		Province	Sector	SV 2017 <sup>a</sup>
Eligible (n=40)			Governmental	556
			Governmental	228
		Eastern Province	Governmental	1176
	Included (n=32)	(n=5)	Private non-profit	88
			Private non-profit	284
		North West Province (n=5)	Governmental	496
			Governmental	412
			Governmental	292
			Private non-profit	808
			Private non-profit	na <sup>b</sup>
		Northern Province (n=7)	Governmental	884
			Governmental	852
			Private non-profit	420
			Private non-profit	740
			Private non-profit	524
			Private non-profit	392
			Private non-profit	776
		Southern Province (n=8)	Governmental	1764
			Governmental	32
			Governmental	652
			Governmental	116
			Private non-profit	220
			Private non-profit	44
			Private non-profit	1268
			-	
			Private non-profit	1284
			Governmental Governmental	1484 92
		Western Area (n=7)		
			Governmental	2196
			Governmental	748
			Private non-profit	900
			Private non-profit	4372
			Private non-profit	232
	Excluded (n=8)	Eastern Province	Governmental	32°
		(n=2)	Private non-profit	na <sup>b,c</sup>
		Northern Province	Governmental	776 <sup>d</sup>
		Southern Province	Private non-profit	na <sup>b,c</sup>
		Western Area (n=4)	Governmental	32°
			Private non-profit	96°
			Private non-profit	1072e
			Private non-profit	132°
Not eligible (n=20)		Eastern Province	Private for-profit	na <sup>b</sup>
		(n=2)	Private for-profit	212
		North West Province	Private for-profit	200
		Northern Province (n=3)	Private for-profit	288
			Private for-profit	0
			Private for-profit	52
		Southern Province (n=3)	Private for-profit	na <sup>b</sup>
			Private for-profit	na <sup>b</sup>
			Private for-profit	104
		Western Area (n=11)	Private for-profit	0
			Private for-profit	96
			Private for-profit	0
			Private for-profit	44
			Private for-profit	12
			Private for-profit	144
			Private for-profit	na <sup>b</sup>
			Private for-profit	164
			Private for-profit	88
			Private for-profit	na <sup>b</sup>
			Private for-profit	52
		rial Table 1, Inclus	ion and Evaluaion	o of hospita

Supplementary material Table 1: Inclusion and Exclusion of hospitals

<sup>&</sup>lt;sup>a</sup>Surgical volume in 2017 Lindheim et al, Surgery 2021, <sup>b</sup>Not available, <sup>c</sup>Resource constraints, <sup>d</sup>Inconsistency in data capture, <sup>e</sup>Did not share data.

## Data analysis plan

Data analysis will be performed using STATA.

The results will be presented in an automatically generated report, as tables and figures and as explanatory text.

## Outcome variables are:

- Number of admissions to hospital by category
- Number of hospital beds occupied
- Number of intensive or critical care beds occupied
- Number of patients that can receive oxygen and the number of patients receiving oxygen
- Number of obstetric deliveries
- Numbers of caesarean sections.
- Number of surgical operations
- Number of hernia operations
- Available surgical and anaesthesia providers
- Number of referrals using the referral coordinator resource

All outcome variables are continuous; they will be described as mean and sd (or n and % of total) for each successive weekly time interval.

They will be shown in total, and disaggregated by facility type, geographical area, sex (where appropriate), and by category of patient (e.g. pediatric, medical, surgical, maternity).

Data will not be analysed or shown by individual named facility.

To ensure comparability, when analysing data from the quantitative study, only data from facilities that have taken part in all three study elements will be used.

Comparison between outcome variables collected at each timepoint (T) will be made with pre-COVID-19 data (T0) using Student's T-test. Trends in mean (sd) for each outcome variable at each timepoint (T1-x) will be shown graphically and comparisons between each outcome over time made using ANOVA.

Effects of factors (such as facility level or geographical location) on outcomes will be explored using multivariate regression