).
- Average length of stay for day care, from patient's admission to discharge is approximately 10 hours.

PROCEDURES				
Total, n=26				
Demography	Gender	Age	Address	Race
	<ul style="list-style-type: none"> Male (n=21) Female (n=5) 	<ul style="list-style-type: none"> 20-40 (n=4) 41-60 (n=13) 61-80 (n=7) 81-100 (n=2) 	<ul style="list-style-type: none"> Baling (n=17) Sik (n=5) Kuala Muda (n=1) Bandar Baharu (n=1) Hulu Perak (n=2) 	<ul style="list-style-type: none"> Malay (n=23) Indian (n=1) Siamese (n=2)
First-level Care Framework	'Should Do' (low risk)	'Should Do' (medium risk)	'Can Do'	Others
	<ul style="list-style-type: none"> Hernia Repair (n=17) Excision biopsy (n=5) 	<ul style="list-style-type: none"> Mastectomy with axillary clearance (n=1) 	<ul style="list-style-type: none"> EUA & Seton insertion (n=1) 	<ul style="list-style-type: none"> Circumcision (n=1) Secondary suturing of laparotomy wound (n=1)
Anaesthesia	General (n=9)		Spinal (n=15)	Local (n=2)
Admission Type	Day care (n=13)		Inpatient (n=13)	
Average Length Of Stay For Day care	~10 hours			

CONCLUSIONS

- GSI implementation by focusing on day care type, planned, low risk procedures, suits the present situation at BDH where trained workforce is limited and the absence of critical care back up, to ensure surgical safety.
- Further expansion of surgical procedures including the Bellwether Procedures (laparotomy, caesarean delivery, and treatment of open fracture) is possible with strong top management support and good inter-hospital collaboration, despite the challenges faced.
- GSI at BDH may impact on patient's experience in terms of length of stay as compared to when the same procedure done at the tertiary centre.
- However, further studies are needed to explore the actual surgical burden and the impact of GSI implementation in this setting.

REFERENCES

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