

Julius Thambura - T18039
Data Summary - Prospective study design

25 March, 2022

Contents

1	Data	3
2	Prospective study design Results	4
2.1	Descriptives	4
2.2	Checklist	5
2.3	Visual Displays	9
3	Prospective study - Independent Comparison Between Lodox and Conventional	13
3.1	Question 1	13
3.2	Question 2	14
3.3	Question 3	15
3.4	Question 4	16
3.5	Question 5	17
3.6	Question 6	18
3.7	Question 7	19
3.8	Question 8	20
3.9	Question 9	21
3.10	Question 10	22
3.11	Question 11	23
3.12	Question 12	24
3.13	Question 13	25
3.14	Question 14	26
3.15	Question 15	27
3.16	Question 16	28
3.17	Question 17	29
3.18	Question 18	30
3.19	Question 19	31
3.20	Question 20	32
3.21	Question 21	33
3.22	Question 22	34
3.23	Question 23	35
3.24	Question 24	36
3.25	Question 25	37
3.26	Question 26	38
3.27	Question 27	39
3.28	Question 28	40
3.29	Question 29	41
4	Retrospective study design Results	42
4.1	Descriptives	42
4.2	Checklist	43
4.3	Visual Displays	47
5	Retrospective study - Independent Comparison Between Lodox and Conventional	51
5.1	Question 1	51

5.2	Question 2	52
5.3	Question 3	53
5.4	Question 4	54
5.5	Question 5	55
5.6	Question 6	56
5.7	Question 7	57
5.8	Question 8	58
5.9	Question 9	59
5.10	Question 10	60
5.11	Question 11	61
5.12	Question 12	62
5.13	Question 13	63
5.14	Question 14	64
5.15	Question 15	65
5.16	Question 16	66
5.17	Question 17	67
5.18	Question 18	68
5.19	Question 19	69
5.20	Question 20	70
5.21	Question 21	71
5.22	Question 22	72
5.23	Question 23	73
5.24	Question 24	74
5.25	Question 25	75
5.26	Question 26	76
5.27	Question 27	77
5.28	Question 28	78
5.29	Question 29	79

1 Data

- The data exists of Prospective and Retrospective data
- No link could be made between the radiologists who rated the Lodox and Conventional data so we will not be able to link results. Where comparisons were tested, independent groups comparisons were reported.

2 Prospective study design Results

2.1 Descriptives

DataA (N = 77)	
Hospital	
Missing Values	0
Charlotte Maxexe academic Hospital	16 (20.78%)
Dr George Mukhari Hospital	16 (20.78%)
Groote Schuur Hospital	0 (0.00%)
Ngwelezane Hospital	0 (0.00%)
Pelonomi Hospital	27 (35.06%)
Steve Biko Academic Hospital	18 (23.38%)
Imaging modality type	
Missing Values	0
Conventional X-ray system	38 (49.35%)
LODOX X-ray System	39 (50.65%)
Study Design	
Missing Values	0
Prospective study design	77 (100.00%)
Retrospective study design	0 (0.00%)

2.2 Checklist

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
1. Exposure artefacts/ chevron exposure artefact			
Missing Values	0	0	0
Visible or Good	5 (6.49%)	4 (10.53%)	1 (2.56%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	1 (1.30%)	1 (2.63%)	0 (0.00%)
Absent	71 (92.21%)	33 (86.84%)	38 (97.44%)
2. Penetration			
Missing Values	0	0	0
Visible or Good	75 (97.40%)	37 (97.37%)	38 (97.44%)
Partially visible or Satisfactory	1 (1.30%)	0 (0.00%)	1 (2.56%)
Poor/Invisible	1 (1.30%)	1 (2.63%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
3. Pulmonary vasculature demonstrated			
Missing Values	0	0	0
Visible or Good	75 (97.40%)	37 (97.37%)	38 (97.44%)
Partially visible or Satisfactory	2 (2.60%)	1 (2.63%)	1 (2.56%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
4. Lungs Parenchyma visualised			
Missing Values	0	0	0
Visible or Good	76 (98.70%)	37 (97.37%)	39 (100.00%)
Partially visible or Satisfactory	1 (1.30%)	1 (2.63%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
5. Lung infiltrates Visualised			
Missing Values	0	0	0
Visible or Good	46 (59.74%)	23 (60.53%)	23 (58.97%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	31 (40.26%)	15 (39.47%)	16 (41.03%)
6. Breast tissue outline visualised			
Missing Values	0	0	0
Visible or Good	24 (31.17%)	14 (36.84%)	10 (25.64%)
Partially visible or Satisfactory	1 (1.30%)	1 (2.63%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	52 (67.53%)	23 (60.53%)	29 (74.36%)
7. Thoracic cage soft tissue outlines visualised			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
8. Trachea and proximal bronchi demonstrated			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

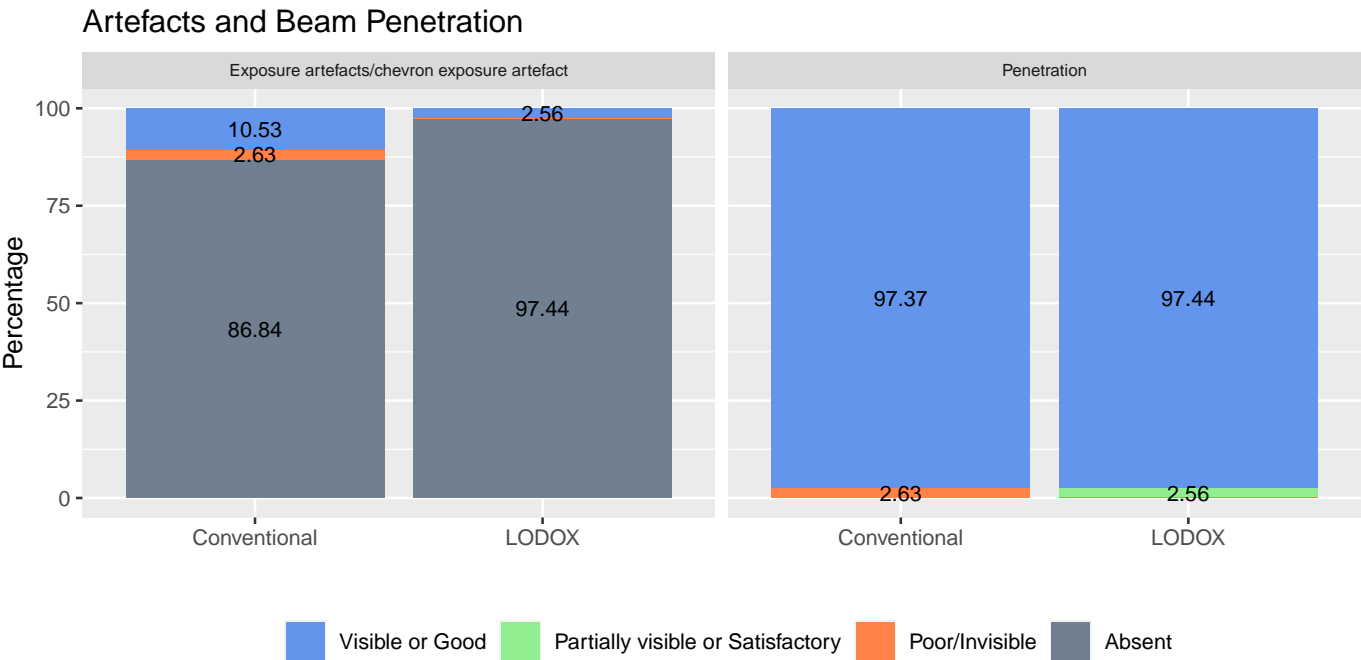
	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
9. Pulmonary vessels peripherally demonstrated			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
10. Cardiac and Aorta outline visualised			
Missing Values	0	0	0
Visible or Good	69 (89.61%)	34 (89.47%)	35 (89.74%)
Partially visible or Satisfactory	7 (9.09%)	4 (10.53%)	3 (7.69%)
Poor/Invisible	1 (1.30%)	0 (0.00%)	1 (2.56%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
11. Retro-cardiac and mediastinum outline well demonstrated			
Missing Values	0	0	0
Visible or Good	70 (90.91%)	33 (86.84%)	37 (94.87%)
Partially visible or Satisfactory	7 (9.09%)	5 (13.16%)	2 (5.13%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
12. Thoracic spine - vertebral bodies and disc spaces			
Missing Values	0	0	0
Visible or Good	76 (98.70%)	38 (100.00%)	38 (97.44%)
Partially visible or Satisfactory	1 (1.30%)	0 (0.00%)	1 (2.56%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
13. Lung contusion			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
14. Pneumothorax			
Missing Values	0	0	0
Visible or Good	9 (11.69%)	4 (10.53%)	5 (12.82%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	68 (88.31%)	34 (89.47%)	34 (87.18%)
15. Effusions			
Missing Values	0	0	0
Visible or Good	33 (42.86%)	13 (34.21%)	20 (51.28%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	44 (57.14%)	25 (65.79%)	19 (48.72%)
16. Pneumomediastinum			
Missing Values	0	0	0
Visible or Good	3 (3.90%)	1 (2.63%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	74 (96.10%)	37 (97.37%)	37 (94.87%)
17. Surgical emphysema			
Missing Values	1	1	1

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Visible or Good	13 (17.11%)	6 (16.22%)	7 (17.95%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	63 (82.89%)	31 (83.78%)	32 (82.05%)
18. Extra luminal air			
Missing Values	0	0	0
Visible or Good	4 (5.19%)	2 (5.26%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	73 (94.81%)	36 (94.74%)	37 (94.87%)
19. Nodules			
Missing Values	0	0	0
Visible or Good	20 (25.97%)	6 (15.79%)	14 (35.90%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	57 (74.03%)	32 (84.21%)	25 (64.10%)
20. Interstitial changes			
Missing Values	0	0	0
Visible or Good	8 (10.39%)	1 (2.63%)	7 (17.95%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	69 (89.61%)	37 (97.37%)	32 (82.05%)
21. Air bronchograms			
Missing Values	0	0	0
Visible or Good	25 (32.47%)	12 (31.58%)	13 (33.33%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	52 (67.53%)	26 (68.42%)	26 (66.67%)
22. Granular glass opacity			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
23. Bullae			
Missing Values	0	0	0
Visible or Good	1 (1.30%)	1 (2.63%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	76 (98.70%)	37 (97.37%)	39 (100.00%)
24. Mediastinal injuries			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
25. Fracture ribs, clavicle			
Missing Values	0	0	0
Visible or Good	3 (3.90%)	1 (2.63%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	74 (96.10%)	37 (97.37%)	37 (94.87%)
26. Thoracic spine fracture			

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
27. Vertebral body or spinous fracture			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
28. Thoracic spine lesions			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)
29. Diaphragms			
Missing Values	0	0	0
Visible or Good	49 (63.64%)	25 (65.79%)	24 (61.54%)
Partially visible or Satisfactory	28 (36.36%)	13 (34.21%)	15 (38.46%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
30. Other			
Missing Values	77	77	77
Visible or Good	0 (NaN%)	0 (NaN%)	0 (NaN%)
Partially visible or Satisfactory	0 (NaN%)	0 (NaN%)	0 (NaN%)
Poor/Invisible	0 (NaN%)	0 (NaN%)	0 (NaN%)
Absent	0 (NaN%)	0 (NaN%)	0 (NaN%)

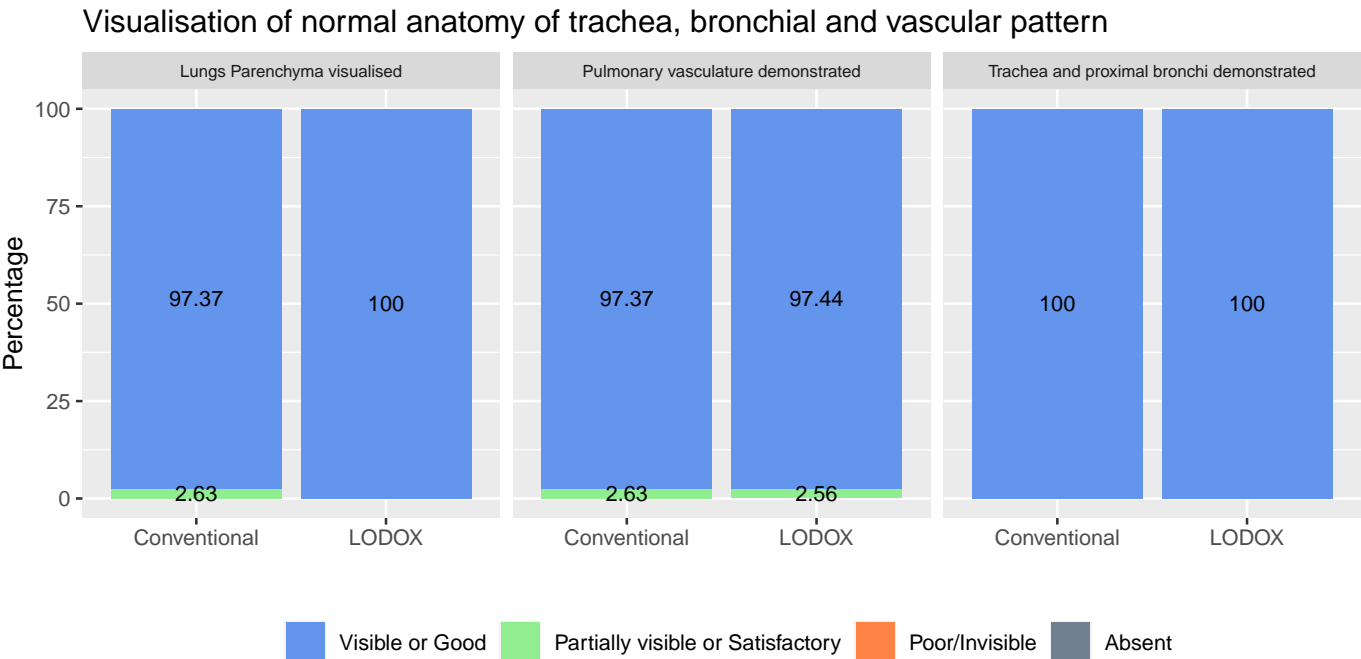
2.3 Visual Displays

2.3.1 Figure 1



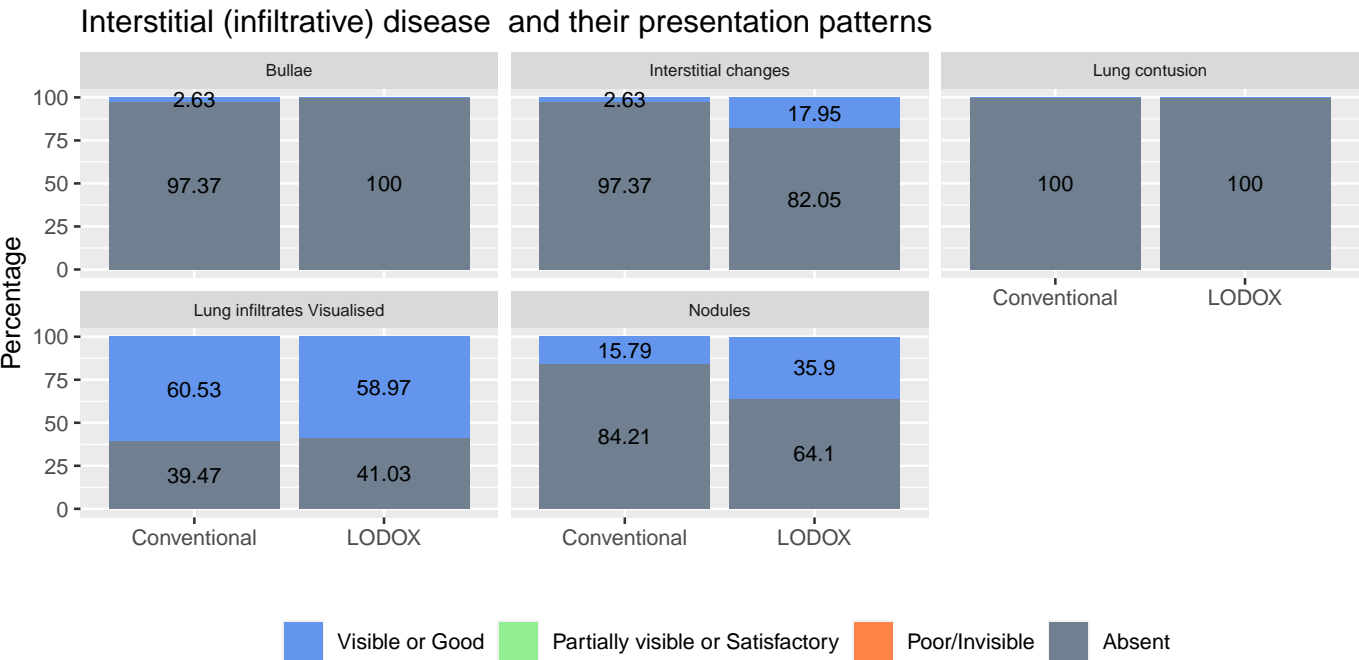
pdf 2

2.3.2 Figure 2



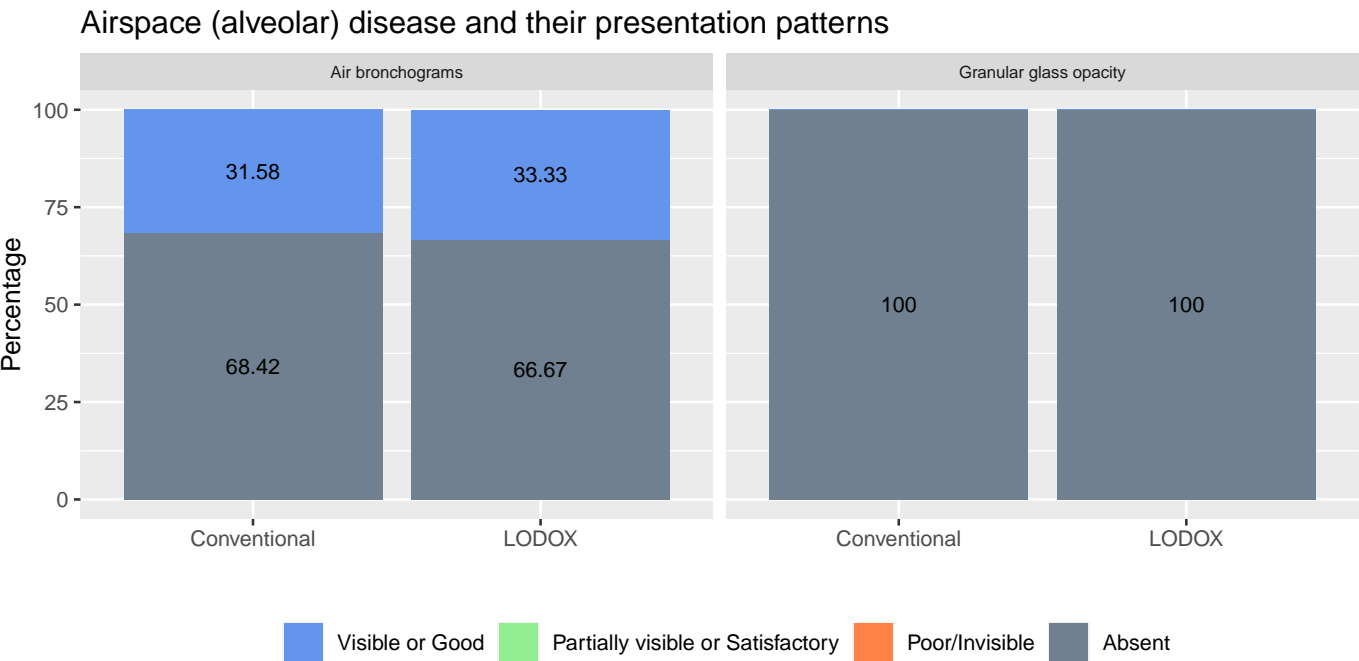
pdf 2

2.3.3 Figure 3 a



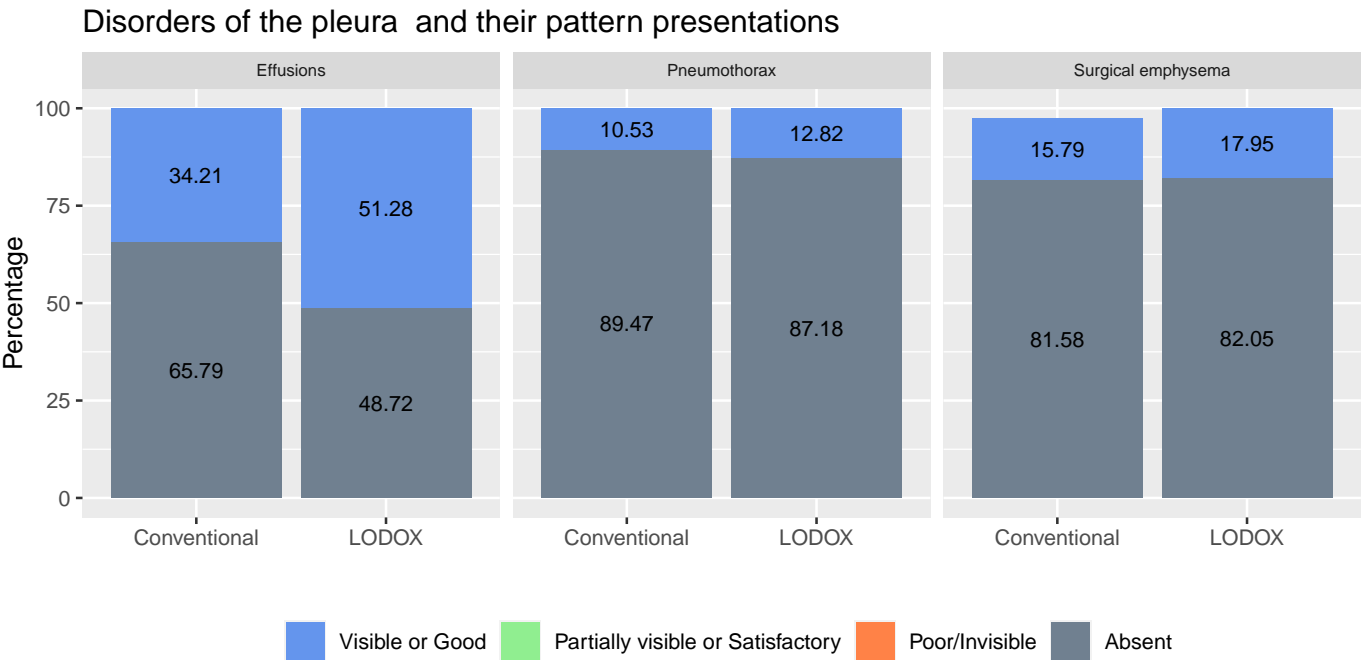
pdf 2

2.3.4 Figure 3 b



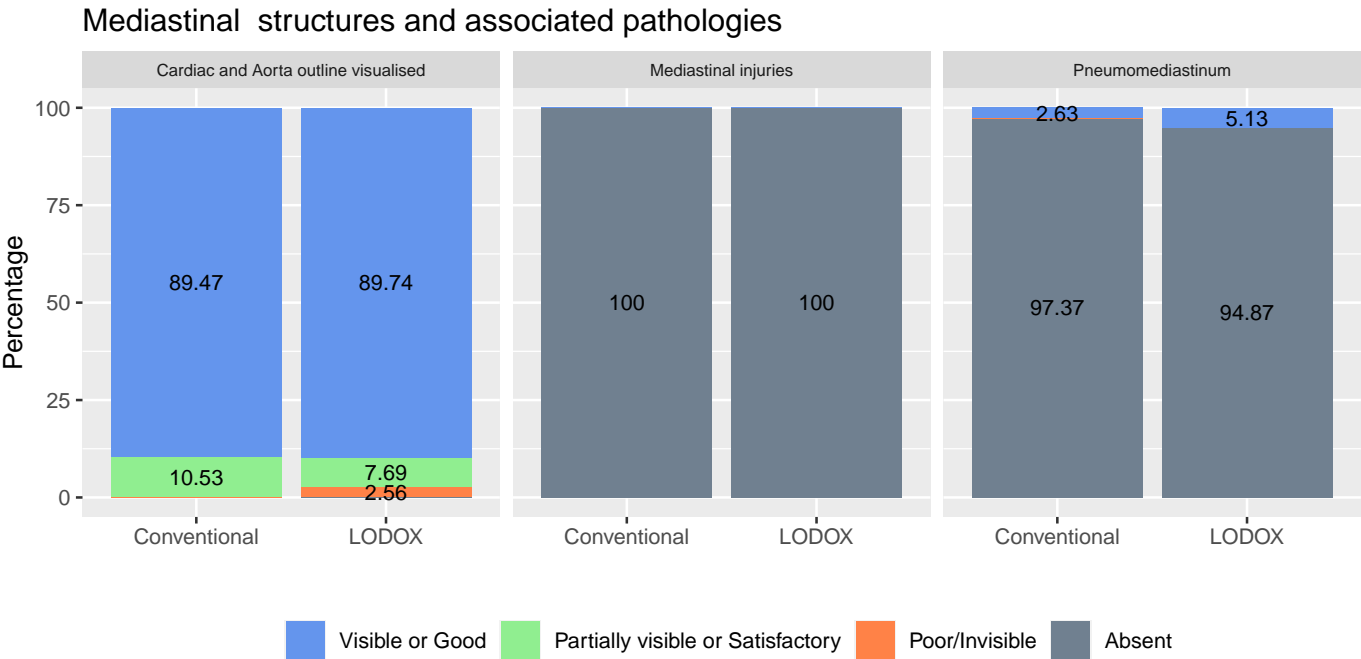
pdf 2

2.3.5 Figure 4



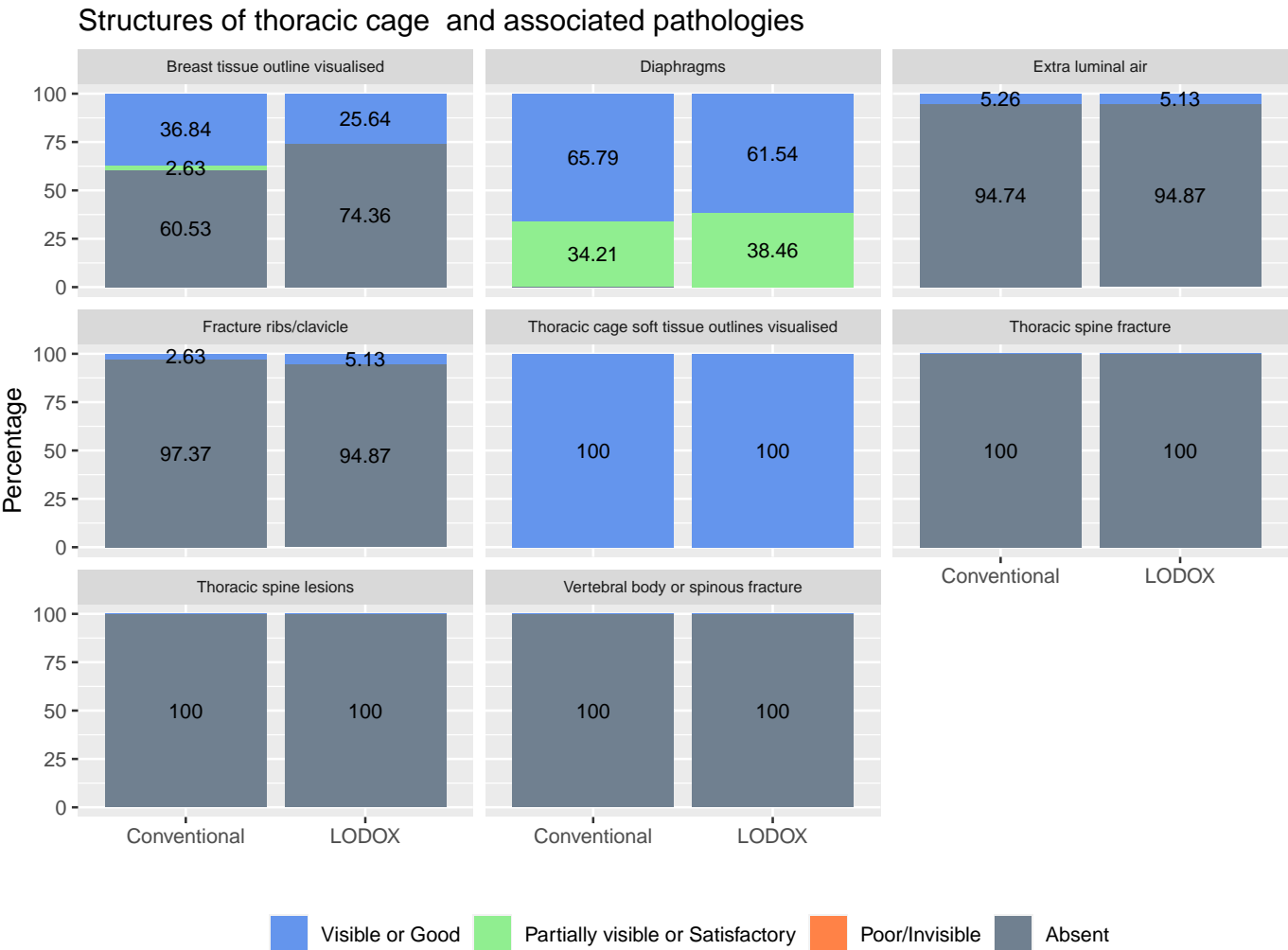
pdf 2

2.3.6 Figure 5



pdf 2

2.3.7 Figure 6



pdf 2

3 Prospective study - Independent Comparison Between Lodox and Conventional

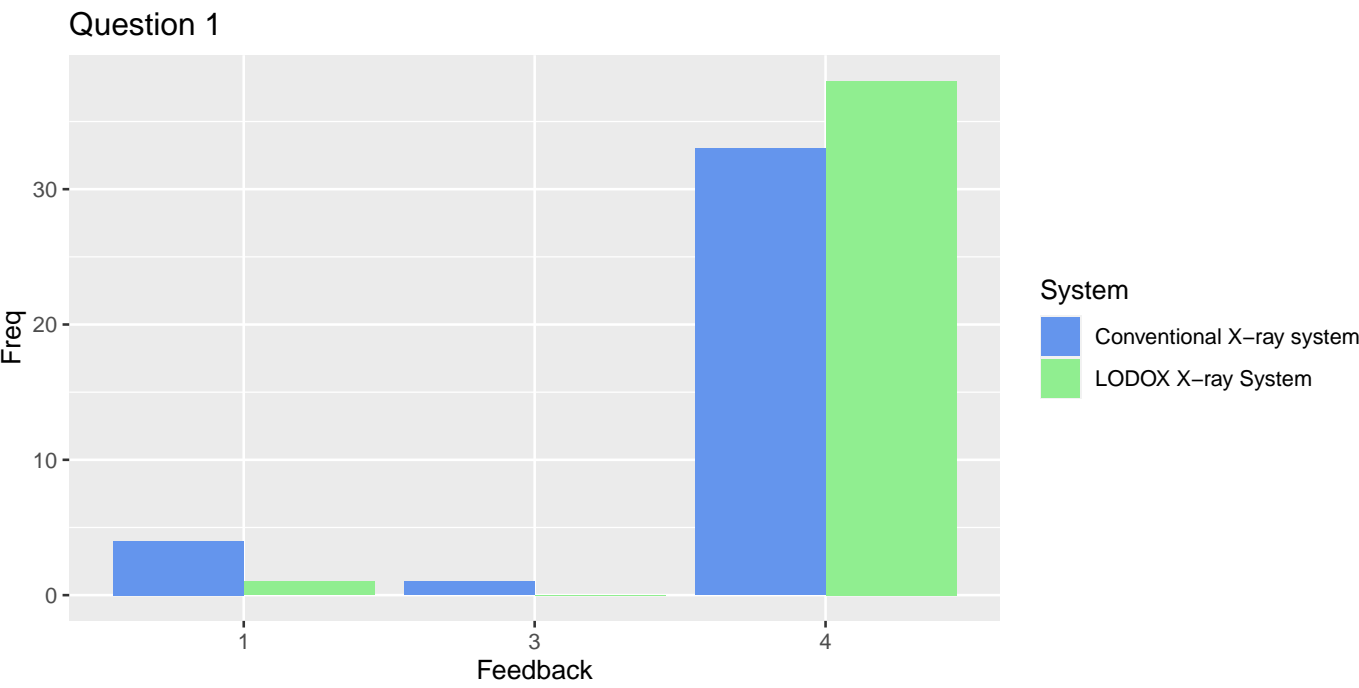
We will be comparing the results for the retrospective, between Lodox and Conventional x-ray. Since the participants cannot be linked between the two groups being compared and since the data is ordinal in nature, the independent groups Mann whitney U test will be used. All tests will be performed at a 5% level of significance. A p-value of less than 0.05 indicates that the nullhypothesis can be rejected which then indicates that a significant difference exists between the distribution of data in the two groups. Each p-value is reported below each table.

- 1 - Visible or Good
- 2 - Partially visisble or Satisfactory
- 3 - Poor/Invisible
- 4 - Absent

3.1 Question 1

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 1			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.79 ± 0.75	3.66 ± 0.94	3.92 ± 0.48
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 1			
Missing Values	0	0	0
Visible or Good	5 (6.49%)	4 (10.53%)	1 (2.56%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	1 (1.30%)	1 (2.63%)	0 (0.00%)
Absent	71 (92.21%)	33 (86.84%)	38 (97.44%)

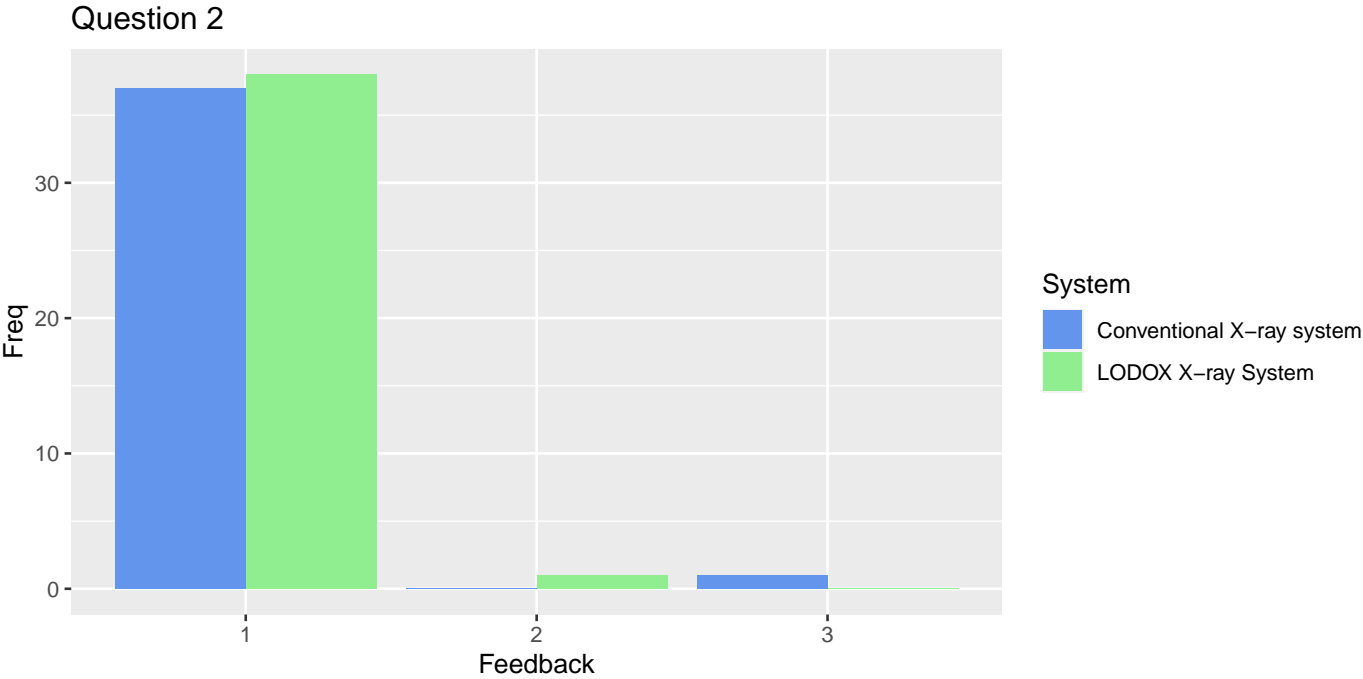
[1] 0.08915879



3.2 Question 2

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 2			
Missing Values	0	0	0
min	1	1	1
max	3	3	2
mean (sd)	1.04 ± 0.25	1.05 ± 0.32	1.03 ± 0.16
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 2			
Missing Values	0	0	0
Visible or Good	75 (97.40%)	37 (97.37%)	38 (97.44%)
Partially visible or Satisfactory	1 (1.30%)	0 (0.00%)	1 (2.56%)
Poor/Invisible	1 (1.30%)	1 (2.63%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

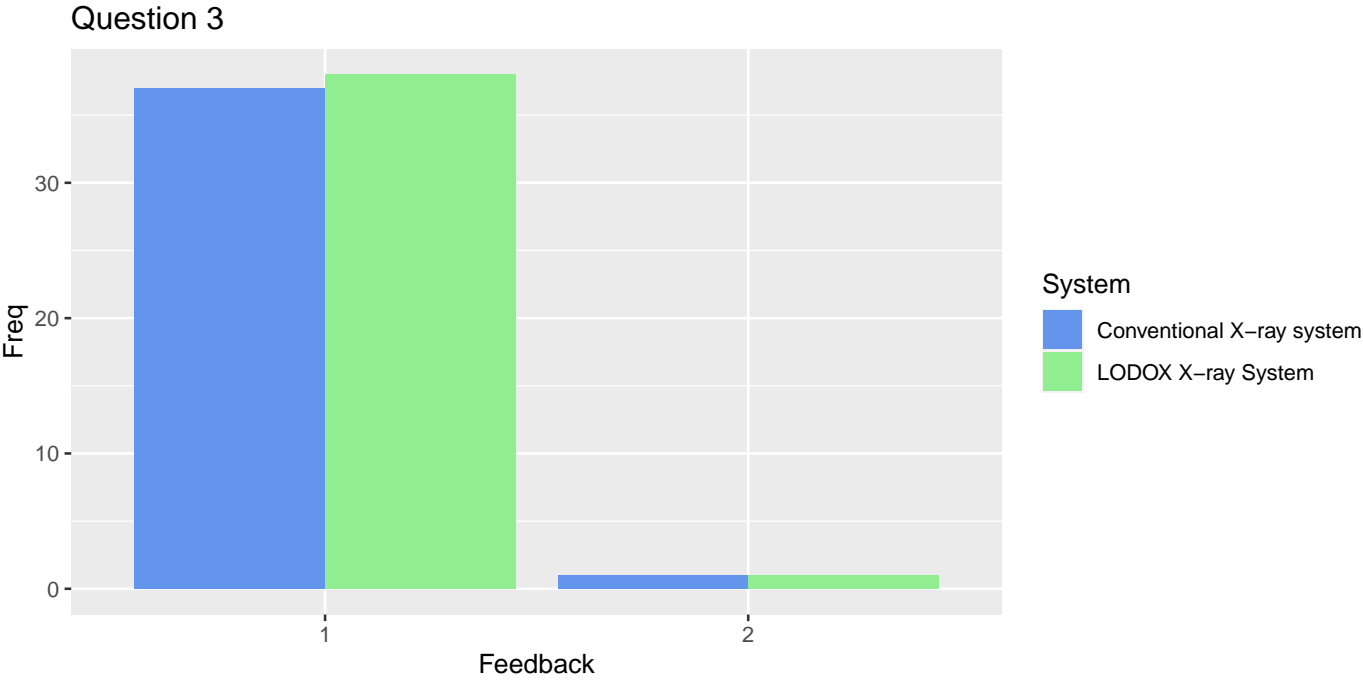
[1] 0.9852492



3.3 Question 3

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 3			
Missing Values	0	0	0
min	1	1	1
max	2	2	2
mean (sd)	1.03 ± 0.16	1.03 ± 0.16	1.03 ± 0.16
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 3			
Missing Values	0	0	0
Visible or Good	75 (97.40%)	37 (97.37%)	38 (97.44%)
Partially visible or Satisfactory	2 (2.60%)	1 (2.63%)	1 (2.56%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

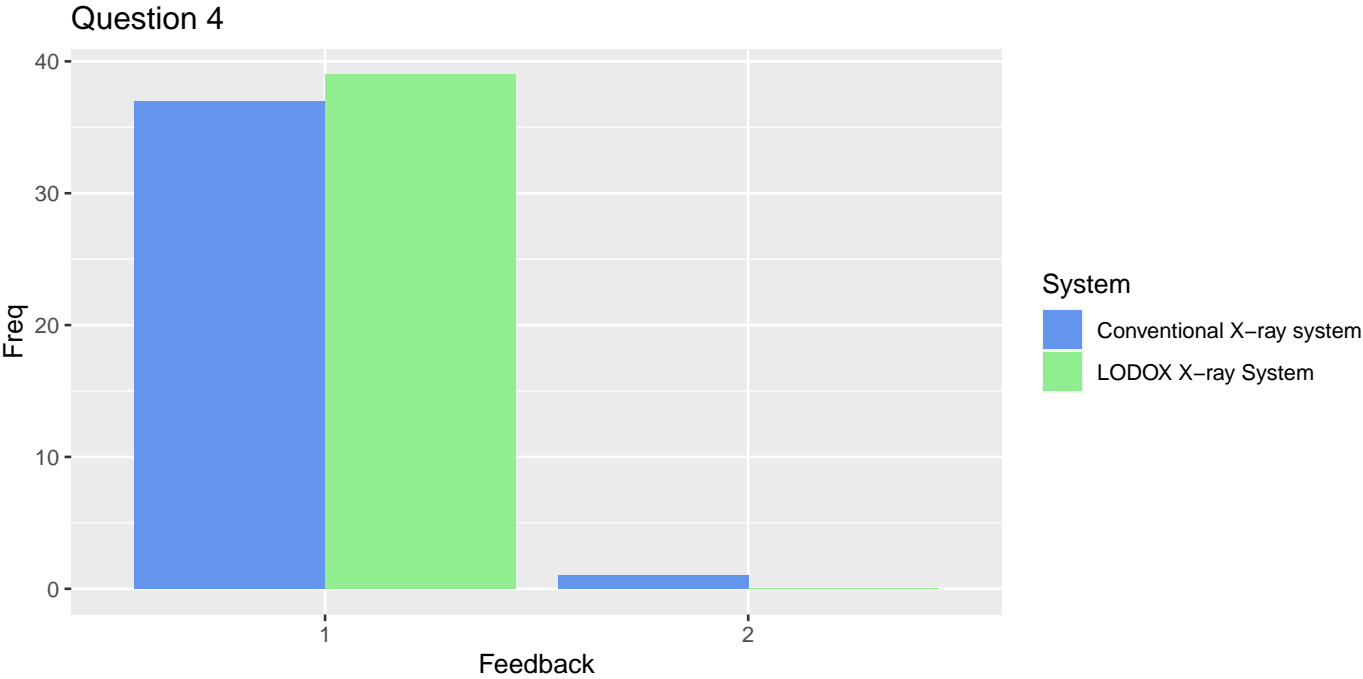
[1] 1



3.4 Question 4

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 4			
Missing Values	0	0	0
min	1	1	1
max	2	2	1
mean (sd)	1.01 ± 0.11	1.03 ± 0.16	1.00 ± 0.00
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 4			
Missing Values	0	0	0
Visible or Good	76 (98.70%)	37 (97.37%)	39 (100.00%)
Partially visible or Satisfactory	1 (1.30%)	1 (2.63%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

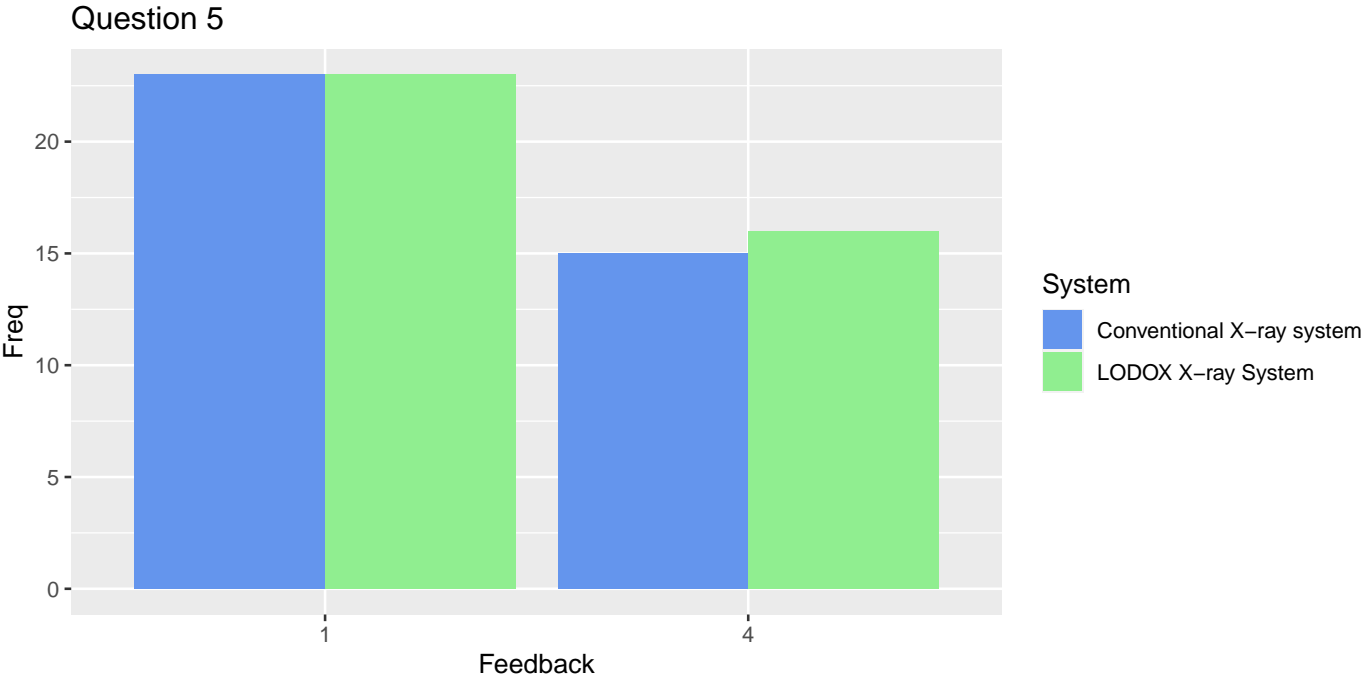
[1] 0.3235955



3.5 Question 5

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 5			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	2.21 ± 1.48	2.18 ± 1.49	2.23 ± 1.49
median (iqr)	1.00 (1.00, 4.00)	1.00 (1.00, 4.00)	1.00 (1.00, 4.00)
Question 5			
Missing Values	0	0	0
Visible or Good	46 (59.74%)	23 (60.53%)	23 (58.97%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	31 (40.26%)	15 (39.47%)	16 (41.03%)

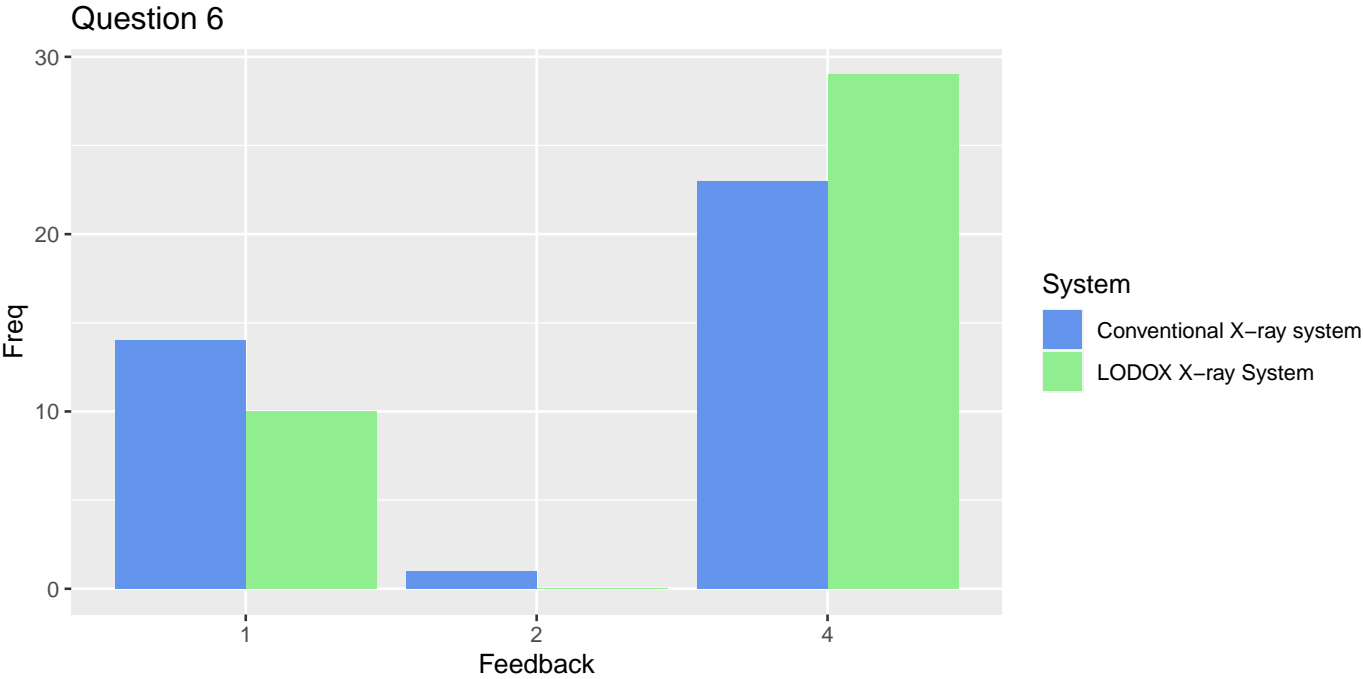
[1] 0.8950392



3.6 Question 6

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 6			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.04 ± 1.40	2.84 ± 1.46	3.23 ± 1.33
median (iqr)	4.00 (1.00, 4.00)	4.00 (1.00, 4.00)	4.00 (2.50, 4.00)
Question 6			
Missing Values	0	0	0
Visible or Good	24 (31.17%)	14 (36.84%)	10 (25.64%)
Partially visible or Satisfactory	1 (1.30%)	1 (2.63%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	52 (67.53%)	23 (60.53%)	29 (74.36%)

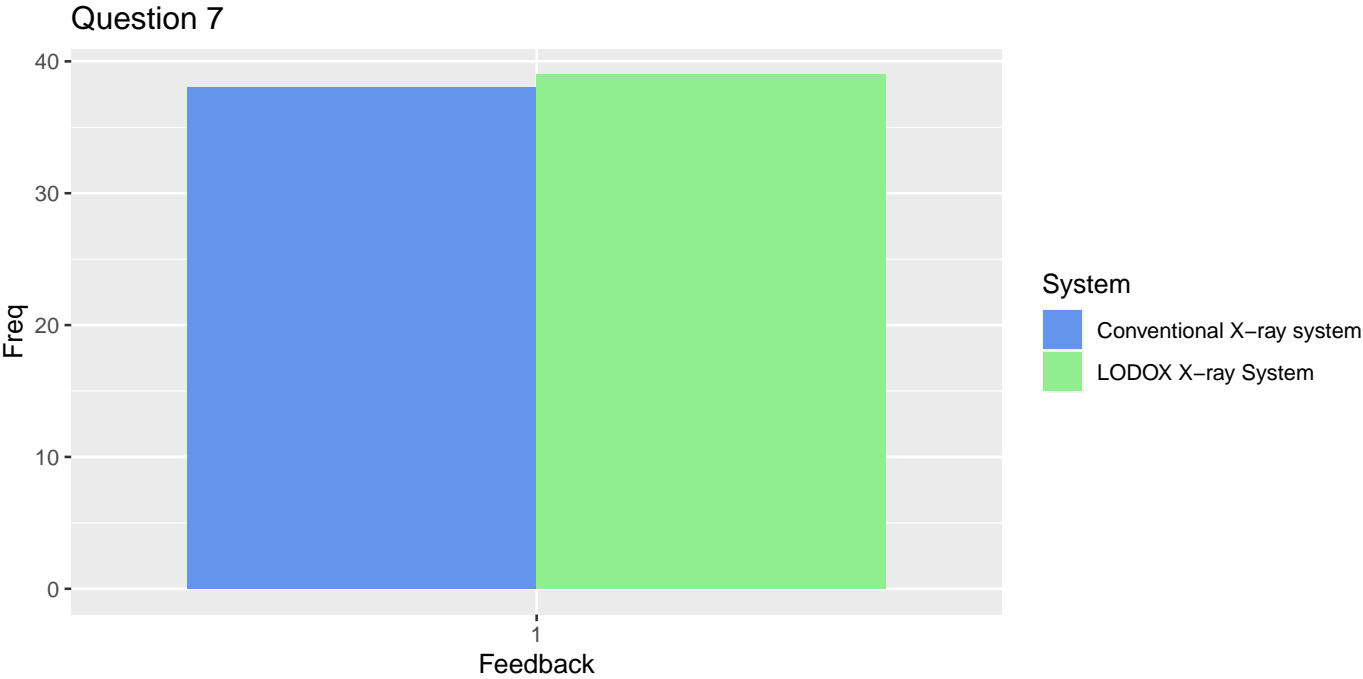
[1] 0.2244314



3.7 Question 7

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 7			
Missing Values	0	0	0
min	1	1	1
max	1	1	1
mean (sd)	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 7			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

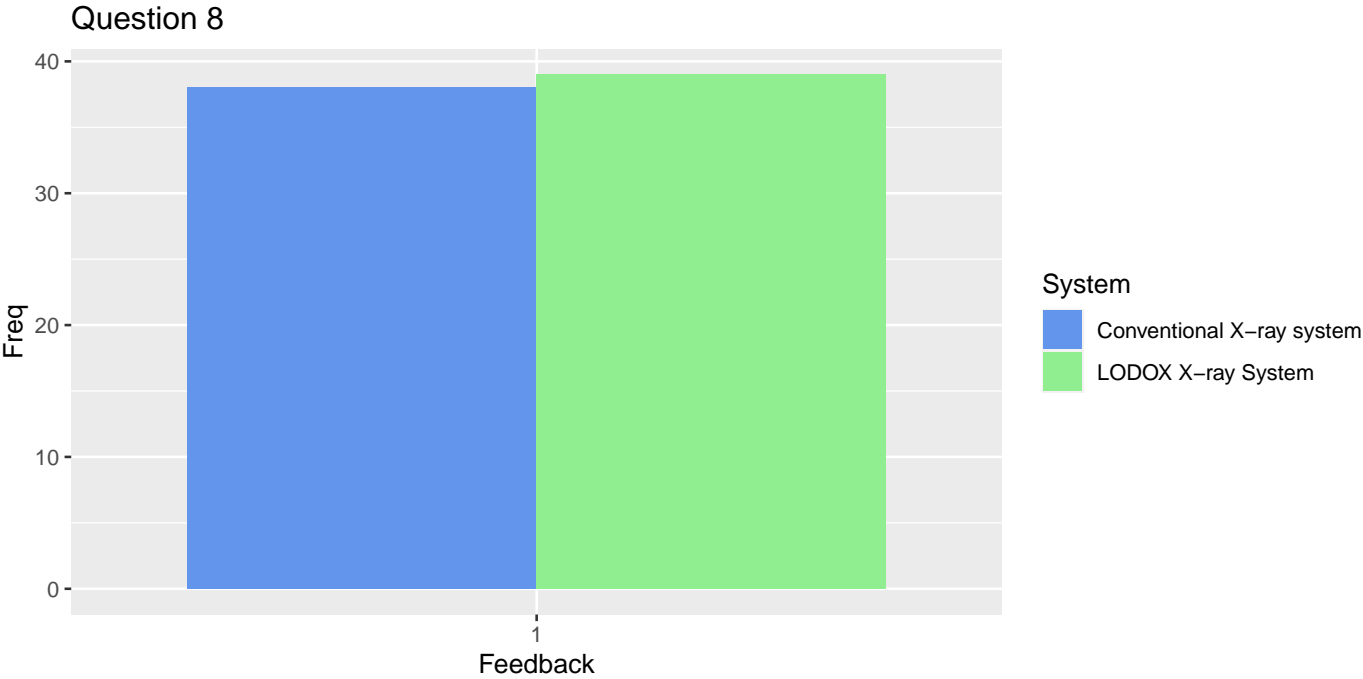
[1] NaN



3.8 Question 8

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 8			
Missing Values	0	0	0
min	1	1	1
max	1	1	1
mean (sd)	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 8			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

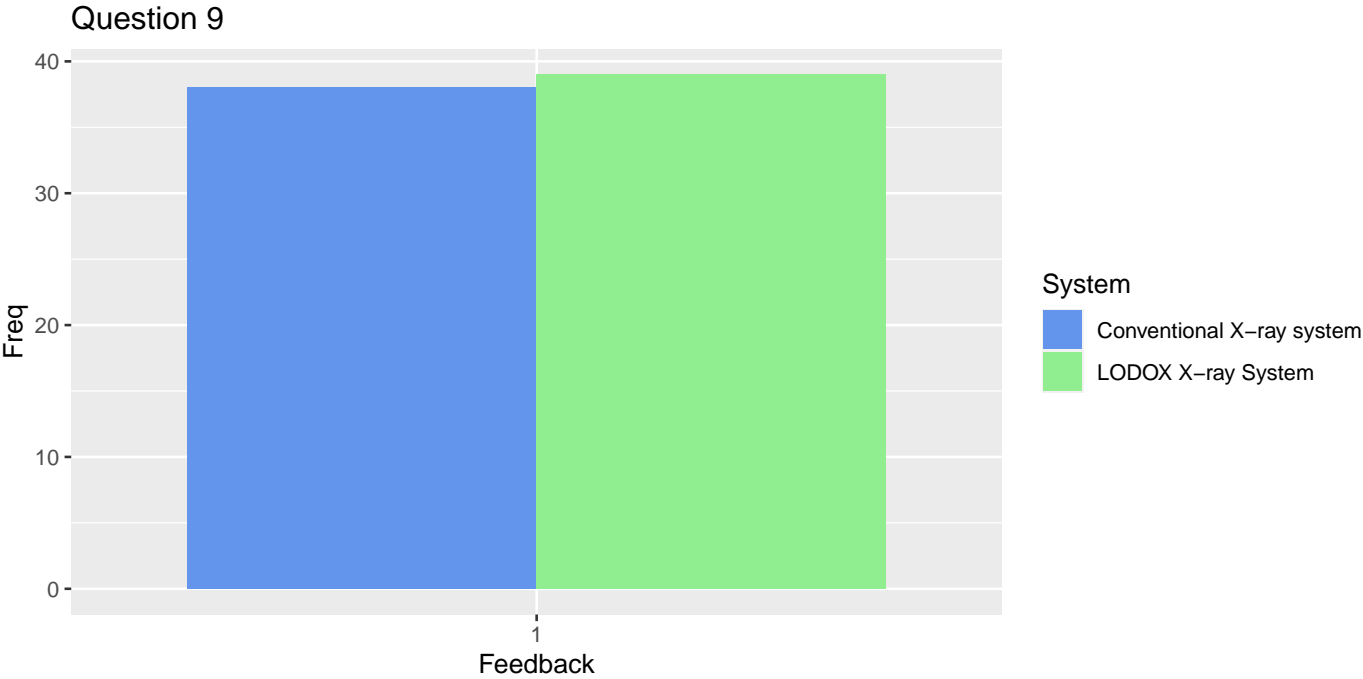
[1] NaN



3.9 Question 9

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 9			
Missing Values	0	0	0
min	1	1	1
max	1	1	1
mean (sd)	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 9			
Missing Values	0	0	0
Visible or Good	77 (100.00%)	38 (100.00%)	39 (100.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

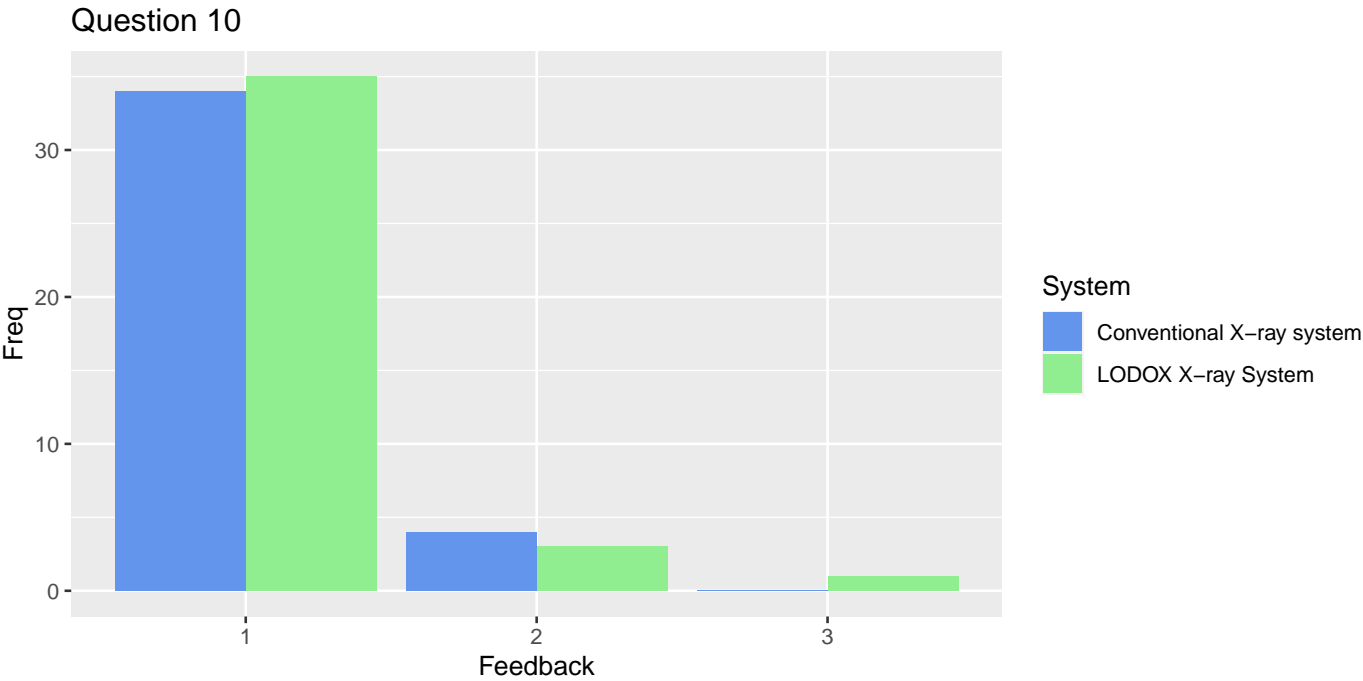
[1] NaN



3.10 Question 10

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 10			
Missing Values	0	0	0
min	1	1	1
max	3	2	3
mean (sd)	1.12 ± 0.36	1.11 ± 0.31	1.13 ± 0.41
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 10			
Missing Values	0	0	0
Visible or Good	69 (89.61%)	34 (89.47%)	35 (89.74%)
Partially visible or Satisfactory	7 (9.09%)	4 (10.53%)	3 (7.69%)
Poor/Invisible	1 (1.30%)	0 (0.00%)	1 (2.56%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

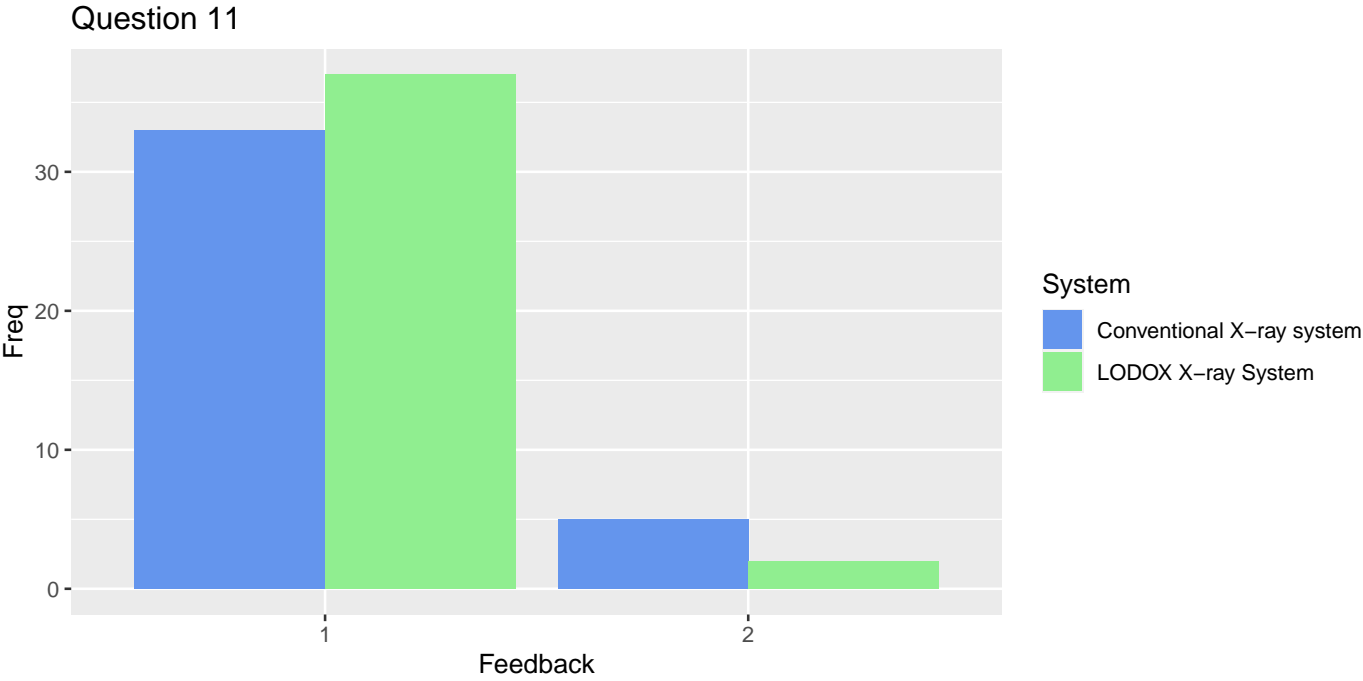
[1] 1



3.11 Question 11

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 11			
Missing Values	0	0	0
min	1	1	1
max	2	2	2
mean (sd)	1.09 ± 0.29	1.13 ± 0.34	1.05 ± 0.22
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 11			
Missing Values	0	0	0
Visible or Good	70 (90.91%)	33 (86.84%)	37 (94.87%)
Partially visible or Satisfactory	7 (9.09%)	5 (13.16%)	2 (5.13%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

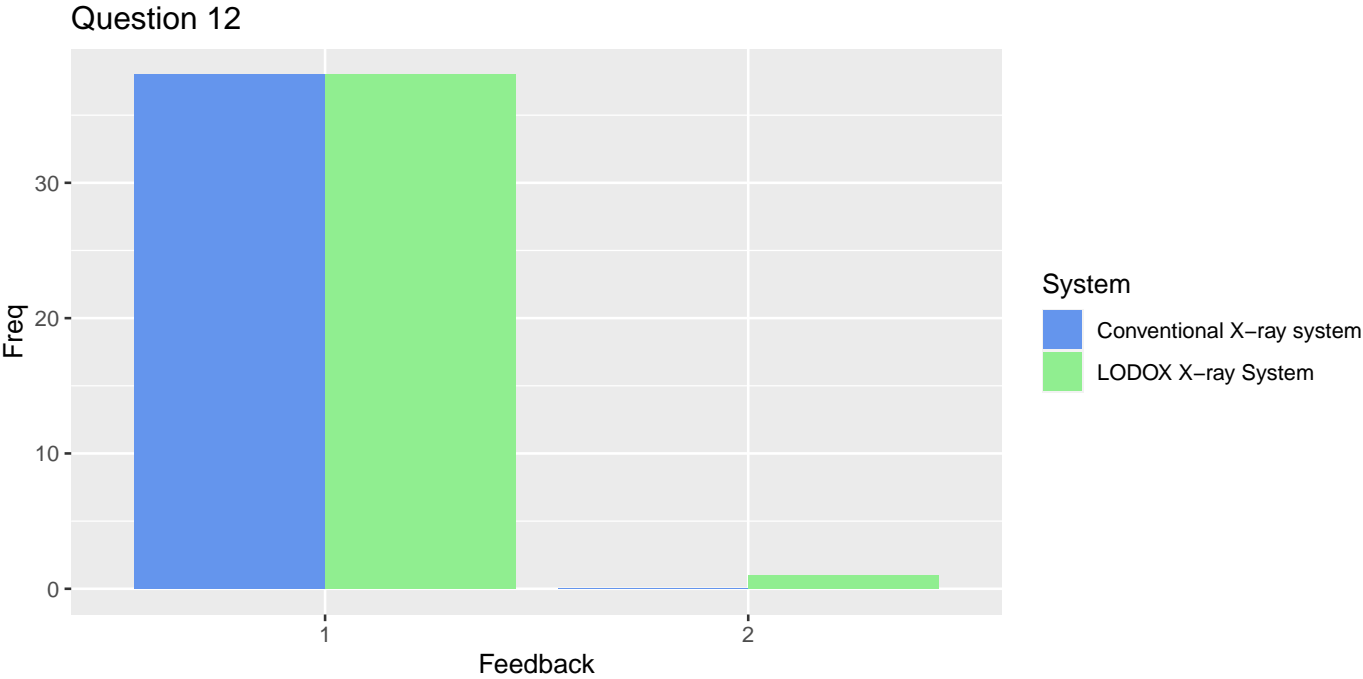
[1] 0.2273686



3.12 Question 12

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 12			
Missing Values	0	0	0
min	1	1	1
max	2	1	2
mean (sd)	1.01 ± 0.11	1.00 ± 0.00	1.03 ± 0.16
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 12			
Missing Values	0	0	0
Visible or Good	76 (98.70%)	38 (100.00%)	38 (97.44%)
Partially visible or Satisfactory	1 (1.30%)	0 (0.00%)	1 (2.56%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

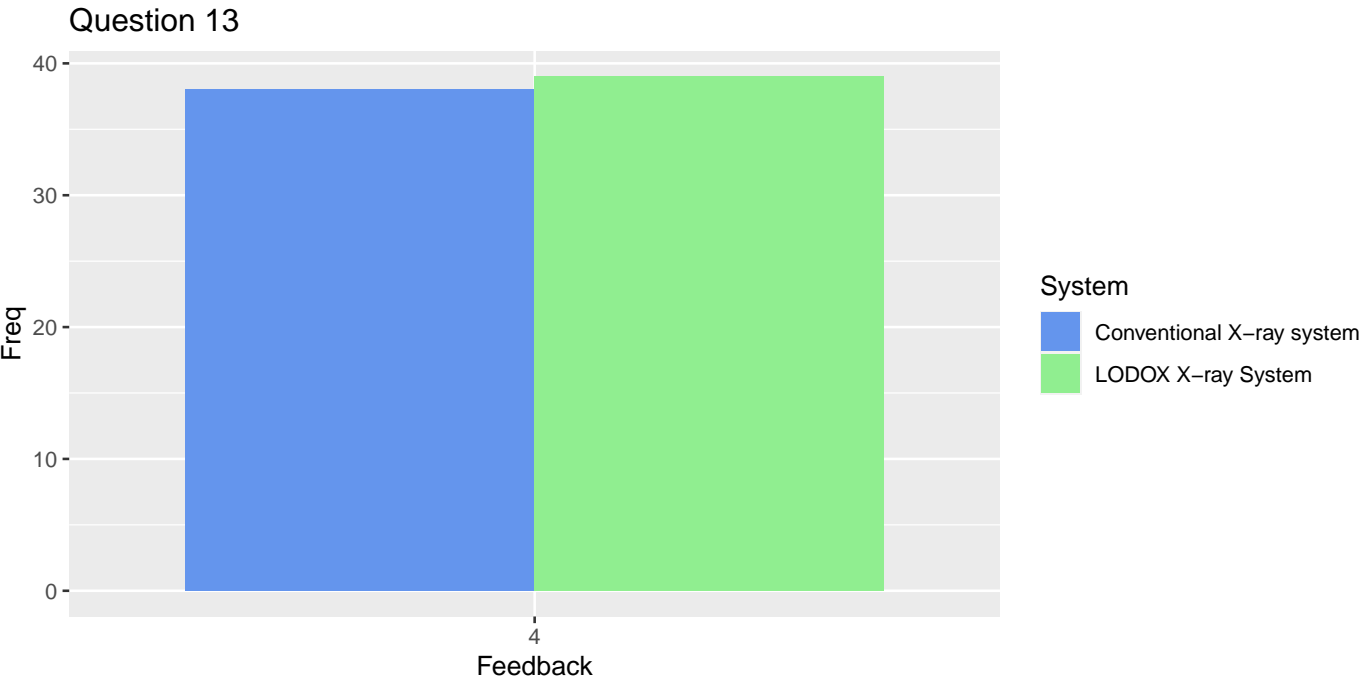
[1] 0.3364918



3.13 Question 13

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 13			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 13			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

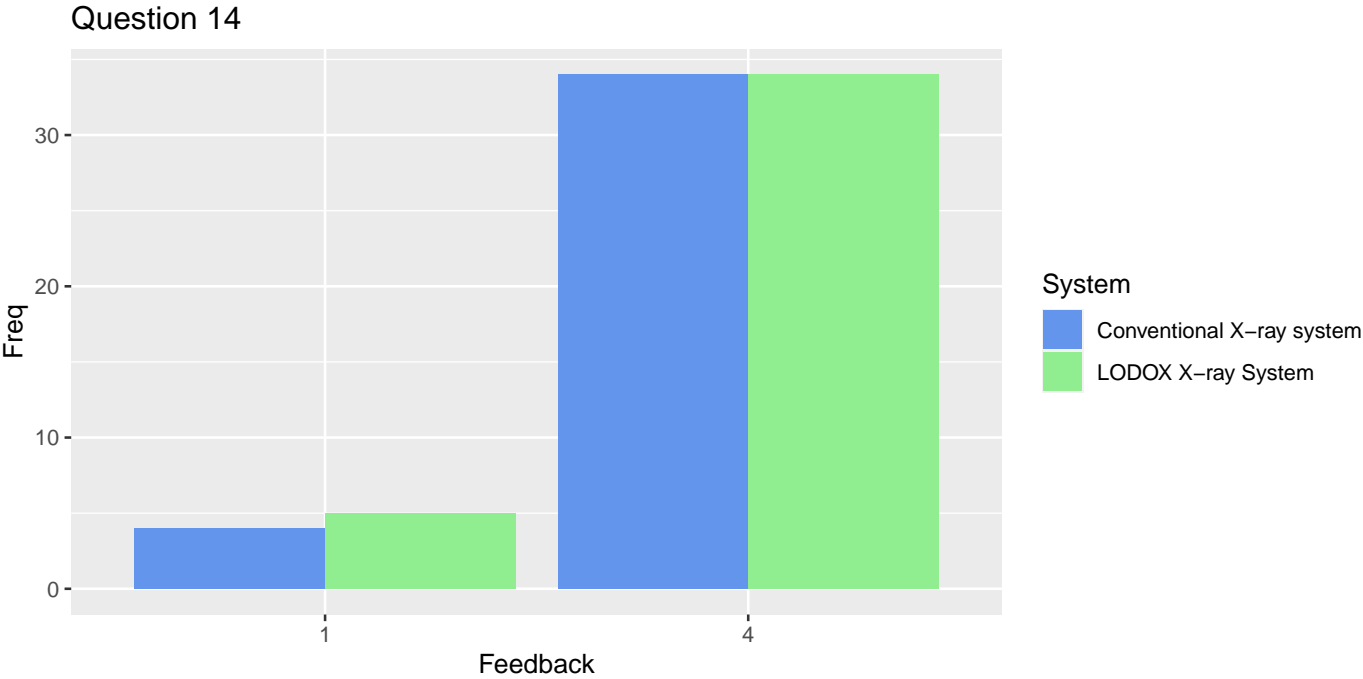
[1] NaN



3.14 Question 14

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 14			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.65 ± 0.97	3.68 ± 0.93	3.62 ± 1.02
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 14			
Missing Values	0	0	0
Visible or Good	9 (11.69%)	4 (10.53%)	5 (12.82%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	68 (88.31%)	34 (89.47%)	34 (87.18%)

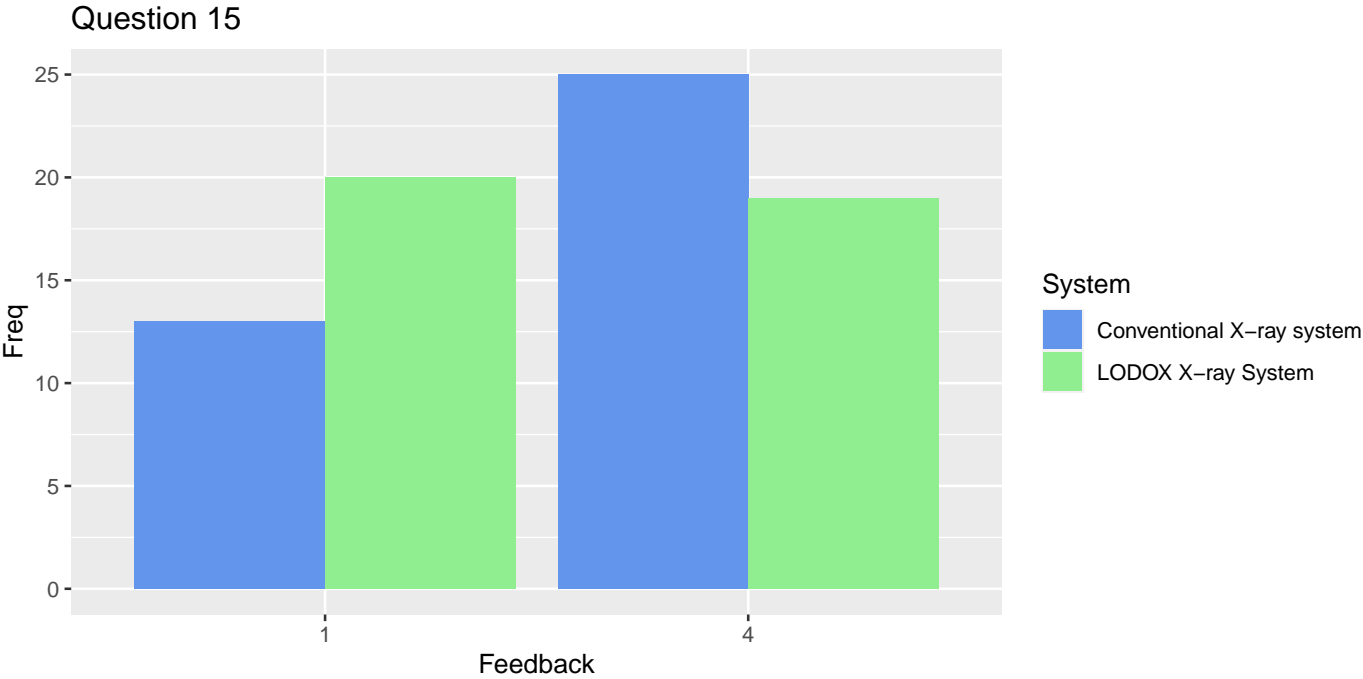
[1] 0.7625916



3.15 Question 15

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 15			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	2.71 ± 1.49	2.97 ± 1.44	2.46 ± 1.52
median (iqr)	4.00 (1.00, 4.00)	4.00 (1.00, 4.00)	1.00 (1.00, 4.00)
Question 15			
Missing Values	0	0	0
Visible or Good	33 (42.86%)	13 (34.21%)	20 (51.28%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	44 (57.14%)	25 (65.79%)	19 (48.72%)

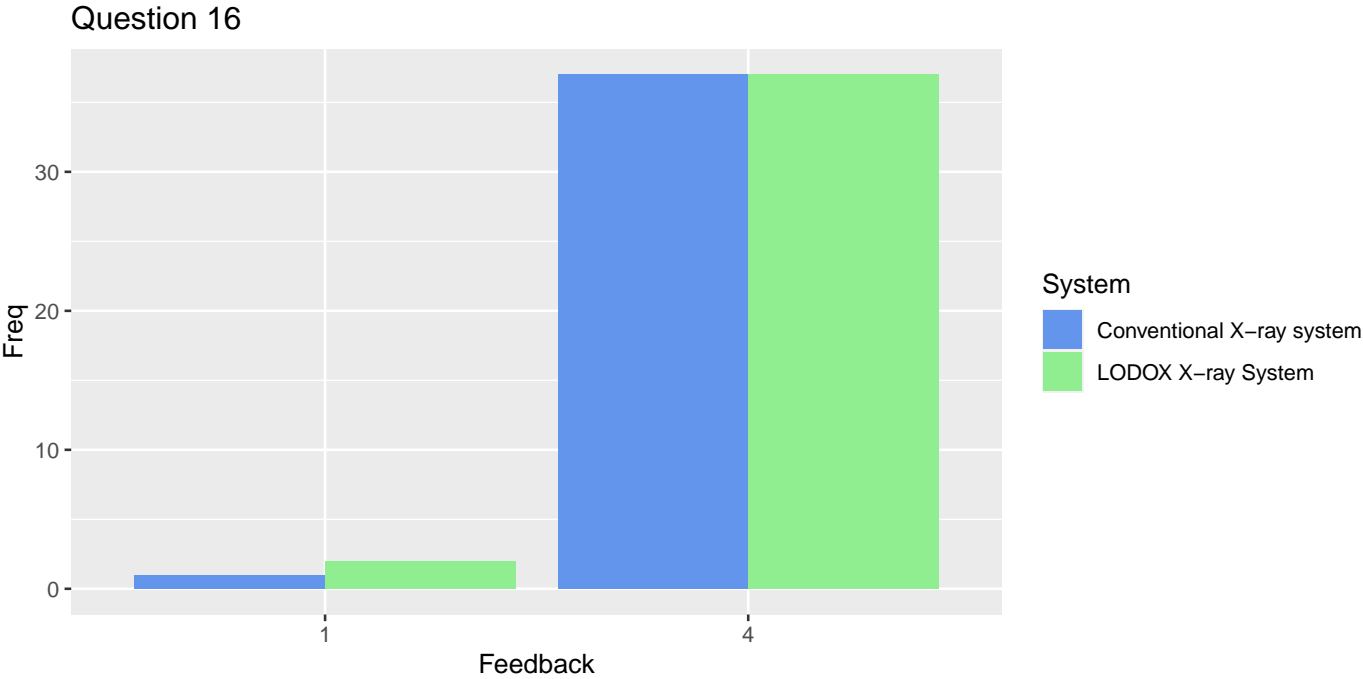
[1] 0.1342335



3.16 Question 16

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 16			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.88 ± 0.58	3.92 ± 0.49	3.85 ± 0.67
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 16			
Missing Values	0	0	0
Visible or Good	3 (3.90%)	1 (2.63%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	74 (96.10%)	37 (97.37%)	37 (94.87%)

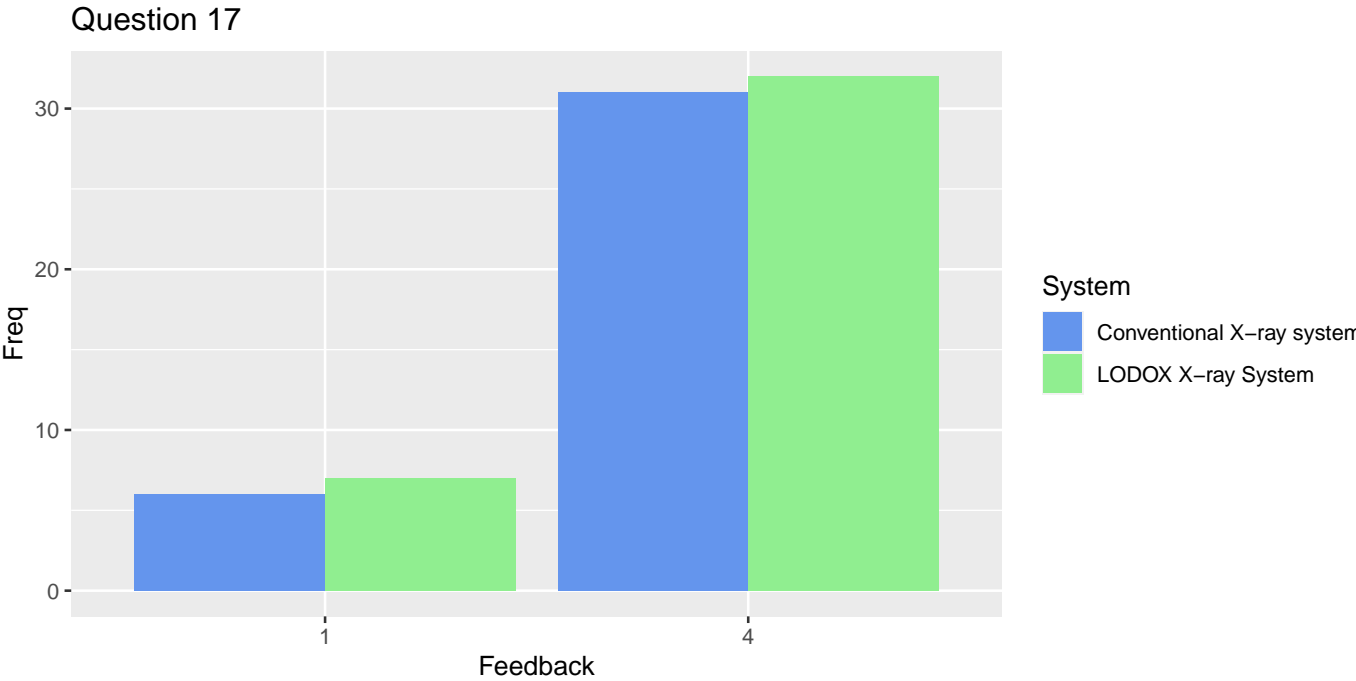
[1] 0.5842737



3.17 Question 17

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 17			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	76; 3.49 ± 1.14	37; 3.51 ± 1.12	3.46 ± 1.17
median (iqr)	76; 4.00 (4.00, 4.00)	37; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 17			
Missing Values	1	1	1
Visible or Good	13 (17.11%)	6 (16.22%)	7 (17.95%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	63 (82.89%)	31 (83.78%)	32 (82.05%)

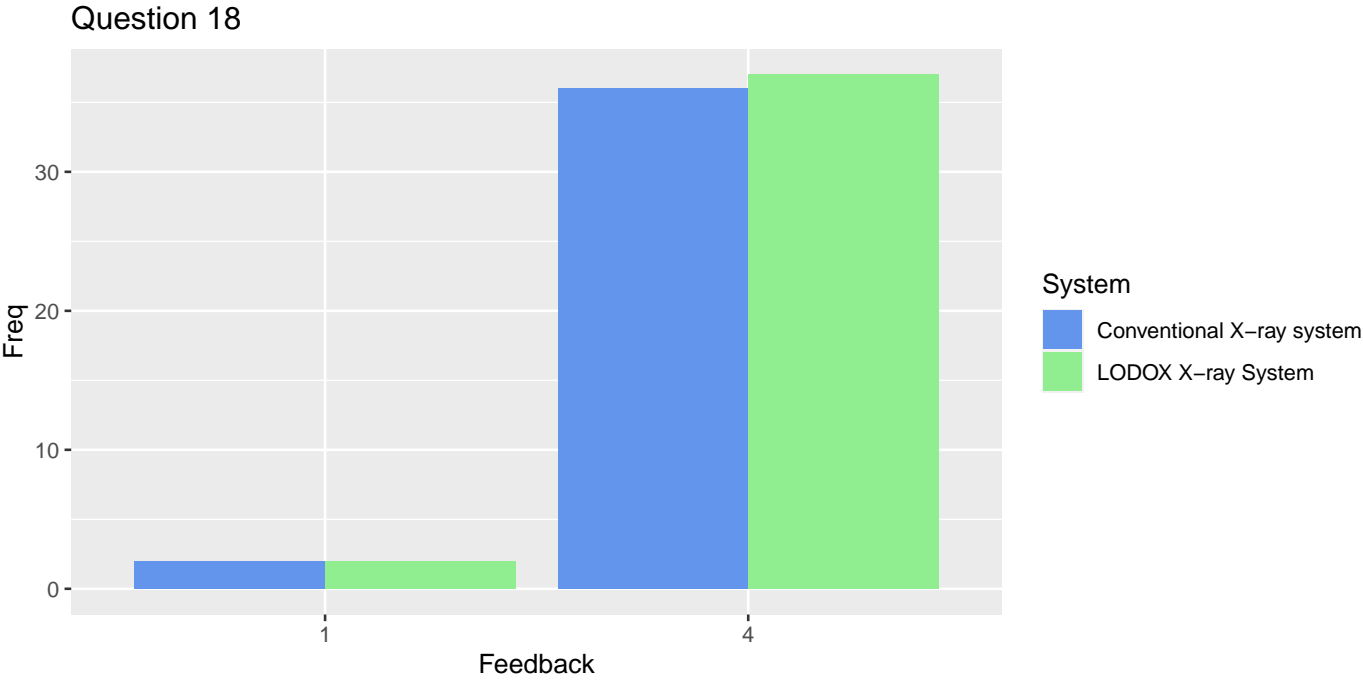
[1] 0.8483762



3.18 Question 18

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 18			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.84 ± 0.67	3.84 ± 0.68	3.85 ± 0.67
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 18			
Missing Values	0	0	0
Visible or Good	4 (5.19%)	2 (5.26%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	73 (94.81%)	36 (94.74%)	37 (94.87%)

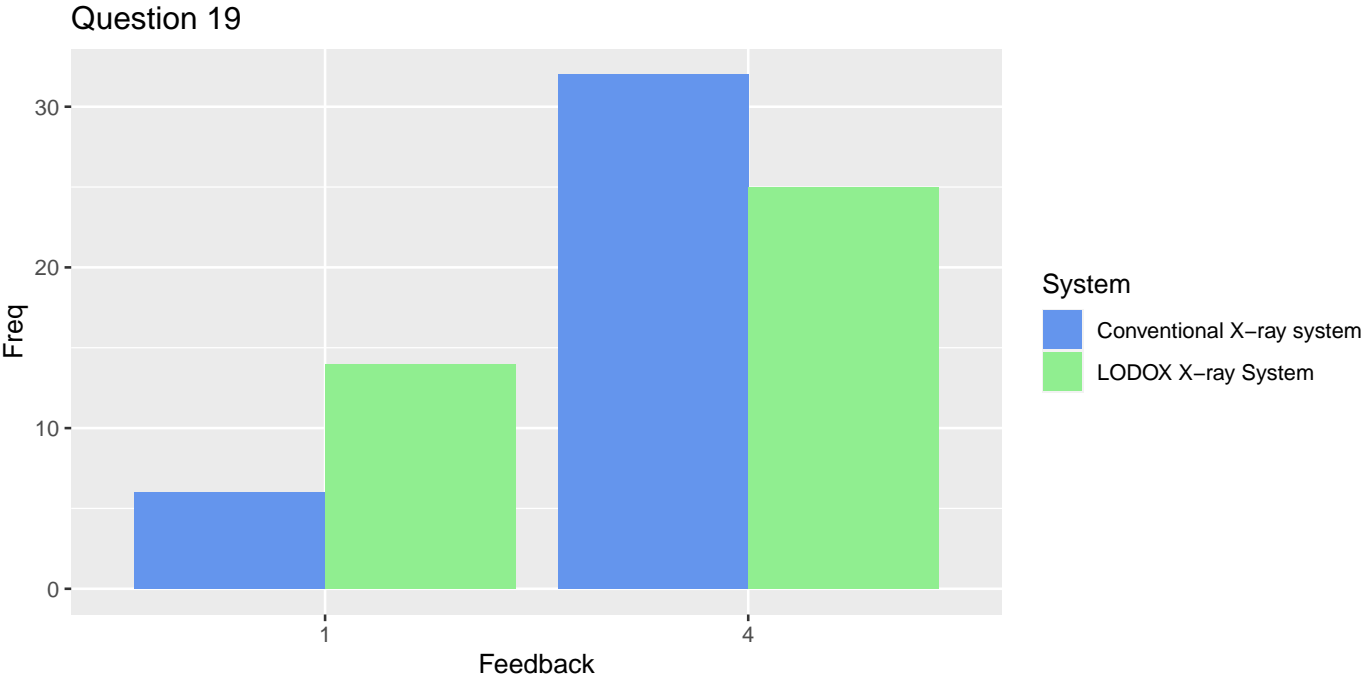
[1] 0.9894265



3.19 Question 19

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 19			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.22 ± 1.32	3.53 ± 1.11	2.92 ± 1.46
median (iqr)	4.00 (1.00, 4.00)	4.00 (4.00, 4.00)	4.00 (1.00, 4.00)
Question 19			
Missing Values	0	0	0
Visible or Good	20 (25.97%)	6 (15.79%)	14 (35.90%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	57 (74.03%)	32 (84.21%)	25 (64.10%)

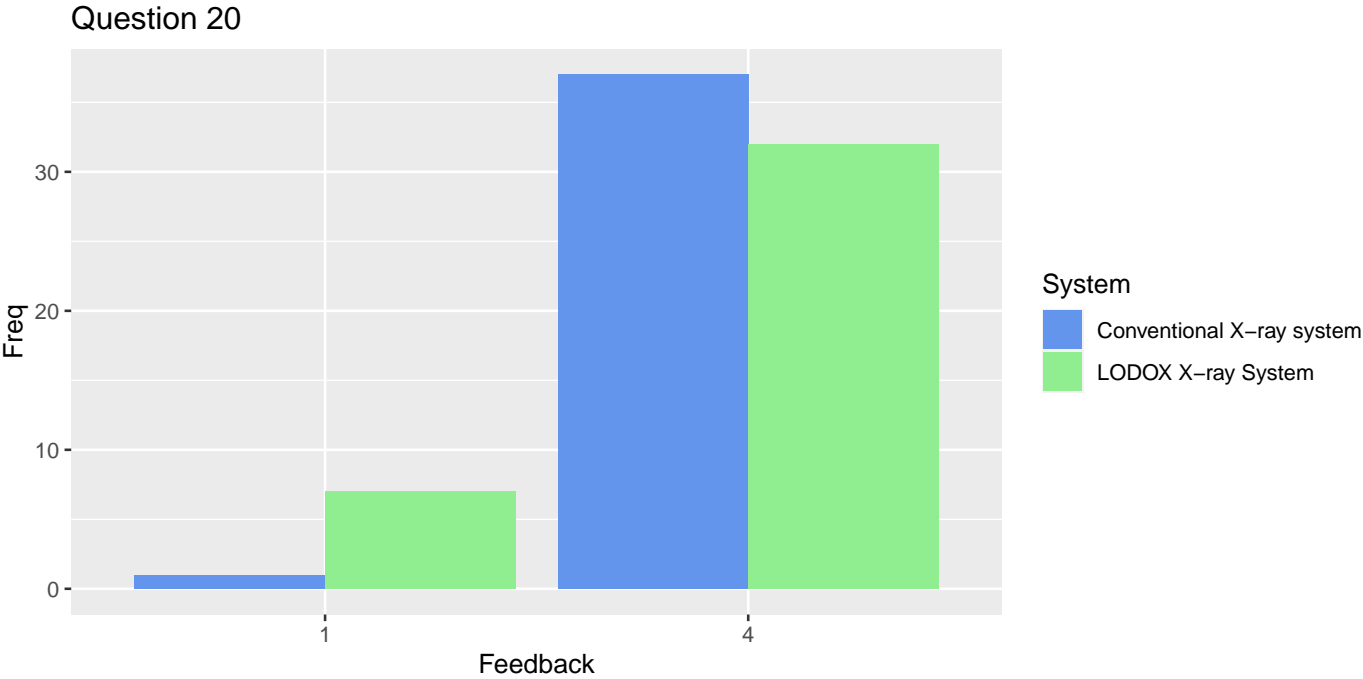
[1] 0.04637237



3.20 Question 20

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 20			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.69 ± 0.92	3.92 ± 0.49	3.46 ± 1.17
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 20			
Missing Values	0	0	0
Visible or Good	8 (10.39%)	1 (2.63%)	7 (17.95%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	69 (89.61%)	37 (97.37%)	32 (82.05%)

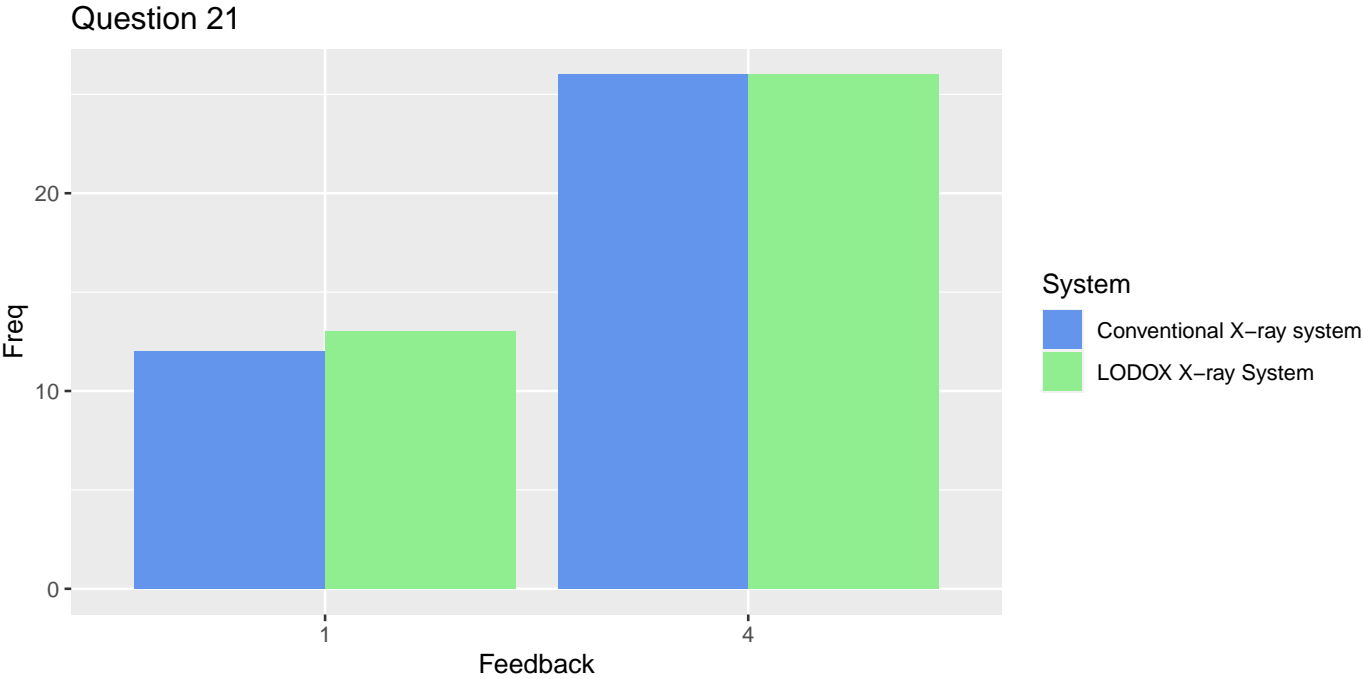
[1] 0.02938225



3.21 Question 21

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 21			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.03 ± 1.41	3.05 ± 1.41	3.00 ± 1.43
median (iqr)	4.00 (1.00, 4.00)	4.00 (1.00, 4.00)	4.00 (1.00, 4.00)
Question 21			
Missing Values	0	0	0
Visible or Good	25 (32.47%)	12 (31.58%)	13 (33.33%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	52 (67.53%)	26 (68.42%)	26 (66.67%)

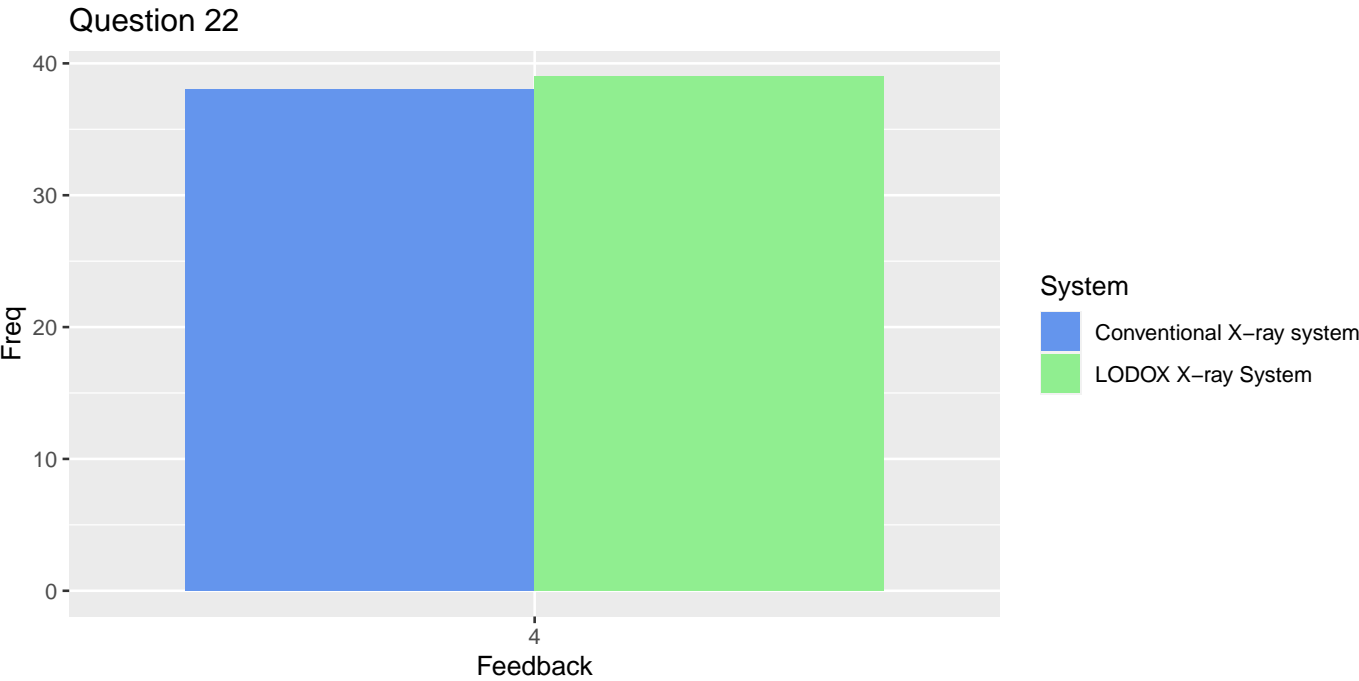
[1] 0.8752302



3.22 Question 22

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 22			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 22			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

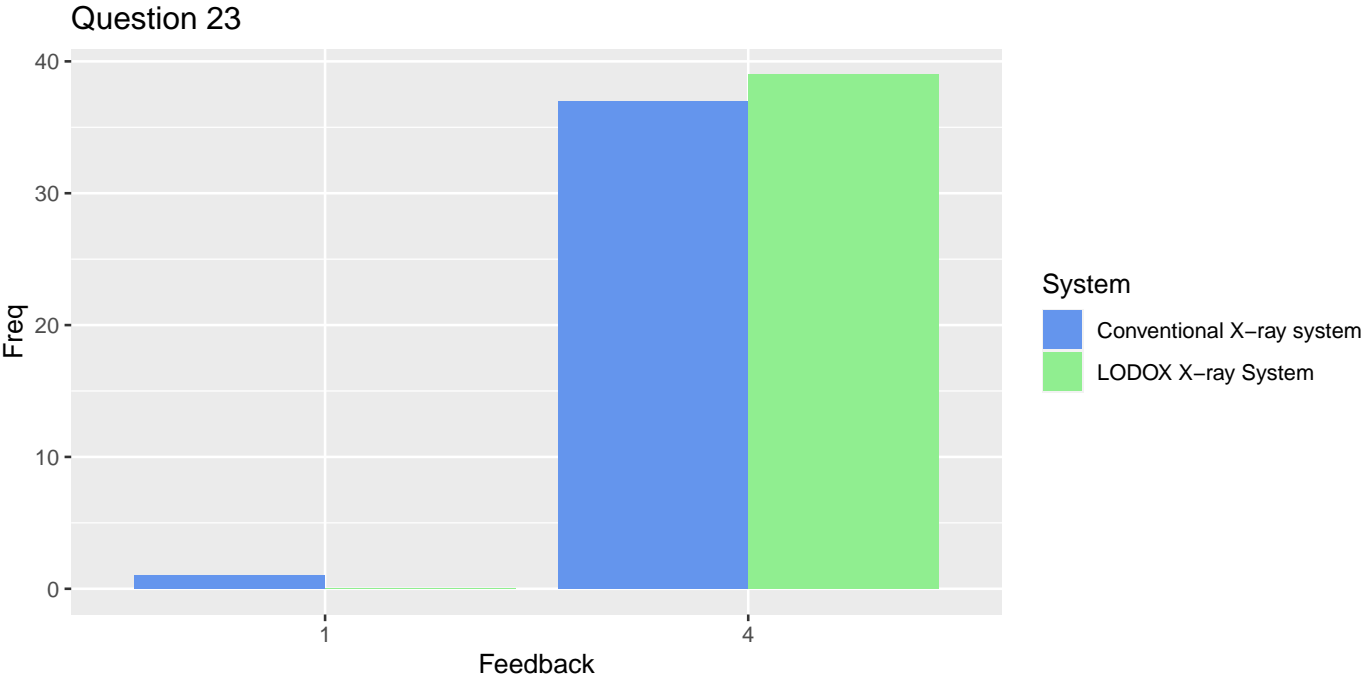
[1] NaN



3.23 Question 23

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 23			
Missing Values	0	0	0
min	1	1	4
max	4	4	4
mean (sd)	3.96 ± 0.34	3.92 ± 0.49	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 23			
Missing Values	0	0	0
Visible or Good	1 (1.30%)	1 (2.63%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	76 (98.70%)	37 (97.37%)	39 (100.00%)

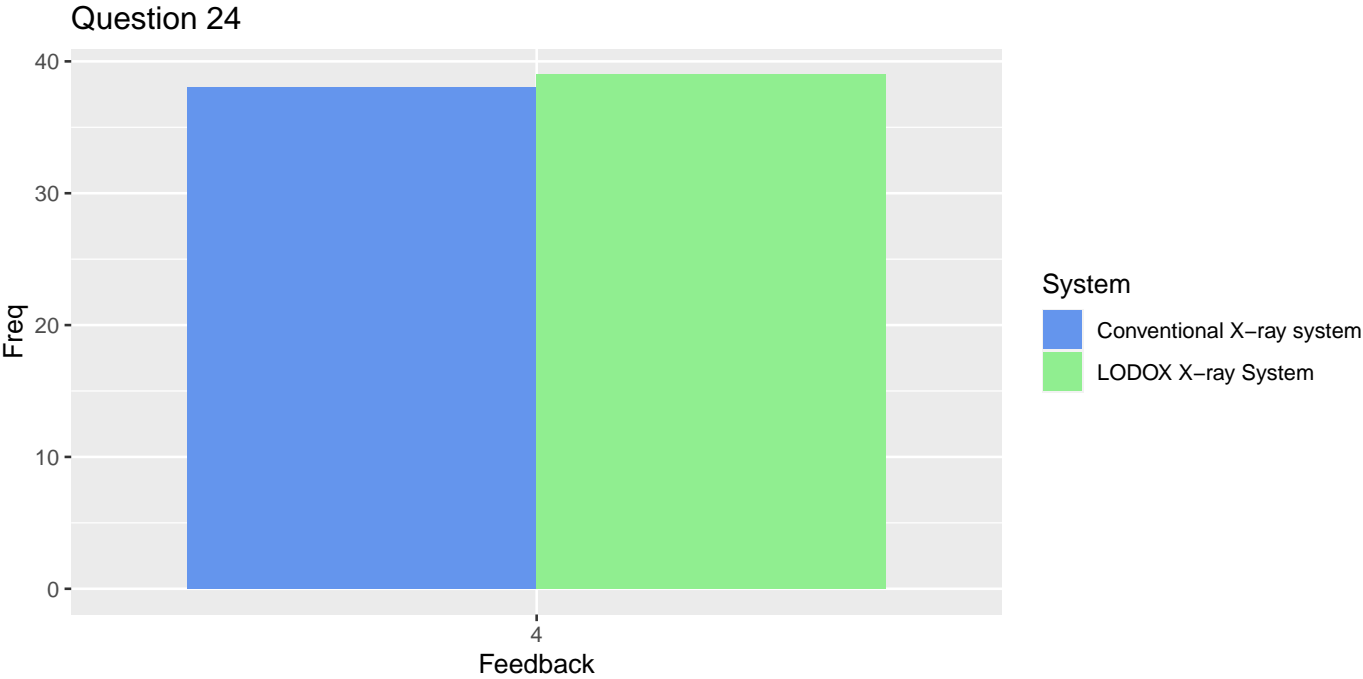
[1] 0.3235955



3.24 Question 24

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 24			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 24			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

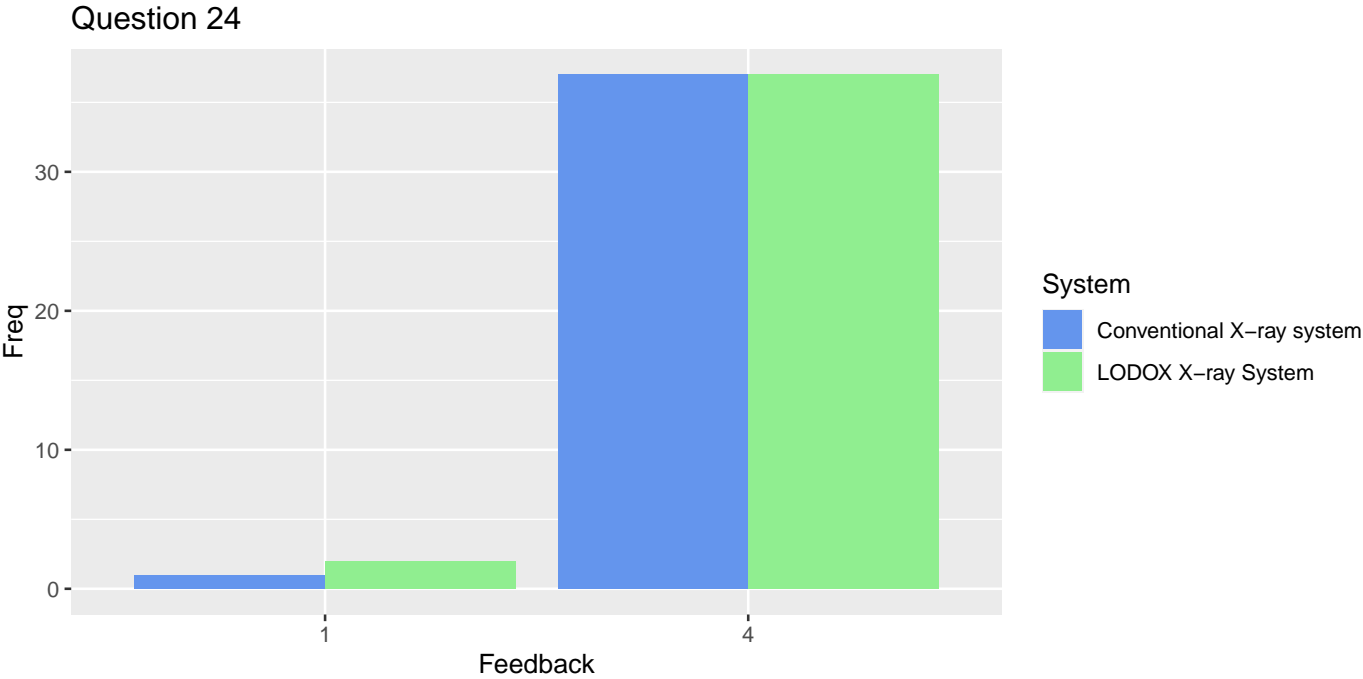
[1] NaN



3.25 Question 25

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 25			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.88 ± 0.58	3.92 ± 0.49	3.85 ± 0.67
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 25			
Missing Values	0	0	0
Visible or Good	3 (3.90%)	1 (2.63%)	2 (5.13%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	74 (96.10%)	37 (97.37%)	37 (94.87%)

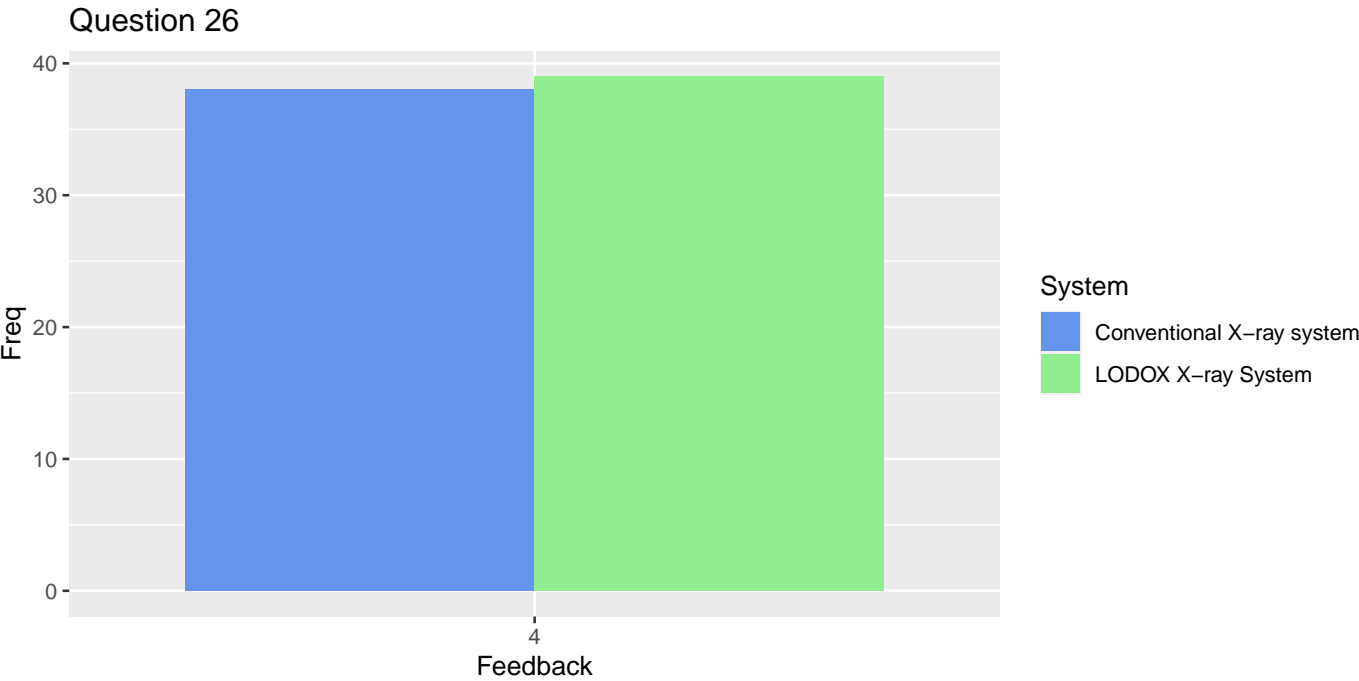
[1] 0.5842737



3.26 Question 26

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 26			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 26			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

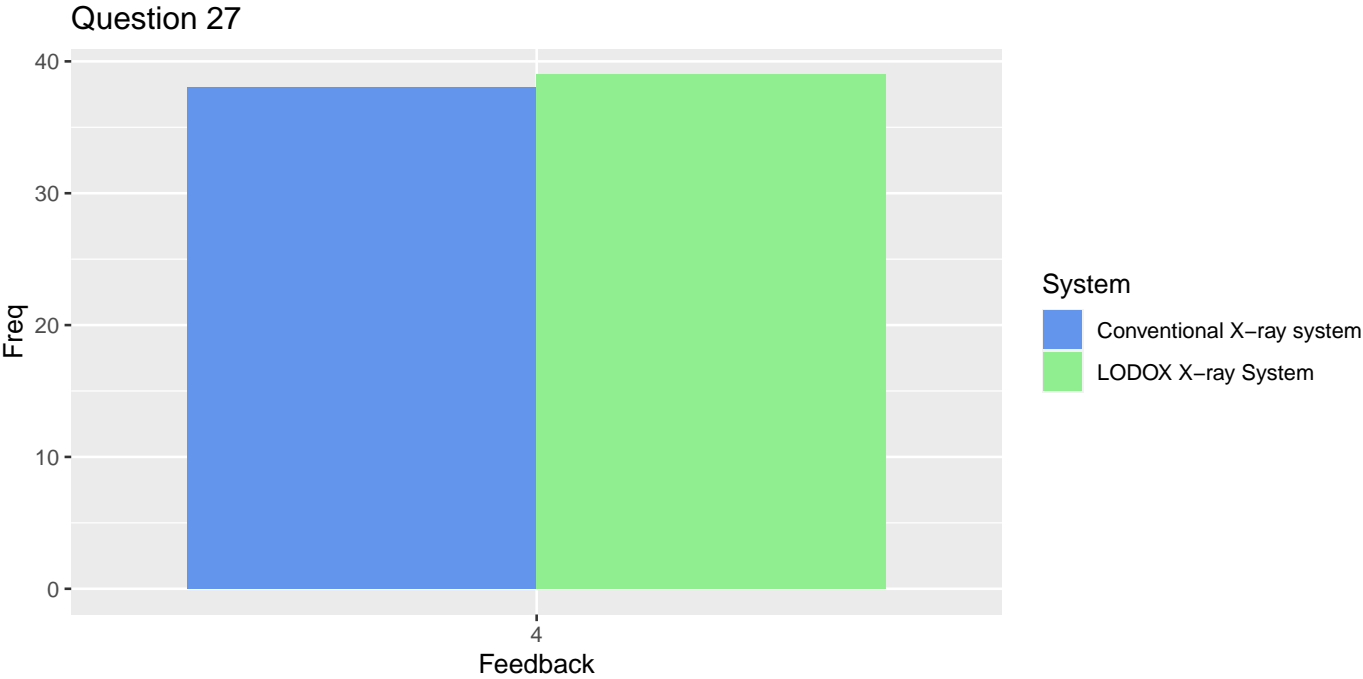
[1] NaN



3.27 Question 27

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 27			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 27			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

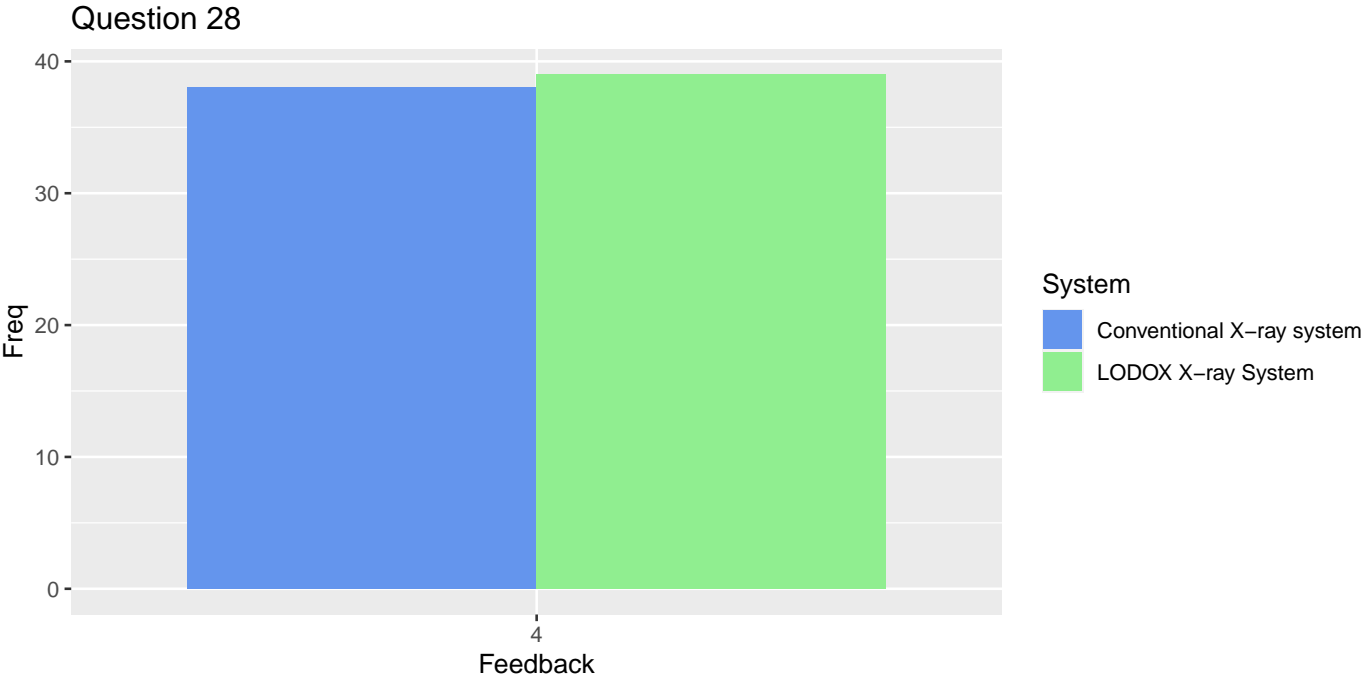
[1] NaN



3.28 Question 28

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 28			
Missing Values	0	0	0
min	4	4	4
max	4	4	4
mean (sd)	4.00 ± 0.00	4.00 ± 0.00	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 28			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	77 (100.00%)	38 (100.00%)	39 (100.00%)

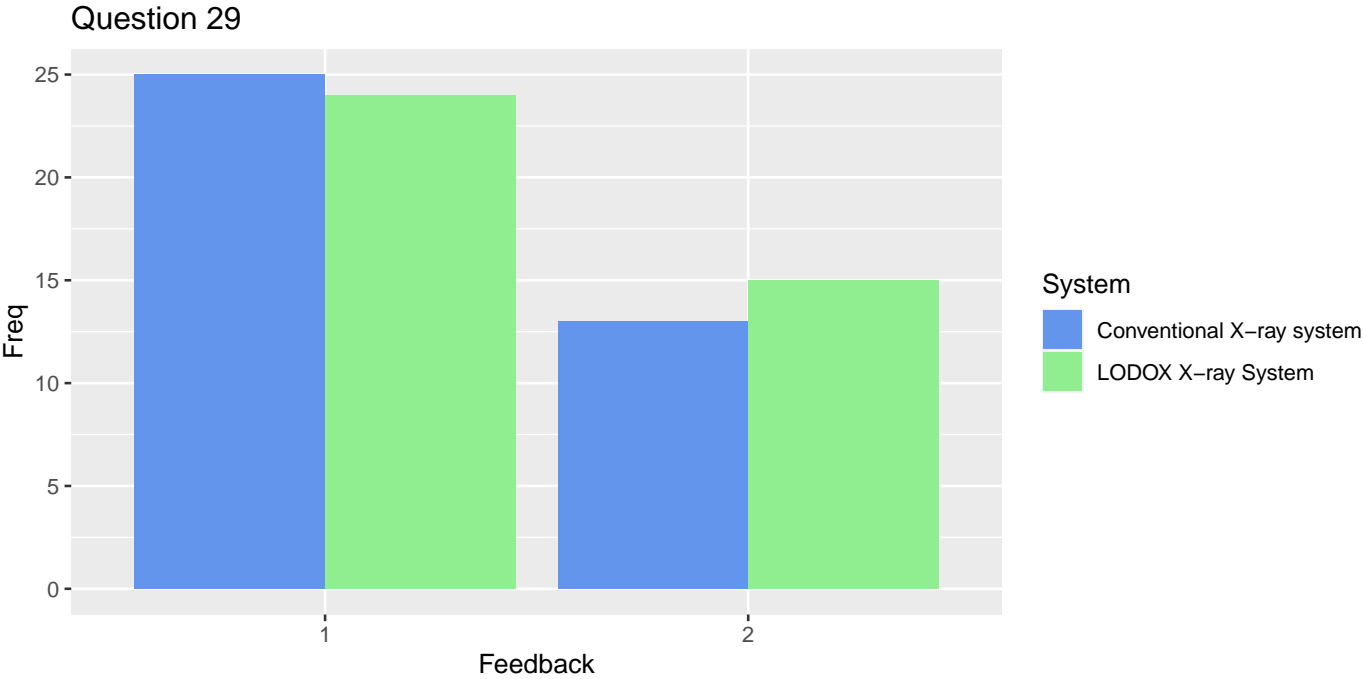
[1] NaN



3.29 Question 29

	DataA (N = 77)	Conventional X-ray system (N = 38)	LODOX X-ray System (N = 39)
Question 29			
Missing Values	0	0	0
min	1	1	1
max	2	2	2
mean (sd)	1.36 ± 0.48	1.34 ± 0.48	1.38 ± 0.49
median (iqr)	1.00 (1.00, 2.00)	1.00 (1.00, 2.00)	1.00 (1.00, 2.00)
Question 29			
Missing Values	0	0	0
Visible or Good	49 (63.64%)	25 (65.79%)	24 (61.54%)
Partially visible or Satisfactory	28 (36.36%)	13 (34.21%)	15 (38.46%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

[1] 0.7046502



4 Retrospective study design Results

4.1 Descriptives

	DataA (N = 278)
Hospital	
Missing Values	0
Charlotte Maxexe academic Hospital	0 (0.00%)
Dr George Mukhari Hospital	92 (33.09%)
Groote Schuur Hospital	120 (43.17%)
Ngwelezane Hospital	65 (23.38%)
Pelonomi Hospital	1 (0.36%)
Steve Biko Academic Hospital	0 (0.00%)
Imaging modality type	
Missing Values	0
Conventional X-ray system	139 (50.00%)
LODOX X-ray System	139 (50.00%)
Study Design	
Missing Values	0
Prospective study design	0 (0.00%)
Retrospective study design	278 (100.00%)

4.2 Checklist

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
1. Exposure artefacts/ chevron exposure artefact			
Missing Values	0	0	0
Visible or Good	29 (10.43%)	29 (20.86%)	0 (0.00%)
Partially visible or Satisfactory	4 (1.44%)	4 (2.88%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	245 (88.13%)	106 (76.26%)	139 (100.00%)
2. Penetration			
Missing Values	0	0	0
Visible or Good	240 (86.33%)	102 (73.38%)	138 (99.28%)
Partially visible or Satisfactory	37 (13.31%)	36 (25.90%)	1 (0.72%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
3. Pulmonary vasculature demonstrated			
Missing Values	0	0	0
Visible or Good	253 (91.01%)	114 (82.01%)	139 (100.00%)
Partially visible or Satisfactory	25 (8.99%)	25 (17.99%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
4. Lungs Parenchyma visualised			
Missing Values	2	2	2
Visible or Good	254 (92.03%)	117 (84.17%)	137 (100.00%)
Partially visible or Satisfactory	22 (7.97%)	22 (15.83%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)
5. Lung infiltrates Visualised			
Missing Values	1	1	1
Visible or Good	177 (63.90%)	87 (62.59%)	90 (65.22%)
Partially visible or Satisfactory	9 (3.25%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	91 (32.85%)	43 (30.94%)	48 (34.78%)
6. Breast tissue outline visualised			
Missing Values	3	3	3
Visible or Good	60 (21.82%)	30 (22.06%)	30 (21.58%)
Partially visible or Satisfactory	10 (3.64%)	10 (7.35%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	205 (74.55%)	96 (70.59%)	109 (78.42%)
7. Thoracic cage soft tissue outlines visualised			
Missing Values	1	1	1
Visible or Good	239 (86.28%)	101 (73.19%)	138 (99.28%)
Partially visible or Satisfactory	17 (6.14%)	17 (12.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	21 (7.58%)	20 (14.49%)	1 (0.72%)
8. Trachea and proximal bronchi demonstrated			

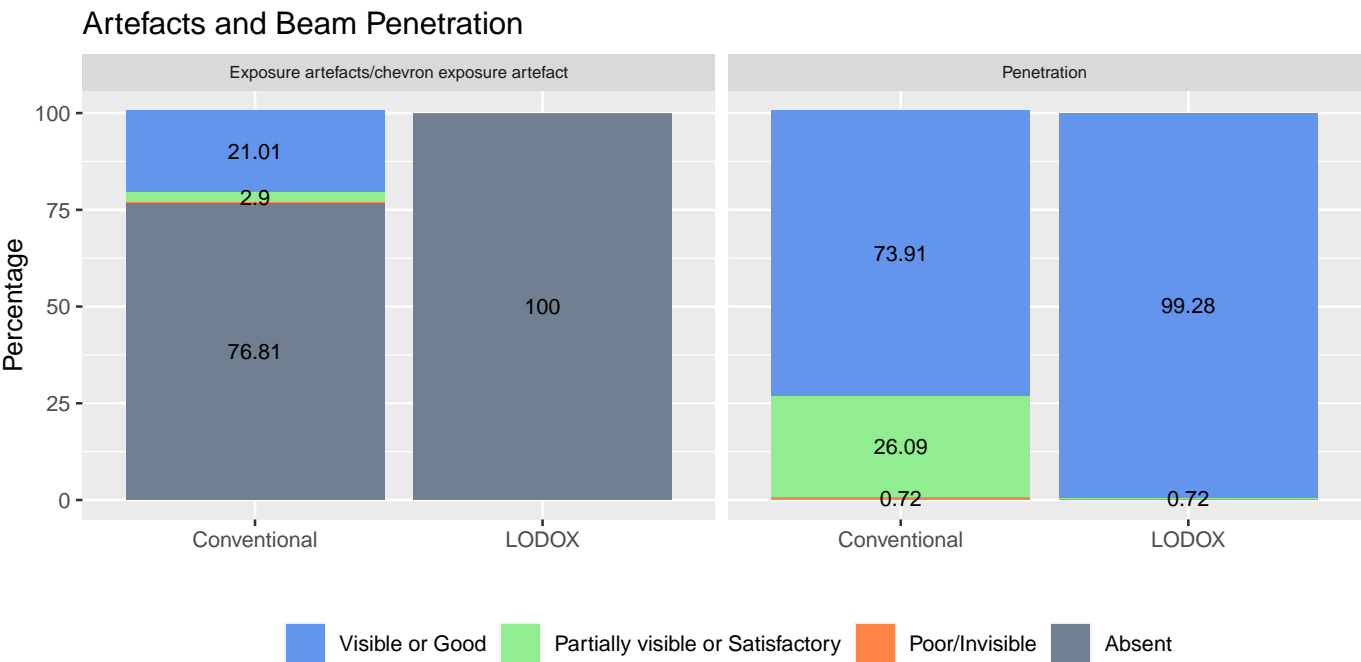
	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Missing Values	0	0	0
Visible or Good	227 (81.65%)	89 (64.03%)	138 (99.28%)
Partially visible or Satisfactory	40 (14.39%)	40 (28.78%)	0 (0.00%)
Poor/Invisible	5 (1.80%)	5 (3.60%)	0 (0.00%)
Absent	6 (2.16%)	5 (3.60%)	1 (0.72%)
9. Pulmonary vessels peripherally demonstrated			
Missing Values	0	0	0
Visible or Good	244 (87.77%)	106 (76.26%)	138 (99.28%)
Partially visible or Satisfactory	29 (10.43%)	29 (20.86%)	0 (0.00%)
Poor/Invisible	2 (0.72%)	2 (1.44%)	0 (0.00%)
Absent	3 (1.08%)	2 (1.44%)	1 (0.72%)
10. Cardiac and Aorta outline visualised			
Missing Values	1	1	1
Visible or Good	249 (89.89%)	111 (80.43%)	138 (99.28%)
Partially visible or Satisfactory	24 (8.66%)	24 (17.39%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	3 (1.08%)	2 (1.45%)	1 (0.72%)
11. Retro-cardiac and mediastinum outline well demonstrated			
Missing Values	1	1	1
Visible or Good	228 (82.31%)	94 (68.12%)	134 (96.40%)
Partially visible or Satisfactory	42 (15.16%)	39 (28.26%)	3 (2.16%)
Poor/Invisible	3 (1.08%)	3 (2.17%)	0 (0.00%)
Absent	4 (1.44%)	2 (1.45%)	2 (1.44%)
12. Thoracic spine - vertebral bodies and disc spaces			
Missing Values	1	1	1
Visible or Good	217 (78.34%)	79 (57.25%)	138 (99.28%)
Partially visible or Satisfactory	41 (14.80%)	41 (29.71%)	0 (0.00%)
Poor/Invisible	8 (2.89%)	8 (5.80%)	0 (0.00%)
Absent	11 (3.97%)	10 (7.25%)	1 (0.72%)
13. Lung contusion			
Missing Values	1	1	1
Visible or Good	24 (8.66%)	24 (17.27%)	0 (0.00%)
Partially visible or Satisfactory	9 (3.25%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	4 (1.44%)	4 (2.88%)	0 (0.00%)
Absent	240 (86.64%)	102 (73.38%)	138 (100.00%)
14. Pneumothorax			
Missing Values	0	0	0
Visible or Good	28 (10.07%)	20 (14.39%)	8 (5.76%)
Partially visible or Satisfactory	9 (3.24%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.16%)	0 (0.00%)
Absent	238 (85.61%)	107 (76.98%)	131 (94.24%)
15. Effusions			
Missing Values	0	0	0
Visible or Good	68 (24.46%)	38 (27.34%)	30 (21.58%)
Partially visible or Satisfactory	7 (2.52%)	7 (5.04%)	0 (0.00%)

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Poor/Invisible	2 (0.72%)	2 (1.44%)	0 (0.00%)
Absent	201 (72.30%)	92 (66.19%)	109 (78.42%)
16. Pneumomediastinum			
Missing Values	2	2	2
Visible or Good	3 (1.09%)	1 (0.72%)	2 (1.45%)
Partially visible or Satisfactory	4 (1.45%)	4 (2.90%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.17%)	0 (0.00%)
Absent	266 (96.38%)	130 (94.20%)	136 (98.55%)
17. Surgical emphysema			
Missing Values	1	1	1
Visible or Good	46 (16.61%)	20 (14.49%)	26 (18.71%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.72%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.17%)	0 (0.00%)
Absent	227 (81.95%)	114 (82.61%)	113 (81.29%)
18. Extra luminal air			
Missing Values	1	1	1
Visible or Good	9 (3.25%)	5 (3.62%)	4 (2.88%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	267 (96.39%)	132 (95.65%)	135 (97.12%)
19. Nodules			
Missing Values	0	0	0
Visible or Good	56 (20.14%)	20 (14.39%)	36 (25.90%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.72%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	220 (79.14%)	117 (84.17%)	103 (74.10%)
20. Interstitial changes			
Missing Values	0	0	0
Visible or Good	51 (18.35%)	24 (17.27%)	27 (19.42%)
Partially visible or Satisfactory	6 (2.16%)	6 (4.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	221 (79.50%)	109 (78.42%)	112 (80.58%)
21. Air bronchograms			
Missing Values	3	3	3
Visible or Good	112 (40.73%)	44 (32.35%)	68 (48.92%)
Partially visible or Satisfactory	2 (0.73%)	2 (1.47%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	161 (58.55%)	90 (66.18%)	71 (51.08%)
22. Granular glass opacity			
Missing Values	5	5	5
Visible or Good	19 (6.96%)	19 (14.07%)	0 (0.00%)
Partially visible or Satisfactory	4 (1.47%)	4 (2.96%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	250 (91.58%)	112 (82.96%)	138 (100.00%)
23. Bullae			
Missing Values	1	1	1

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Visible or Good	4 (1.44%)	4 (2.90%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	273 (98.56%)	134 (97.10%)	139 (100.00%)
24. Mediastinal injuries			
Missing Values	1	1	1
Visible or Good	2 (0.72%)	2 (1.45%)	0 (0.00%)
Partially visible or Satisfactory	2 (0.72%)	2 (1.45%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	272 (98.19%)	133 (96.38%)	139 (100.00%)
25. Fracture ribs, clavicle			
Missing Values	0	0	0
Visible or Good	44 (15.83%)	27 (19.42%)	17 (12.23%)
Partially visible or Satisfactory	6 (2.16%)	6 (4.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	228 (82.01%)	106 (76.26%)	122 (87.77%)
26. Thoracic spine fracture			
Missing Values	4	4	4
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.74%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.22%)	0 (0.00%)
Absent	270 (98.54%)	131 (97.04%)	139 (100.00%)
27. Vertebral body or spinous fracture			
Missing Values	2	2	2
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.19%)	0 (0.00%)
Absent	273 (98.91%)	134 (97.81%)	139 (100.00%)
28. Thoracic spine lesions			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.16%)	0 (0.00%)
Absent	275 (98.92%)	136 (97.84%)	139 (100.00%)
29. Diaphragms			
Missing Values	0	0	0
Visible or Good	205 (73.74%)	91 (65.47%)	114 (82.01%)
Partially visible or Satisfactory	68 (24.46%)	44 (31.65%)	24 (17.27%)
Poor/Invisible	1 (0.36%)	0 (0.00%)	1 (0.72%)
Absent	4 (1.44%)	4 (2.88%)	0 (0.00%)
30. Other			
Missing Values	274	274	274
Visible or Good	1 (25.00%)	1 (25.00%)	0 (NaN%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (NaN%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (NaN%)
Absent	3 (75.00%)	3 (75.00%)	0 (NaN%)

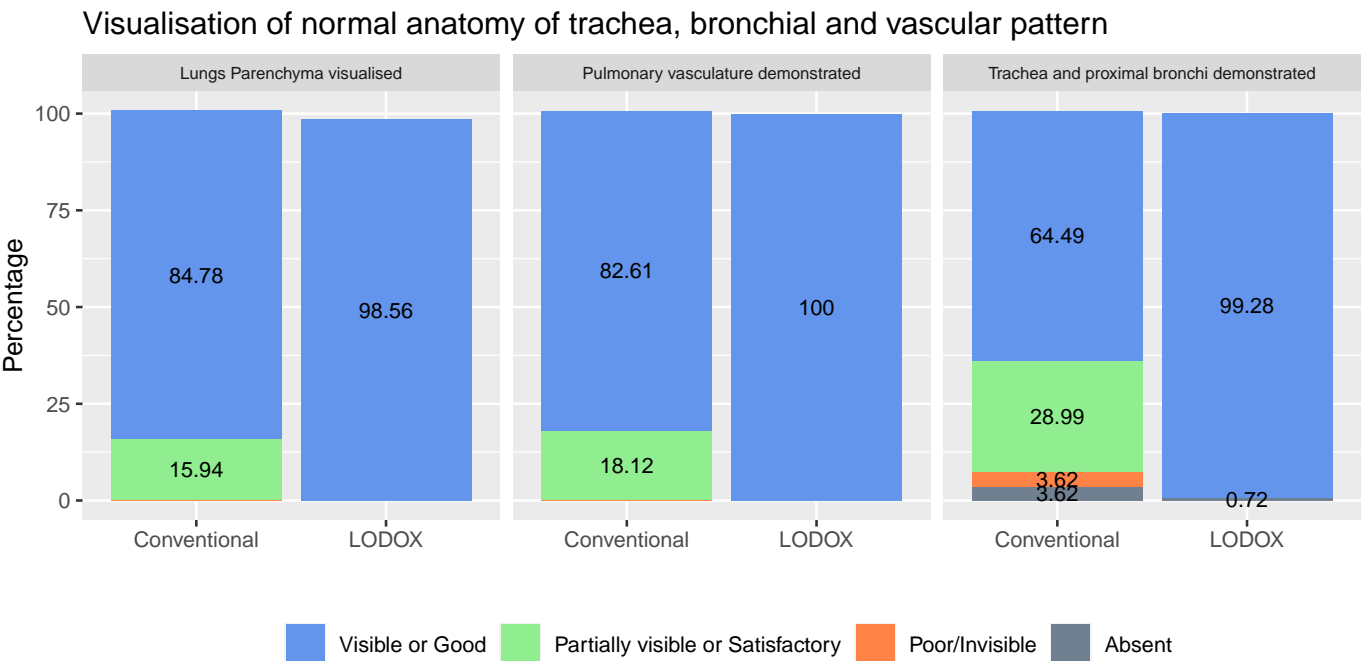
4.3 Visual Displays

4.3.1 Figure 1



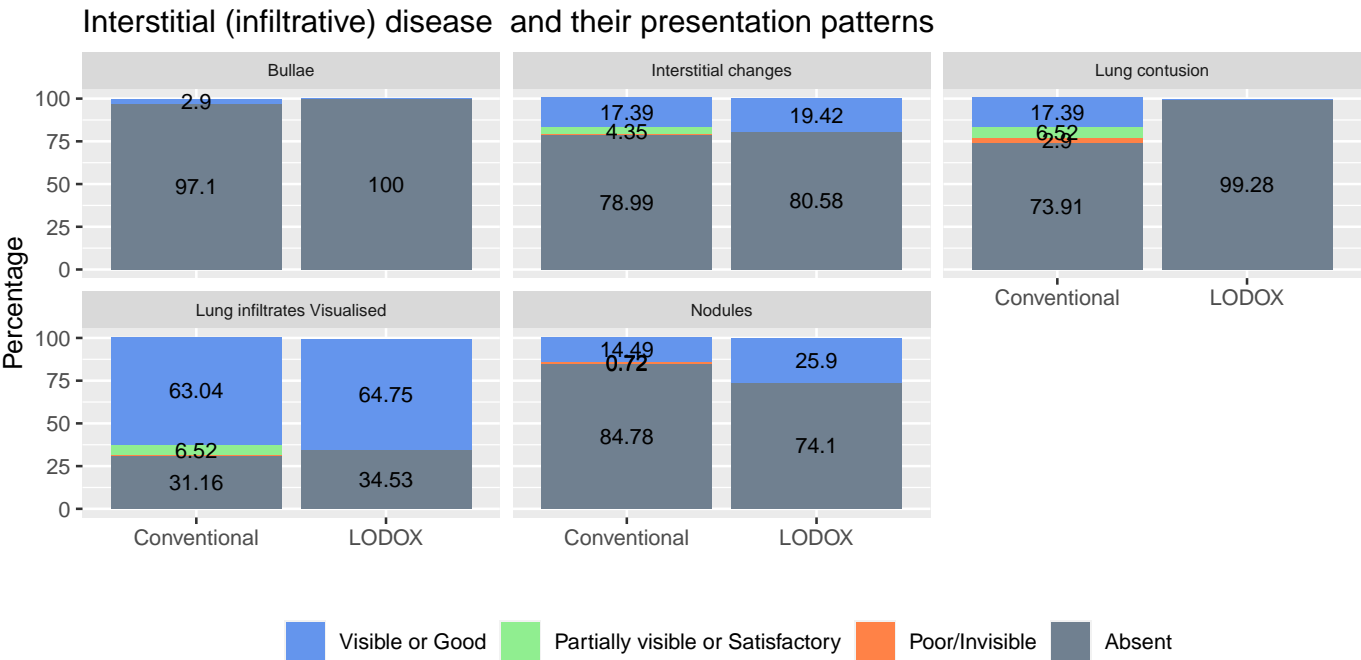
pdf 2

4.3.2 Figure 2



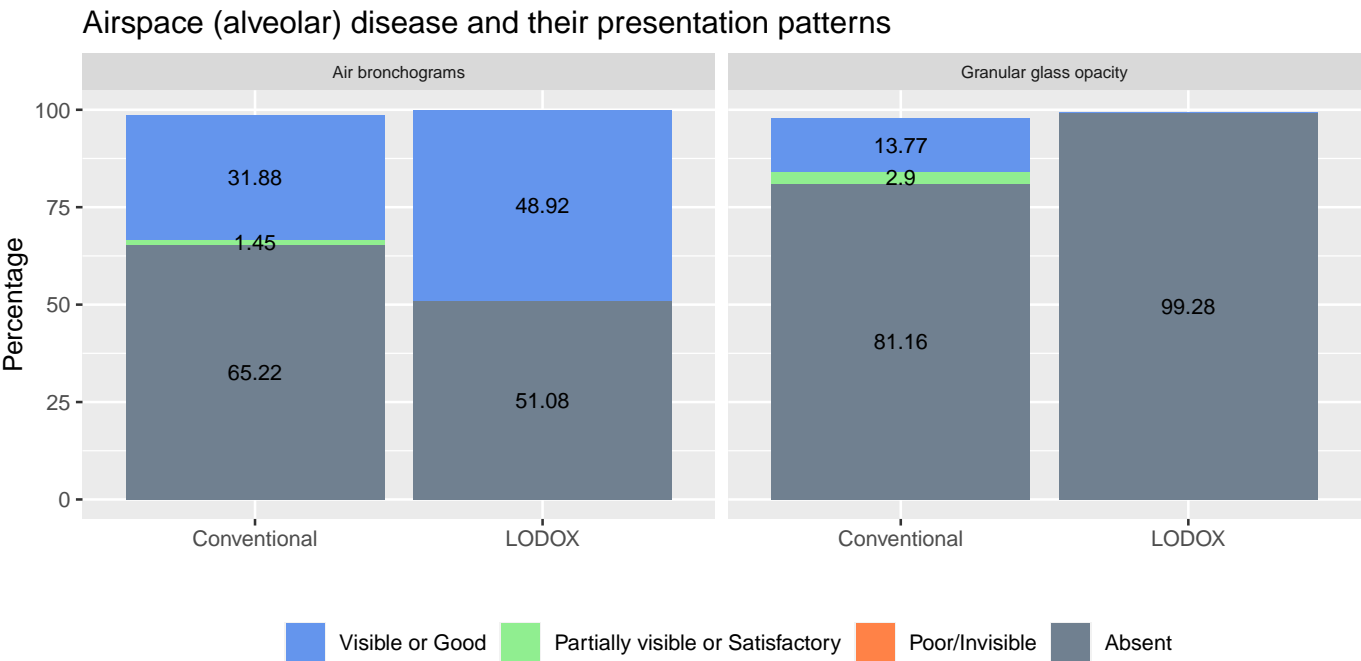
pdf 2

4.3.3 Figure 3 a



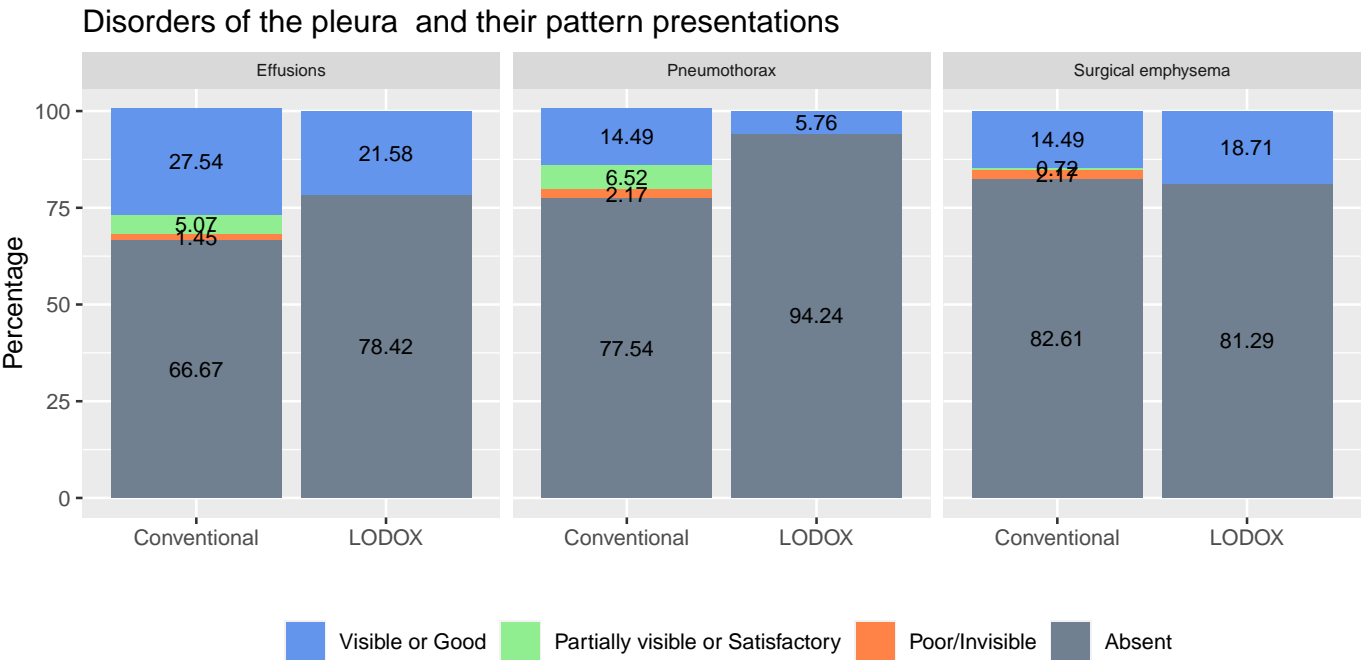
pdf 2

4.3.4 Figure 3 b



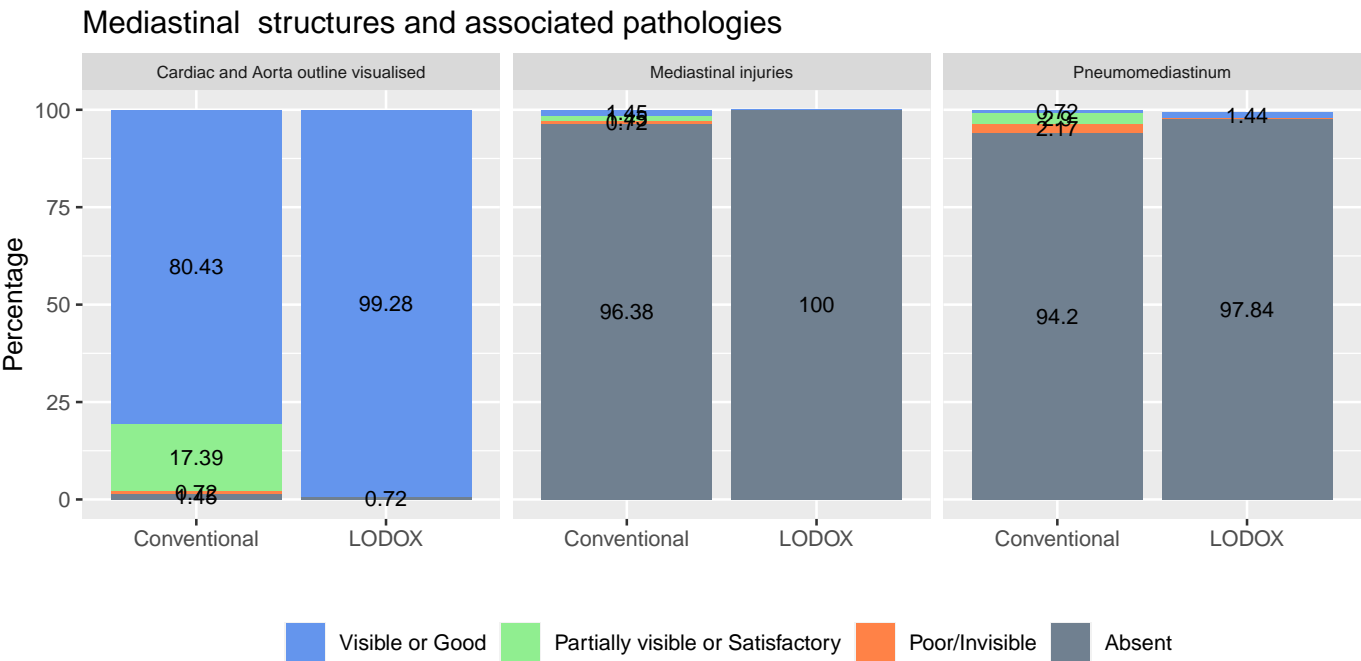
pdf 2

4.3.5 Figure 4



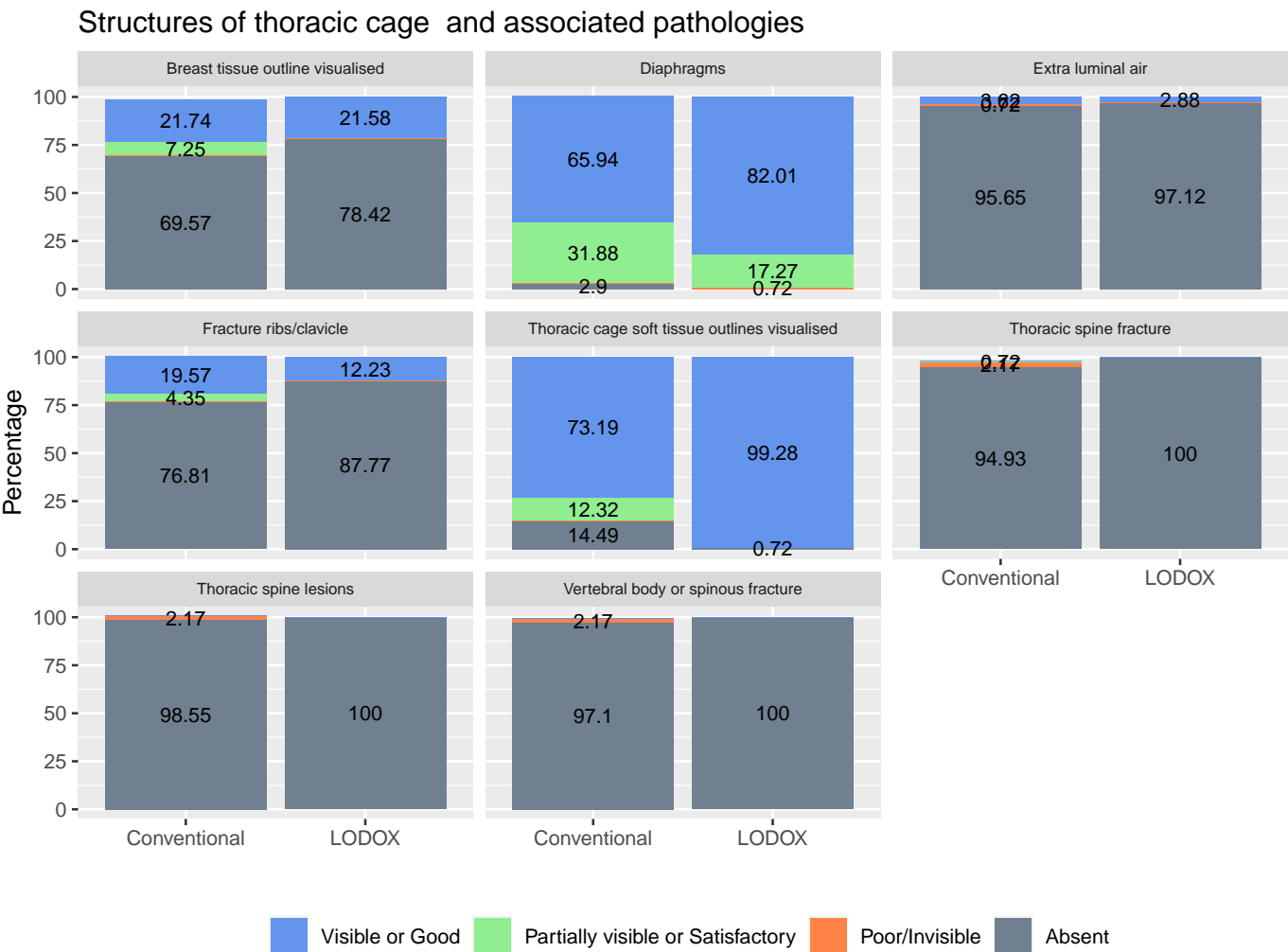
pdf 2

4.3.6 Figure 5



pdf 2

4.3.7 Figure 6



pdf 2

5 Retrospective study - Independent Comparison Between Lodox and Conventional

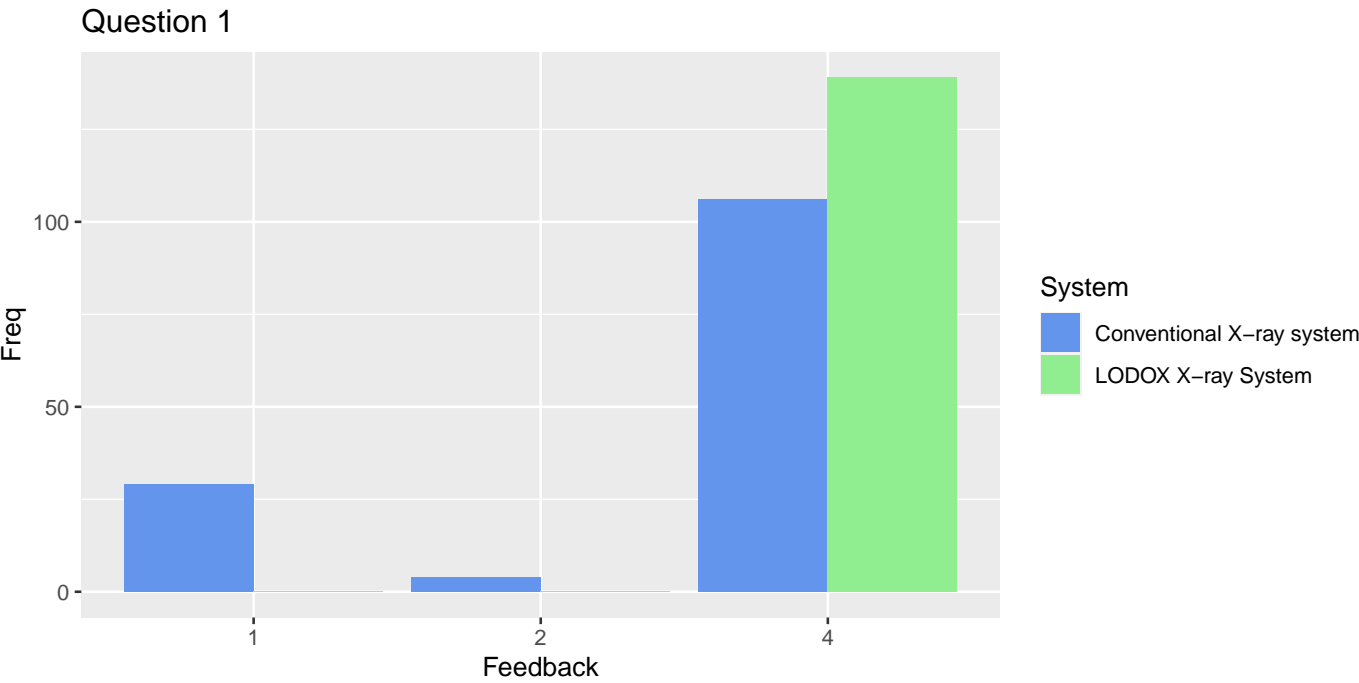
We will be comparing the results for the retrospective, between Lodox and Conventional x-ray. Since the participants cannot be linked between the two groups being compared and since the data is ordinal in nature, the independent groups Mann whitney U test will be used. All tests will be performed at a 5% level of significance. A p-value of less than 0.05 indicates that the nullhypothesis can be rejected which then indicates that a significant difference exists between the distribution of data in the two groups. Each p-value is reported below each table.

- 1 - Visible or Good
- 2 - Partially visiblr or Satisfactory
- 3 - Poor/Invisible
- 4 - Absent

5.1 Question 1

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 1			
Missing Values	0	0	0
min	1	1	4
max	4	4	4
mean (sd)	3.66 ± 0.94	3.32 ± 1.24	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 1			
Missing Values	0	0	0
Visible or Good	29 (10.43%)	29 (20.86%)	0 (0.00%)
Partially visible or Satisfactory	4 (1.44%)	4 (2.88%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	245 (88.13%)	106 (76.26%)	139 (100.00%)

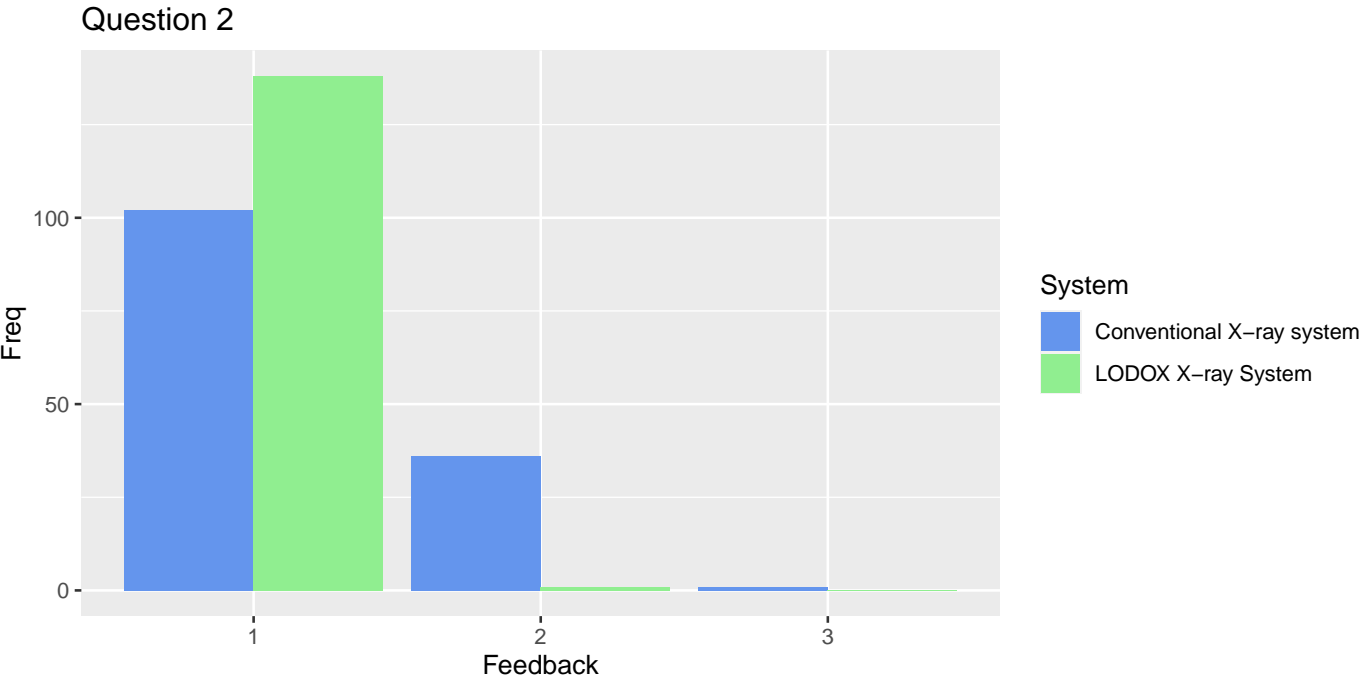
[1] 0.000000001049577



5.2 Question 2

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 2			
Missing Values	0	0	0
min	1	1	1
max	3	3	2
mean (sd)	1.14 ± 0.36	1.27 ± 0.46	1.01 ± 0.08
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 2			
Missing Values	0	0	0
Visible or Good	240 (86.33%)	102 (73.38%)	138 (99.28%)
Partially visible or Satisfactory	37 (13.31%)	36 (25.90%)	1 (0.72%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

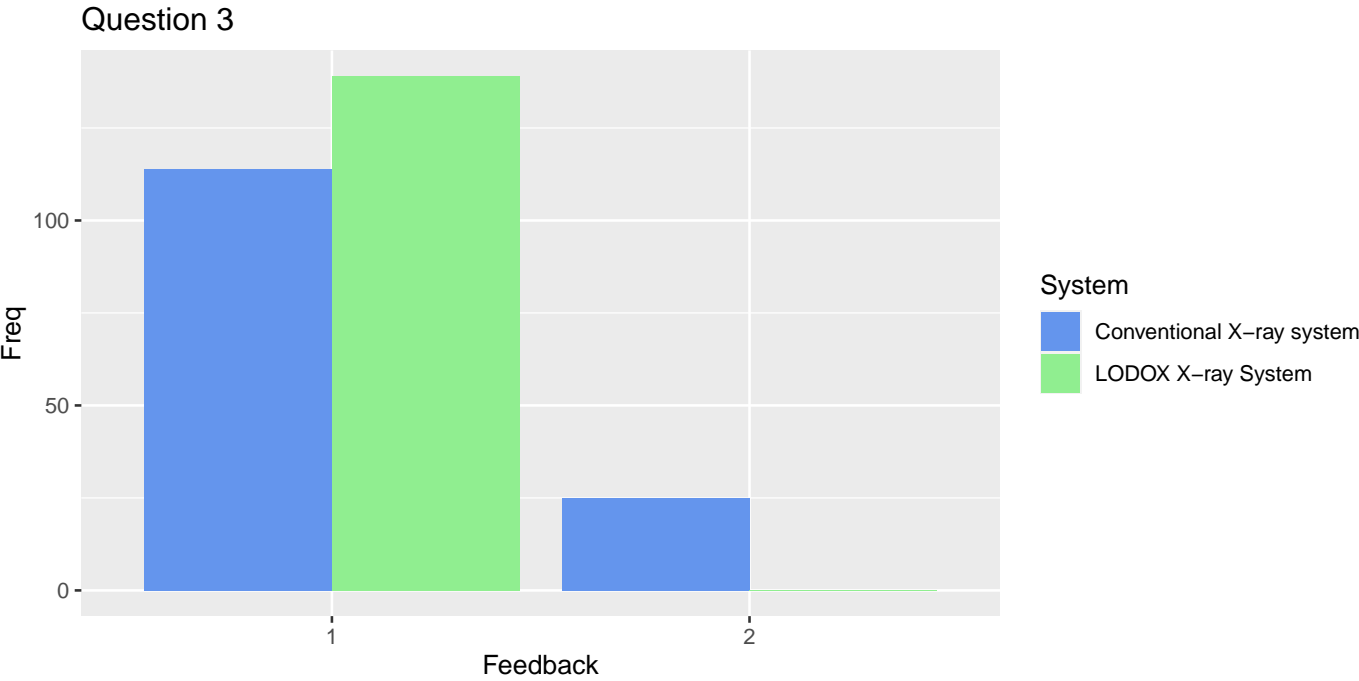
[1] 0.0000000003558273



5.3 Question 3

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 3			
Missing Values	0	0	0
min	1	1	1
max	2	2	1
mean (sd)	1.09 ± 0.29	1.18 ± 0.39	1.00 ± 0.00
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 3			
Missing Values	0	0	0
Visible or Good	253 (91.01%)	114 (82.01%)	139 (100.00%)
Partially visible or Satisfactory	25 (8.99%)	25 (17.99%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

[1] 0.0000001692569



5.4 Question 4

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 4			
Missing Values	2	2	2
min	1	1	1
max	2	2	1
mean (sd)	276; 1.08 ± 0.27	1.16 ± 0.37	137; 1.00 ± 0.00
median (iqr)	276; 1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	137; 1.00 (1.00, 1.00)
Question 4			
Missing Values	2	2	2
Visible or Good	254 (92.03%)	117 (84.17%)	137 (100.00%)
Partially visible or Satisfactory	22 (7.97%)	22 (15.83%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	0 (0.00%)	0 (0.00%)	0 (0.00%)

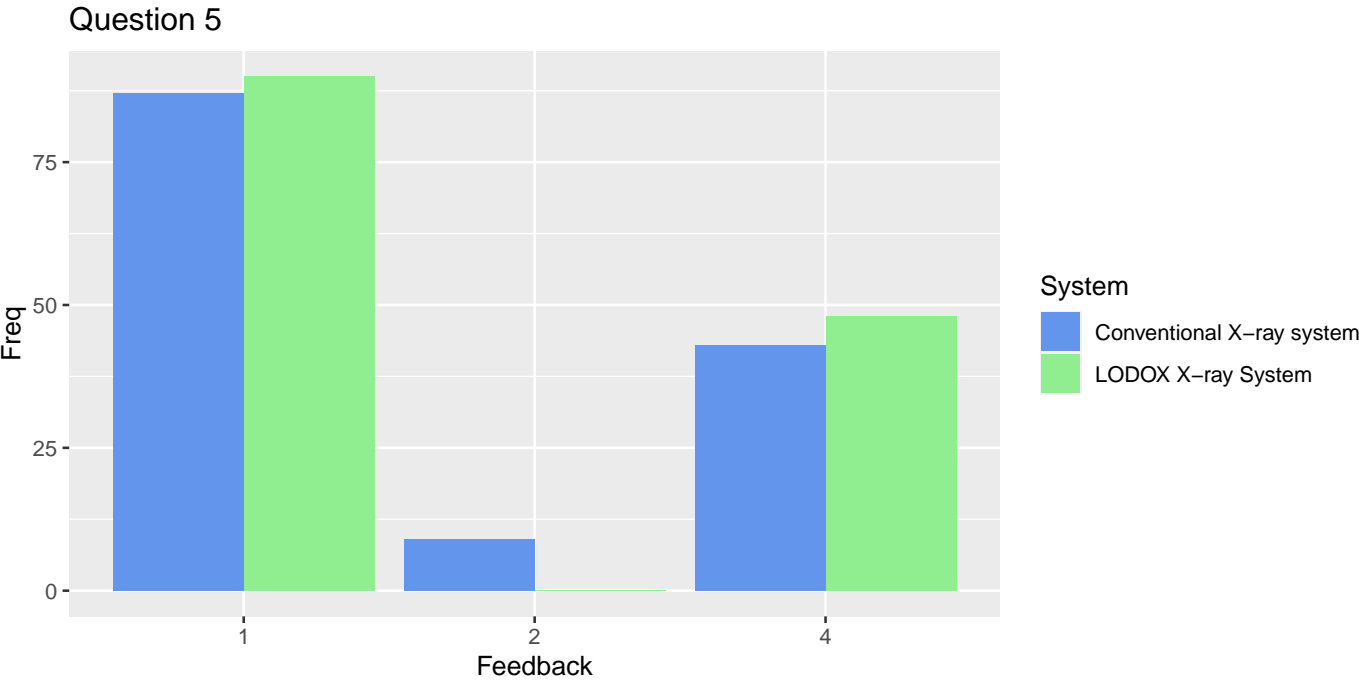
[1] 0.00000127498



5.5 Question 5

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 5			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 2.02 ± 1.40	1.99 ± 1.37	138; 2.04 ± 1.43
median (iqr)	277; 1.00 (1.00, 4.00)	1.00 (1.00, 4.00)	138; 1.00 (1.00, 4.00)
Question 5			
Missing Values	1	1	1
Visible or Good	177 (63.90%)	87 (62.59%)	90 (65.22%)
Partially visible or Satisfactory	9 (3.25%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	91 (32.85%)	43 (30.94%)	48 (34.78%)

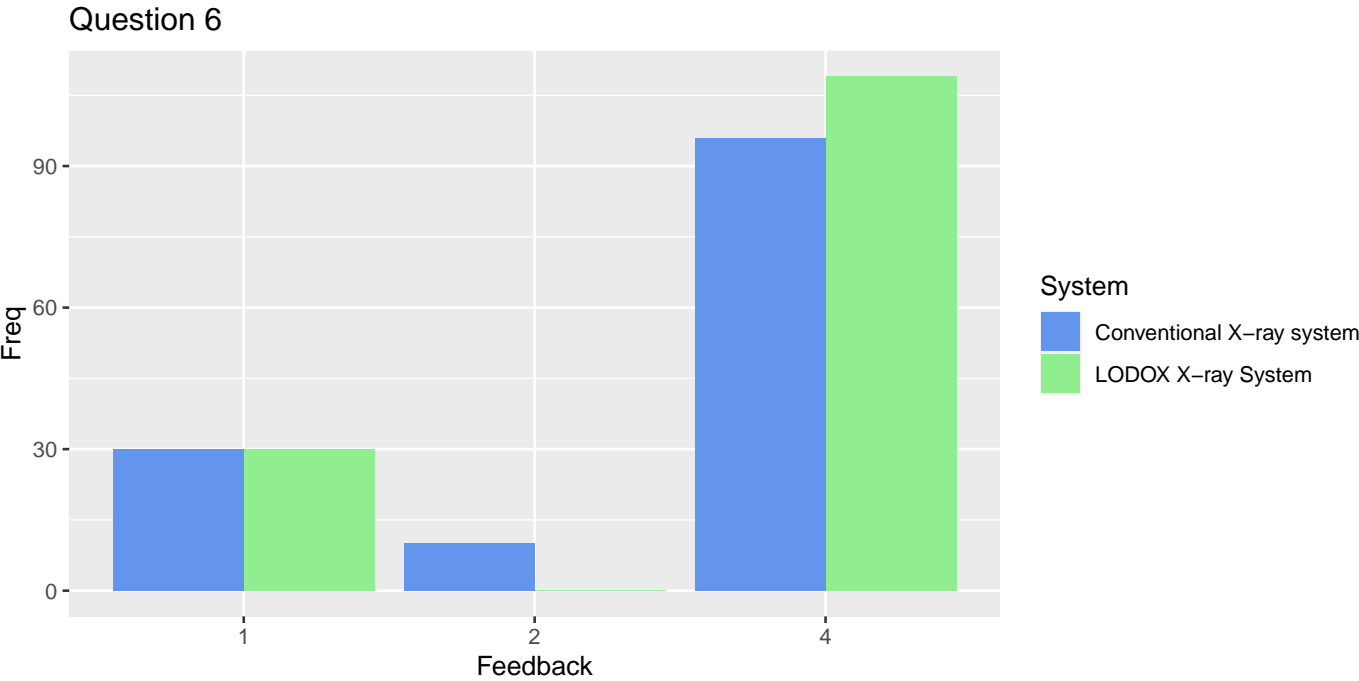
[1] 0.949379



5.6 Question 6

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 6			
Missing Values	3	3	3
min	1	1	1
max	4	4	4
mean (sd)	275; 3.27 ± 1.26	136; 3.19 ± 1.28	3.35 ± 1.24
median (iqr)	275; 4.00 (2.00, 4.00)	136; 4.00 (2.00, 4.00)	4.00 (4.00, 4.00)
Question 6			
Missing Values	3	3	3
Visible or Good	60 (21.82%)	30 (22.06%)	30 (21.58%)
Partially visible or Satisfactory	10 (3.64%)	10 (7.35%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	205 (74.55%)	96 (70.59%)	109 (78.42%)

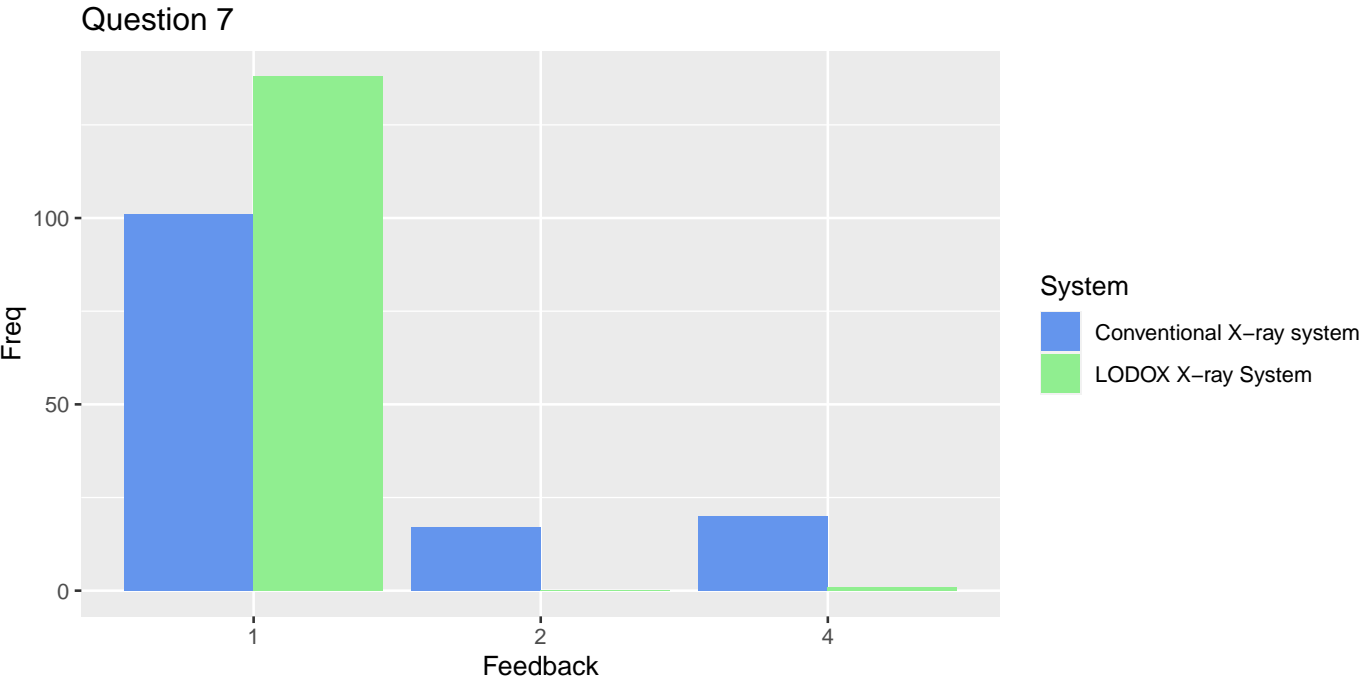
[1] 0.2385348



5.7 Question 7

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 7			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 1.29 ± 0.81	138; 1.56 ± 1.06	1.02 ± 0.25
median (iqr)	277; 1.00 (1.00, 1.00)	138; 1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 7			
Missing Values	1	1	1
Visible or Good	239 (86.28%)	101 (73.19%)	138 (99.28%)
Partially visible or Satisfactory	17 (6.14%)	17 (12.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	21 (7.58%)	20 (14.49%)	1 (0.72%)

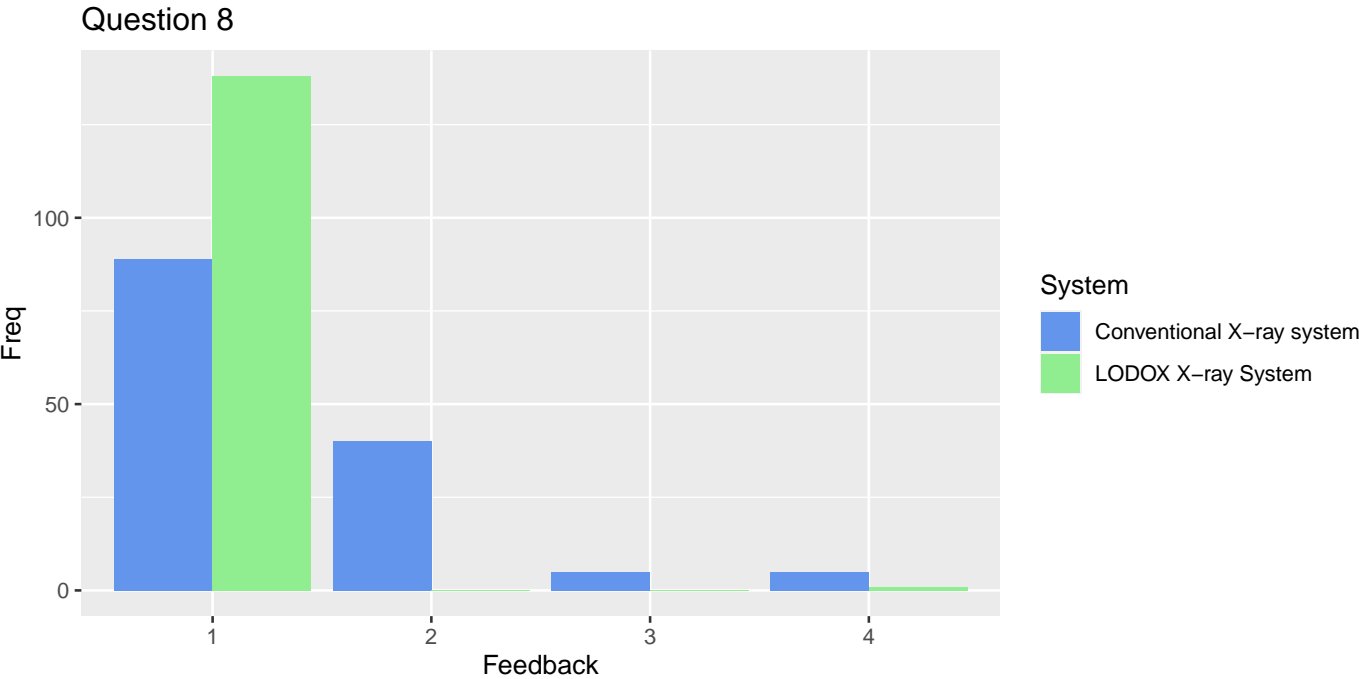
[1] 0.0000000003844774



5.8 Question 8

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 8			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	1.24 ± 0.59	1.47 ± 0.74	1.02 ± 0.25
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 8			
Missing Values	0	0	0
Visible or Good	227 (81.65%)	89 (64.03%)	138 (99.28%)
Partially visible or Satisfactory	40 (14.39%)	40 (28.78%)	0 (0.00%)
Poor/Invisible	5 (1.80%)	5 (3.60%)	0 (0.00%)
Absent	6 (2.16%)	5 (3.60%)	1 (0.72%)

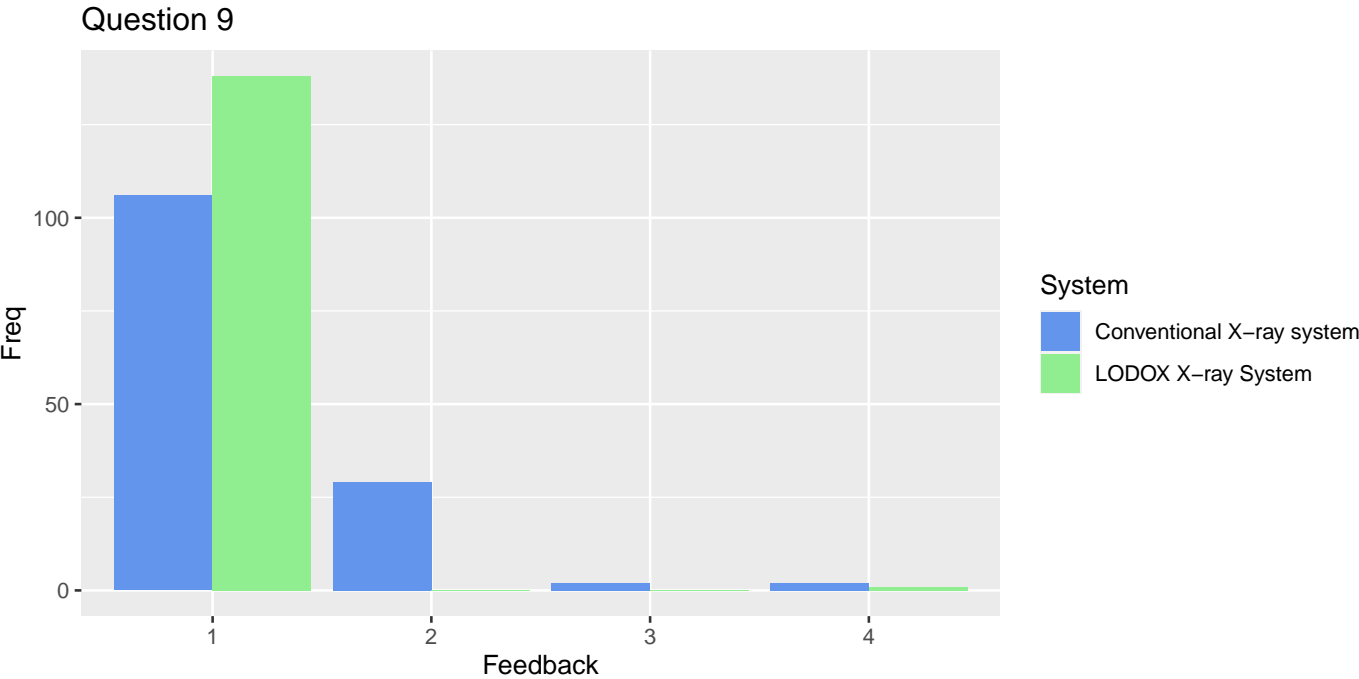
[1] 0.000000000000006295986



5.9 Question 9

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 9			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	1.15 ± 0.46	1.28 ± 0.57	1.02 ± 0.25
median (iqr)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 9			
Missing Values	0	0	0
Visible or Good	244 (87.77%)	106 (76.26%)	138 (99.28%)
Partially visible or Satisfactory	29 (10.43%)	29 (20.86%)	0 (0.00%)
Poor/Invisible	2 (0.72%)	2 (1.44%)	0 (0.00%)
Absent	3 (1.08%)	2 (1.44%)	1 (0.72%)

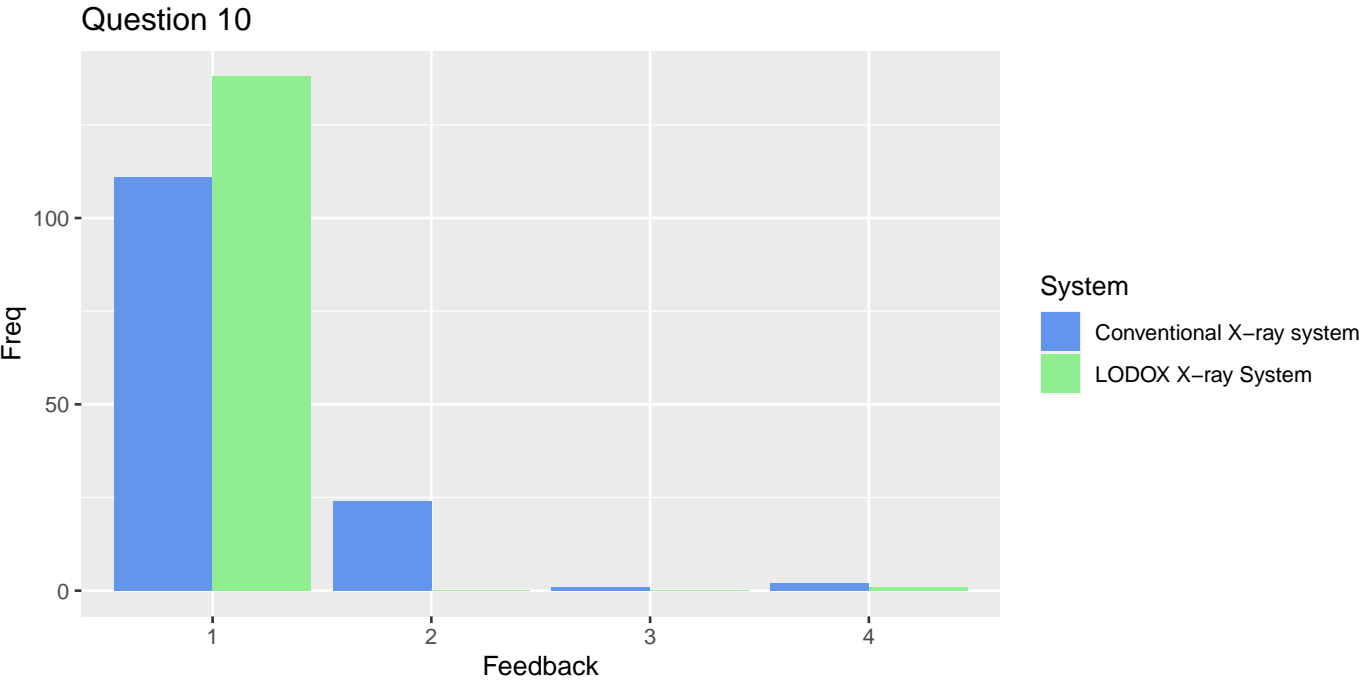
[1] 0.000000006671066



5.10 Question 10

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 10			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 1.13 ± 0.43	138; 1.23 ± 0.53	1.02 ± 0.25
median (iqr)	277; 1.00 (1.00, 1.00)	138; 1.00 (1.00, 1.00)	1.00 (1.00, 1.00)
Question 10			
Missing Values	1	1	1
Visible or Good	249 (89.89%)	111 (80.43%)	138 (99.28%)
Partially visible or Satisfactory	24 (8.66%)	24 (17.39%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	3 (1.08%)	2 (1.45%)	1 (0.72%)

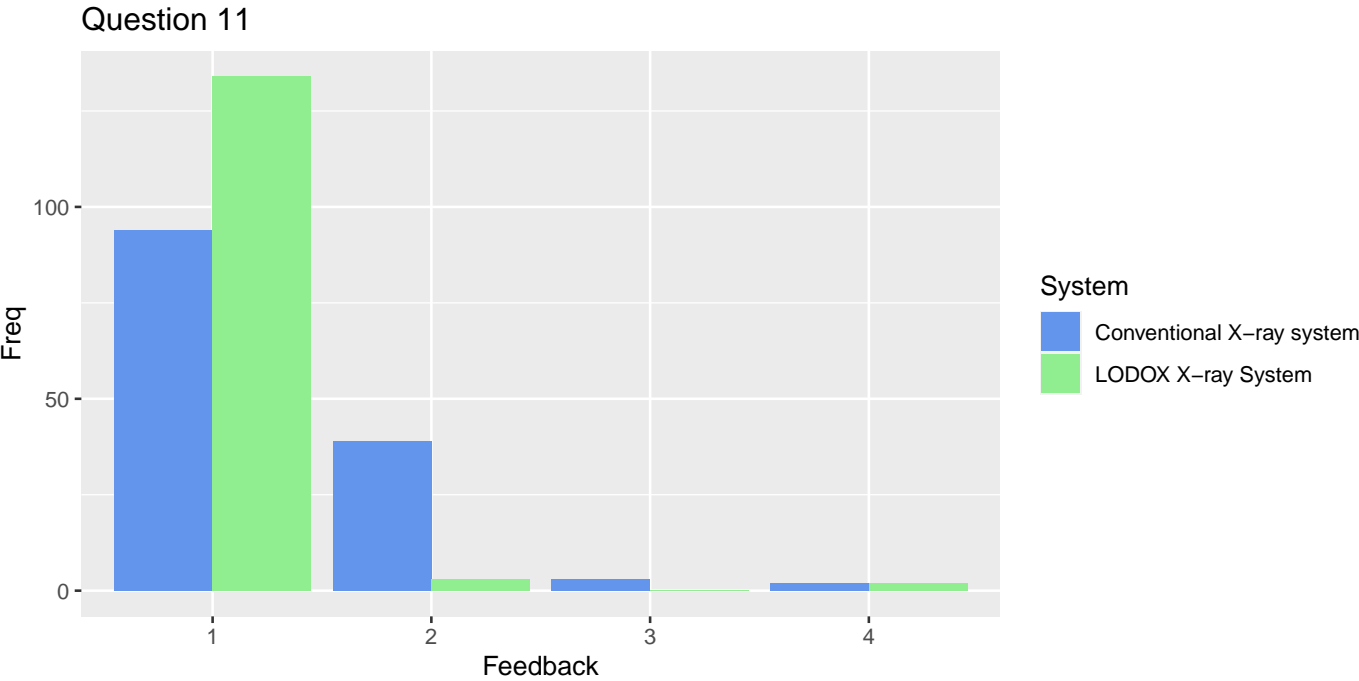
[1] 0.000000257346



5.11 Question 11

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 11			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 1.22 ± 0.53	138; 1.37 ± 0.61	1.06 ± 0.38
median (iqr)	277; 1.00 (1.00, 1.00)	138; 1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 11			
Missing Values	1	1	1
Visible or Good	228 (82.31%)	94 (68.12%)	134 (96.40%)
Partially visible or Satisfactory	42 (15.16%)	39 (28.26%)	3 (2.16%)
Poor/Invisible	3 (1.08%)	3 (2.17%)	0 (0.00%)
Absent	4 (1.44%)	2 (1.45%)	2 (1.44%)

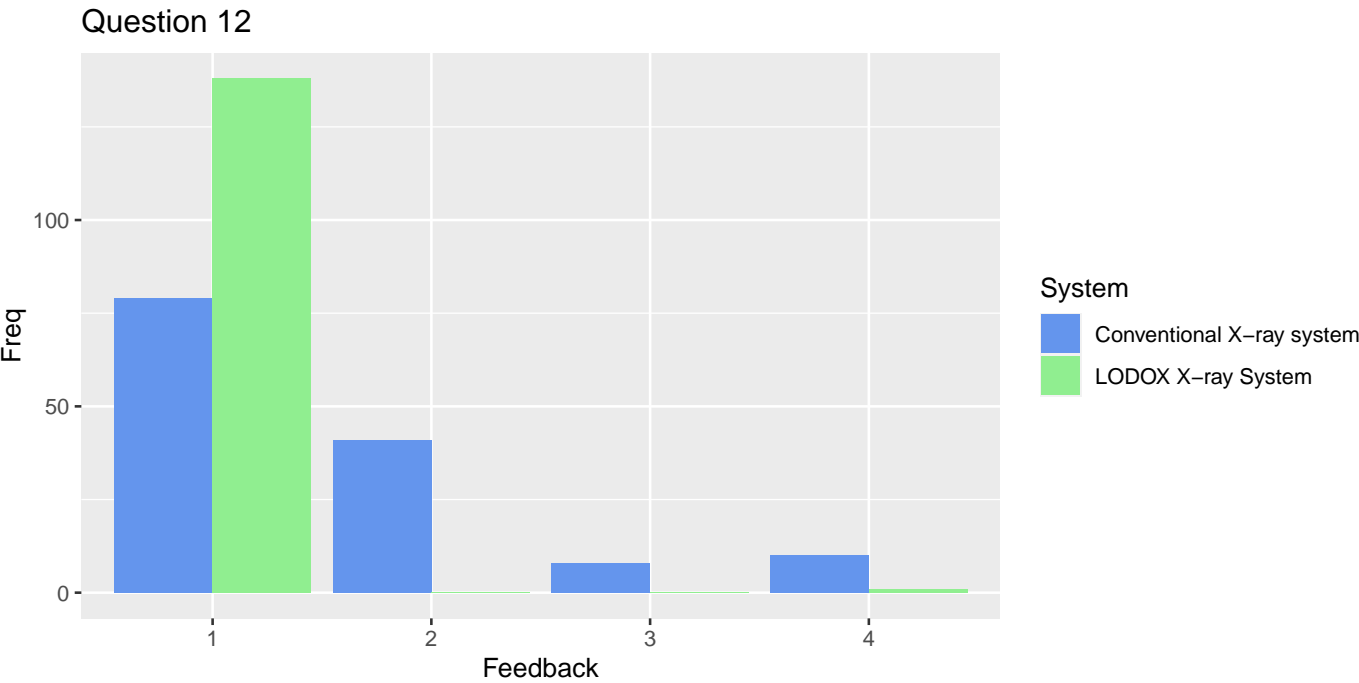
[1] 0.000000001326718



5.12 Question 12

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 12			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 1.32 ± 0.72	138; 1.63 ± 0.89	1.02 ± 0.25
median (iqr)	277; 1.00 (1.00, 1.00)	138; 1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 12			
Missing Values	1	1	1
Visible or Good	217 (78.34%)	79 (57.25%)	138 (99.28%)
Partially visible or Satisfactory	41 (14.80%)	41 (29.71%)	0 (0.00%)
Poor/Invisible	8 (2.89%)	8 (5.80%)	0 (0.00%)
Absent	11 (3.97%)	10 (7.25%)	1 (0.72%)

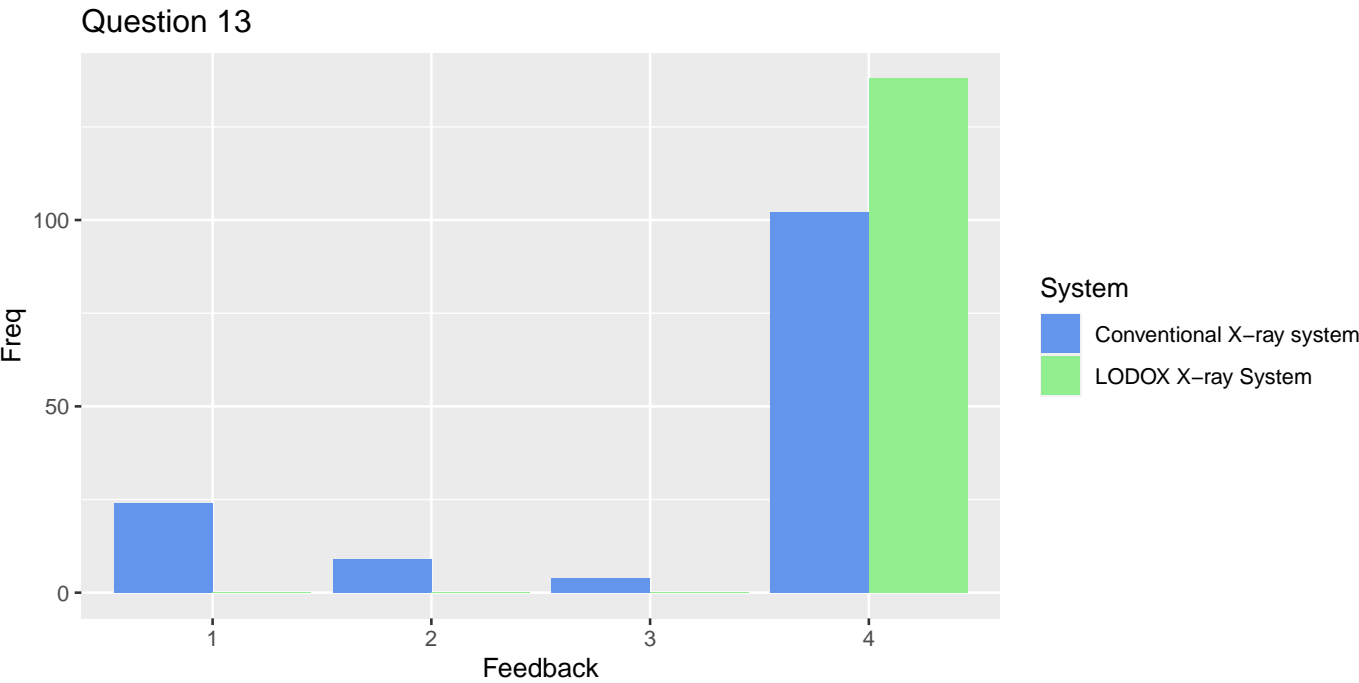
[1] 0.00000000000000005879521



5.13 Question 13

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 13			
Missing Values	1	1	1
min	1	1	4
max	4	4	4
mean (sd)	277; 3.66 ± 0.90	3.32 ± 1.18	138; 4.00 ± 0.00
median (iqr)	277; 4.00 (4.00, 4.00)	4.00 (3.00, 4.00)	138; 4.00 (4.00, 4.00)
Question 13			
Missing Values	1	1	1
Visible or Good	24 (8.66%)	24 (17.27%)	0 (0.00%)
Partially visible or Satisfactory	9 (3.25%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	4 (1.44%)	4 (2.88%)	0 (0.00%)
Absent	240 (86.64%)	102 (73.38%)	138 (100.00%)

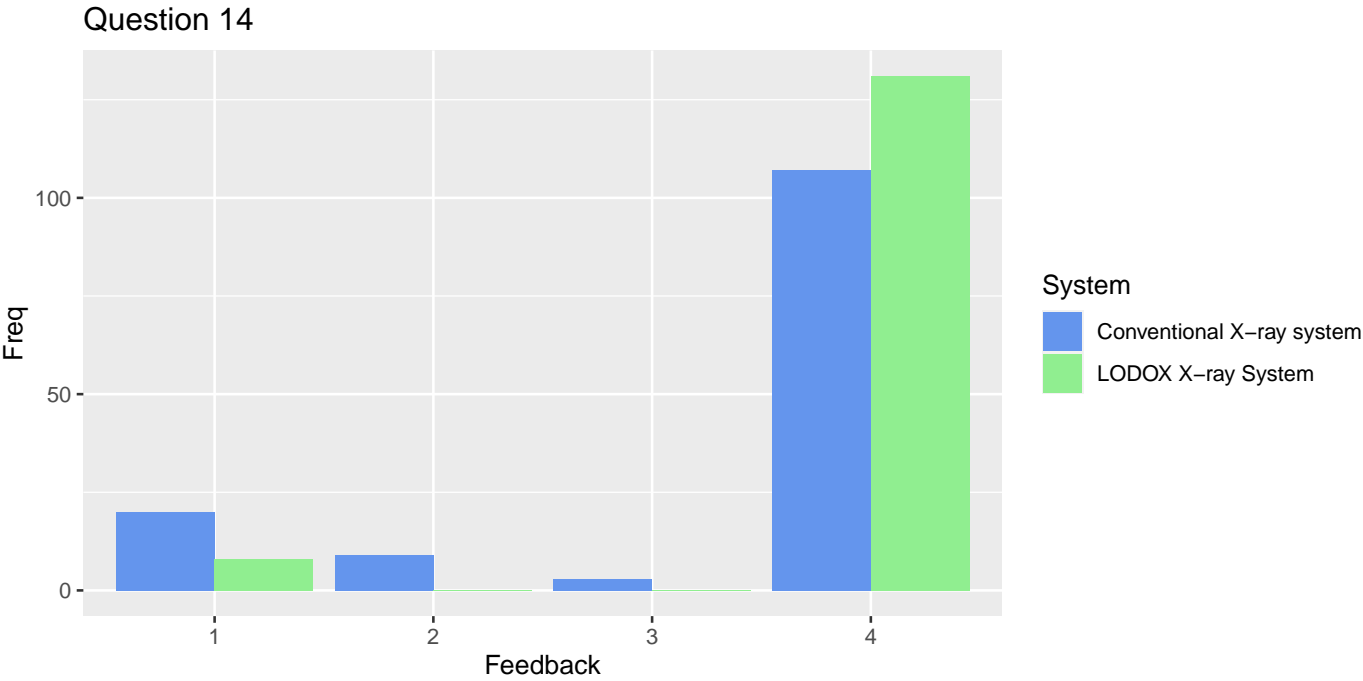
[1] 0.00000000009024635



5.14 Question 14

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 14			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.62 ± 0.95	3.42 ± 1.12	3.83 ± 0.70
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 14			
Missing Values	0	0	0
Visible or Good	28 (10.07%)	20 (14.39%)	8 (5.76%)
Partially visible or Satisfactory	9 (3.24%)	9 (6.47%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.16%)	0 (0.00%)
Absent	238 (85.61%)	107 (76.98%)	131 (94.24%)

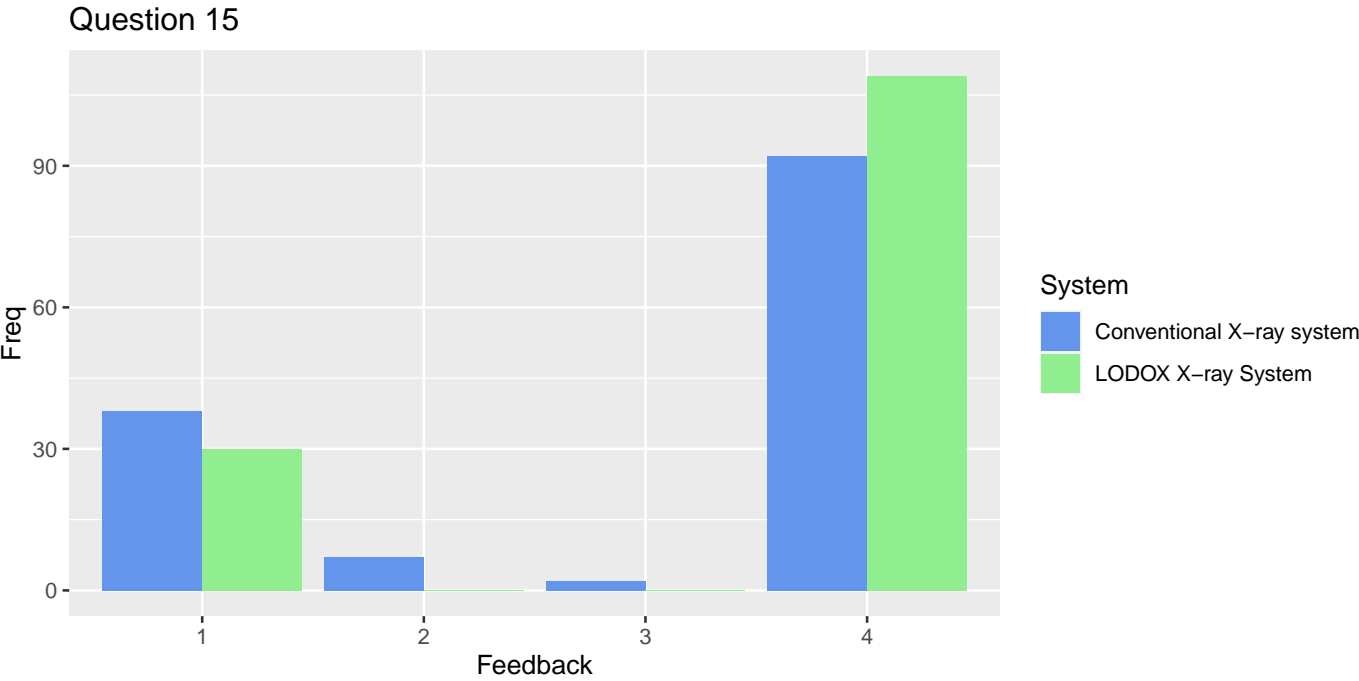
[1] 0.00007354223



5.15 Question 15

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 15			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.21 ± 1.30	3.06 ± 1.35	3.35 ± 1.24
median (iqr)	4.00 (2.00, 4.00)	4.00 (1.00, 4.00)	4.00 (4.00, 4.00)
Question 15			
Missing Values	0	0	0
Visible or Good	68 (24.46%)	38 (27.34%)	30 (21.58%)
Partially visible or Satisfactory	7 (2.52%)	7 (5.04%)	0 (0.00%)
Poor/Invisible	2 (0.72%)	2 (1.44%)	0 (0.00%)
Absent	201 (72.30%)	92 (66.19%)	109 (78.42%)

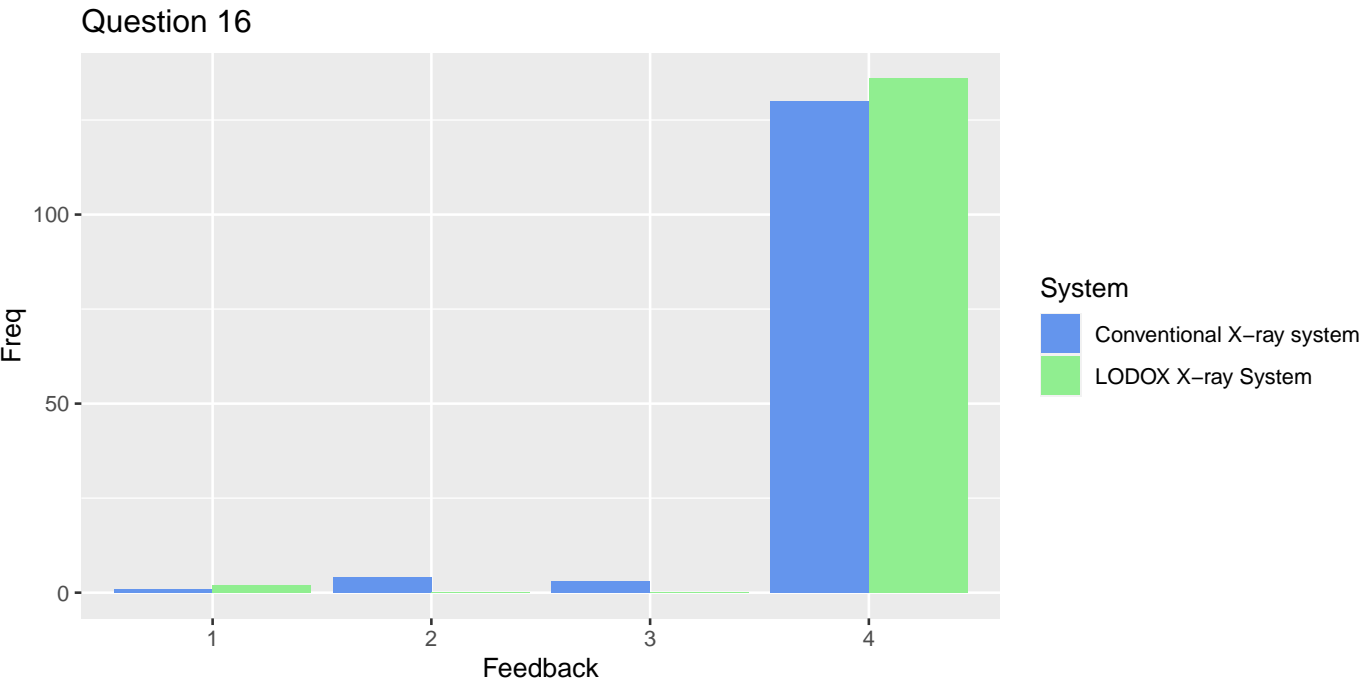
[1] 0.04523138



5.16 Question 16

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 16			
Missing Values	2	2	2
min	1	1	1
max	4	4	4
mean (sd)	276; 3.93 ± 0.40	138; 3.90 ± 0.44	138; 3.96 ± 0.36
median (iqr)	276; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)
Question 16			
Missing Values	2	2	2
Visible or Good	3 (1.09%)	1 (0.72%)	2 (1.45%)
Partially visible or Satisfactory	4 (1.45%)	4 (2.90%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.17%)	0 (0.00%)
Absent	266 (96.38%)	130 (94.20%)	136 (98.55%)

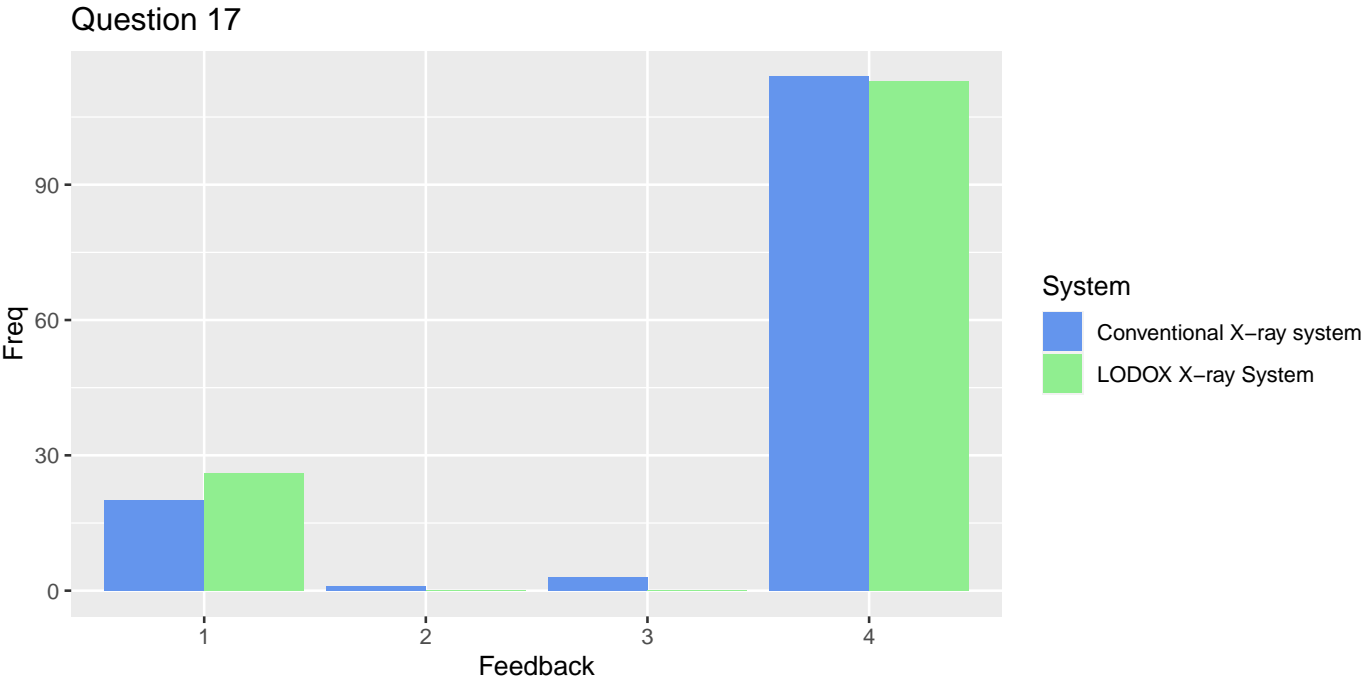
[1] 0.05824234



5.17 Question 17

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 17			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 3.48 ± 1.12	138; 3.53 ± 1.07	3.44 ± 1.17
median (iqr)	277; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 17			
Missing Values	1	1	1
Visible or Good	46 (16.61%)	20 (14.49%)	26 (18.71%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.72%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.17%)	0 (0.00%)
Absent	227 (81.95%)	114 (82.61%)	113 (81.29%)

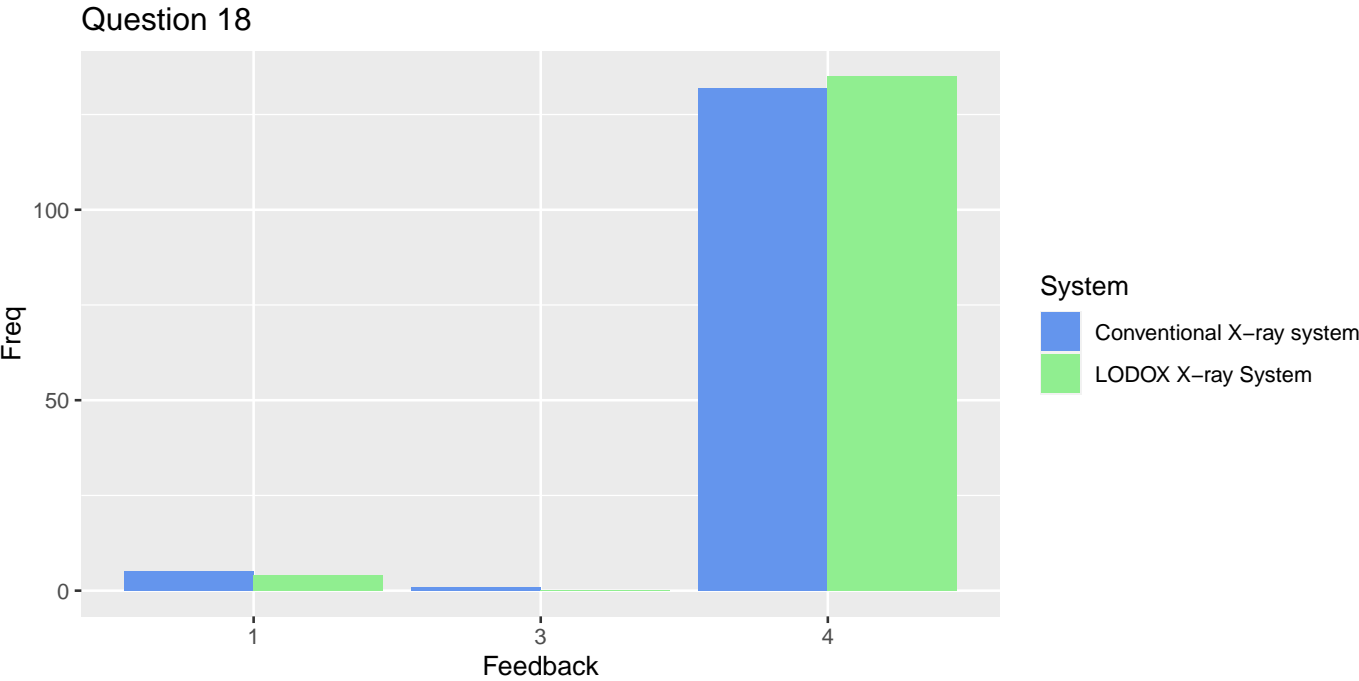
[1] 0.6898053



5.18 Question 18

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 18			
Missing Values	1	1	1
min	1	1	1
max	4	4	4
mean (sd)	277; 3.90 ± 0.54	138; 3.88 ± 0.57	3.91 ± 0.50
median (iqr)	277; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 18			
Missing Values	1	1	1
Visible or Good	9 (3.25%)	5 (3.62%)	4 (2.88%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	267 (96.39%)	132 (95.65%)	135 (97.12%)

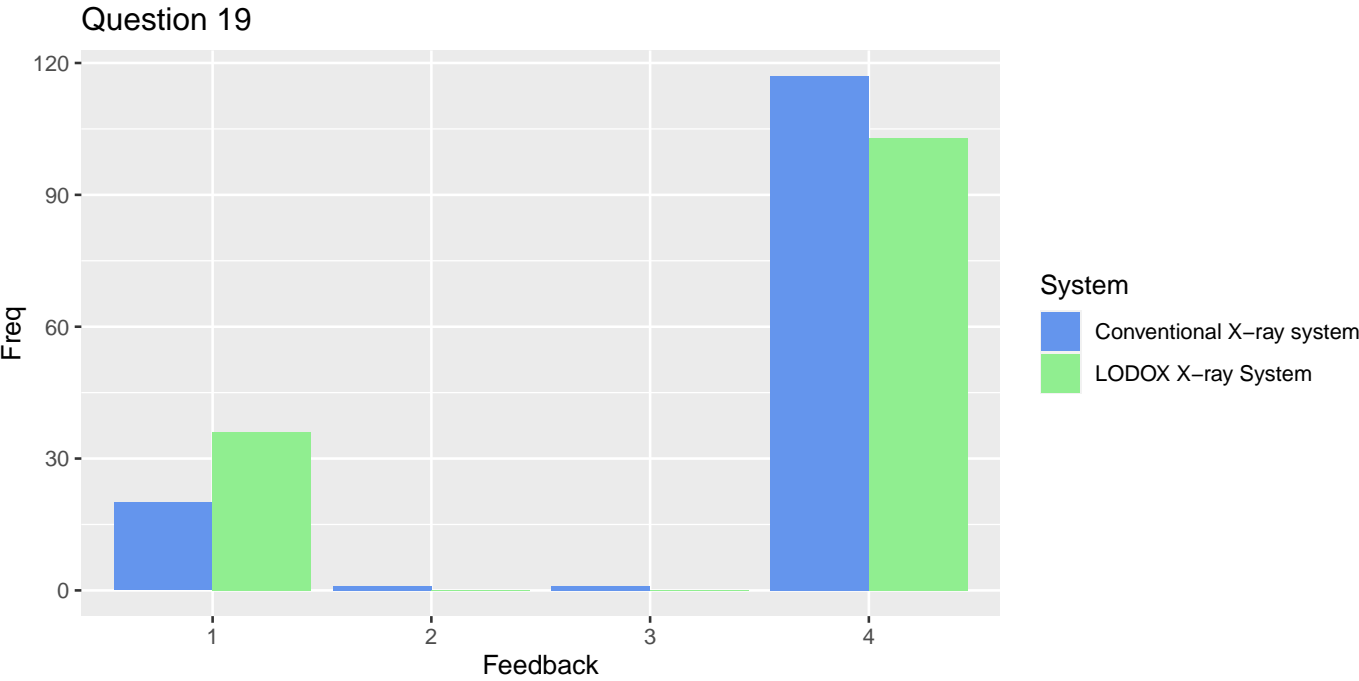
[1] 0.5202295



5.19 Question 19

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 19			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.38 ± 1.21	3.55 ± 1.06	3.22 ± 1.32
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (1.00, 4.00)
Question 19			
Missing Values	0	0	0
Visible or Good	56 (20.14%)	20 (14.39%)	36 (25.90%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.72%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	220 (79.14%)	117 (84.17%)	103 (74.10%)

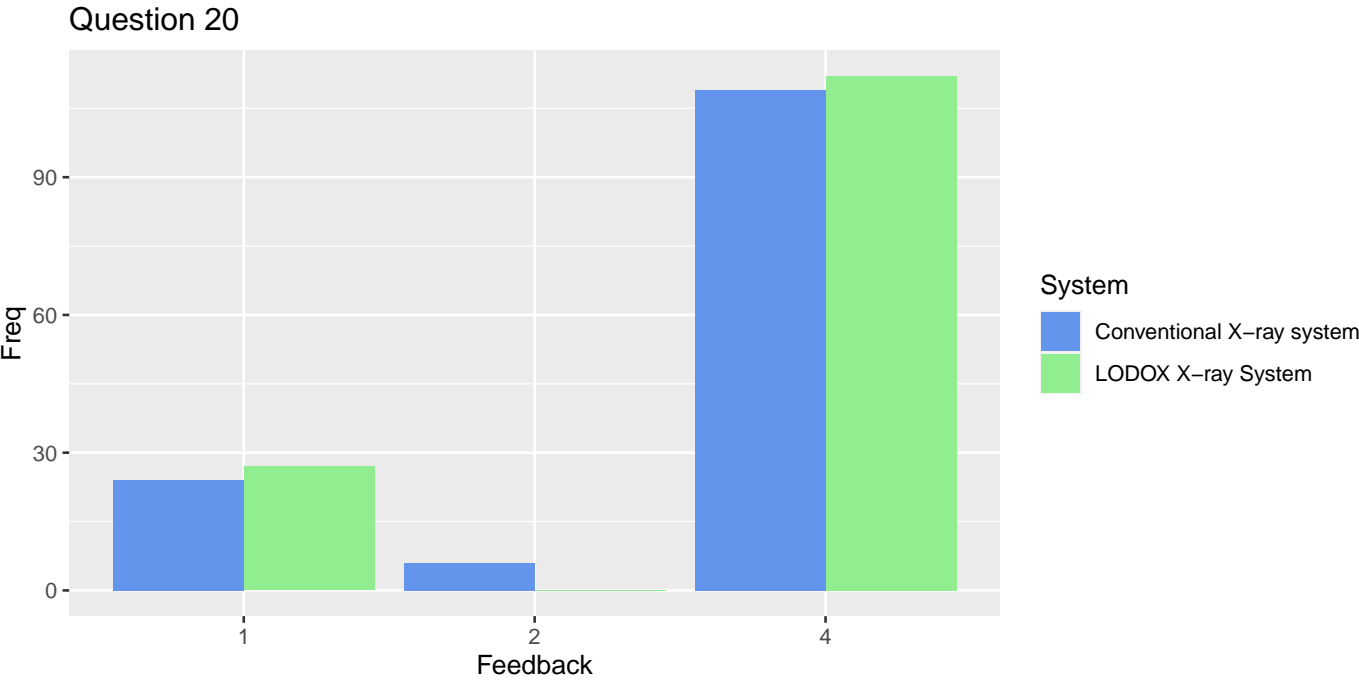
[1] 0.03267661



5.20 Question 20

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 20			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.41 ± 1.18	3.40 ± 1.17	3.42 ± 1.19
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 20			
Missing Values	0	0	0
Visible or Good	51 (18.35%)	24 (17.27%)	27 (19.42%)
Partially visible or Satisfactory	6 (2.16%)	6 (4.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	221 (79.50%)	109 (78.42%)	112 (80.58%)

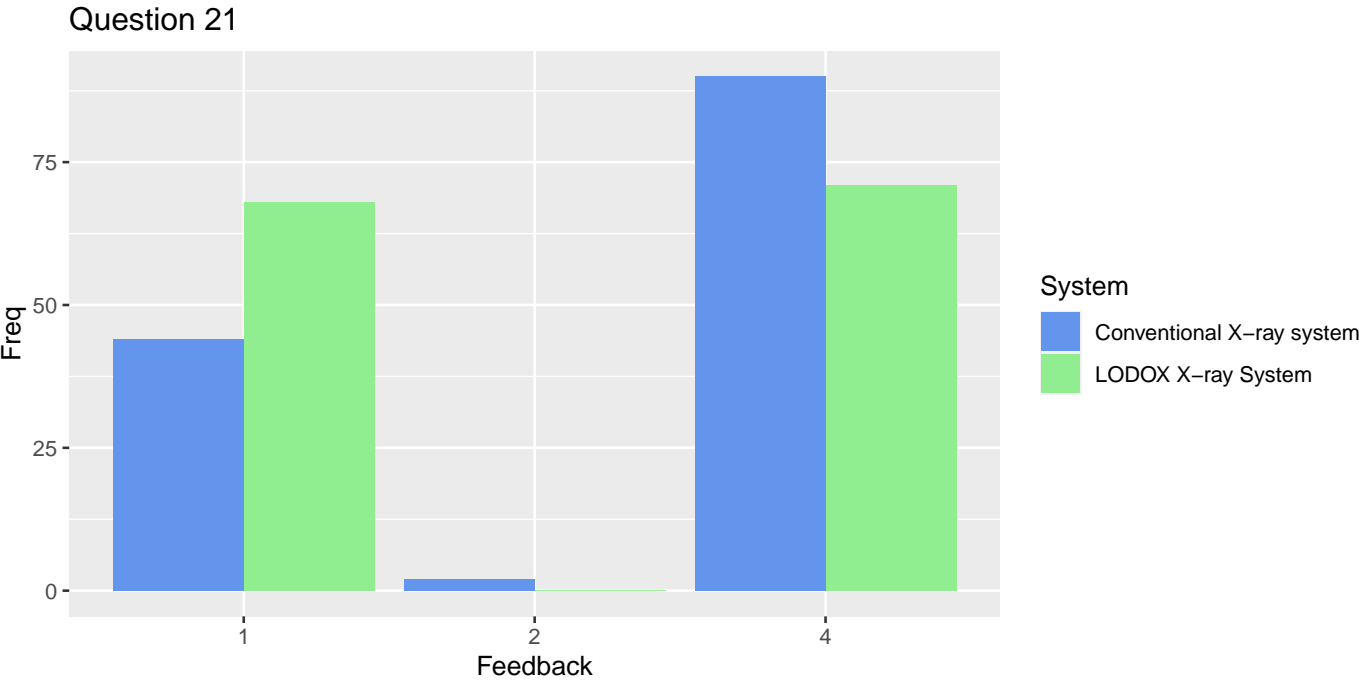
[1] 0.7869293



5.21 Question 21

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 21			
Missing Values	3	3	3
min	1	1	1
max	4	4	4
mean (sd)	275; 2.76 ± 1.47	136; 3.00 ± 1.41	2.53 ± 1.51
median (iqr)	275; 4.00 (1.00, 4.00)	136; 4.00 (1.00, 4.00)	4.00 (1.00, 4.00)
Question 21			
Missing Values	3	3	3
Visible or Good	112 (40.73%)	44 (32.35%)	68 (48.92%)
Partially visible or Satisfactory	2 (0.73%)	2 (1.47%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	161 (58.55%)	90 (66.18%)	71 (51.08%)

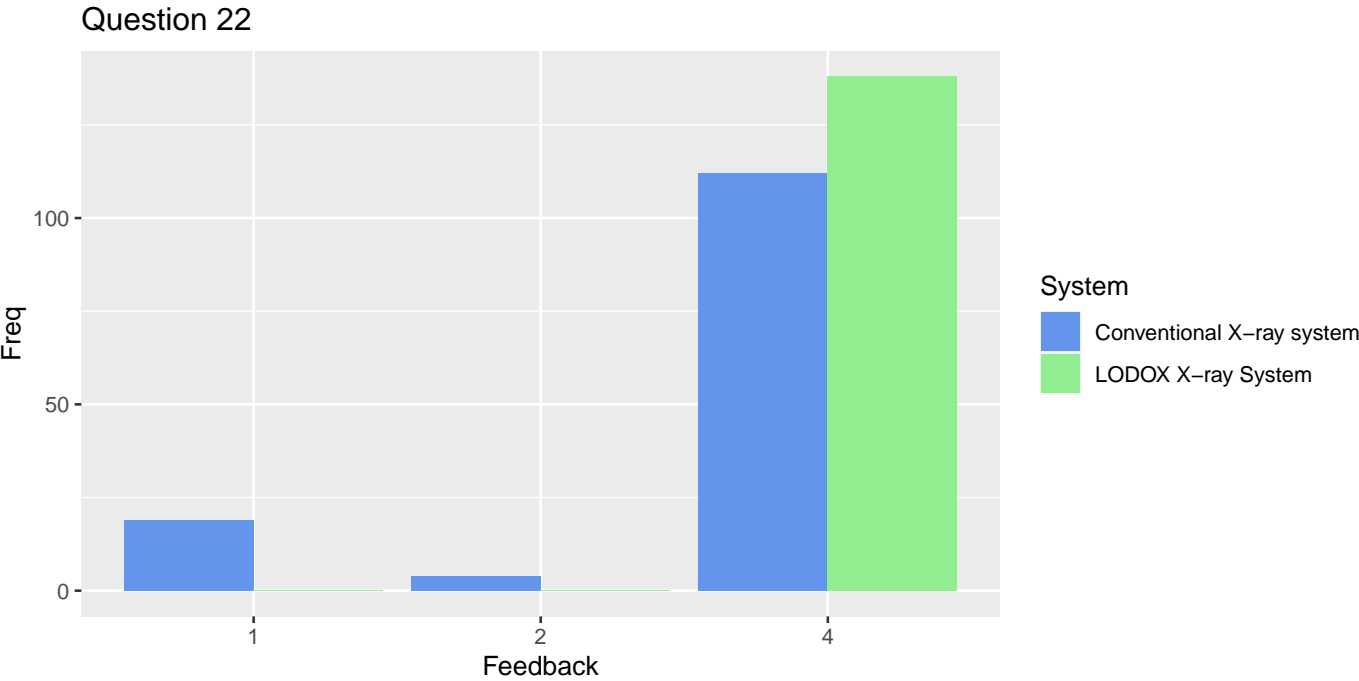
[1] 0.008061212



5.22 Question 22

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 22			
Missing Values	5	5	5
min	1	1	4
max	4	4	4
mean (sd)	273; 3.76 ± 0.79	135; 3.52 ± 1.08	138; 4.00 ± 0.00
median (iqr)	273; 4.00 (4.00, 4.00)	135; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)
Question 22			
Missing Values	5	5	5
Visible or Good	19 (6.96%)	19 (14.07%)	0 (0.00%)
Partially visible or Satisfactory	4 (1.47%)	4 (2.96%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	250 (91.58%)	112 (82.96%)	138 (100.00%)

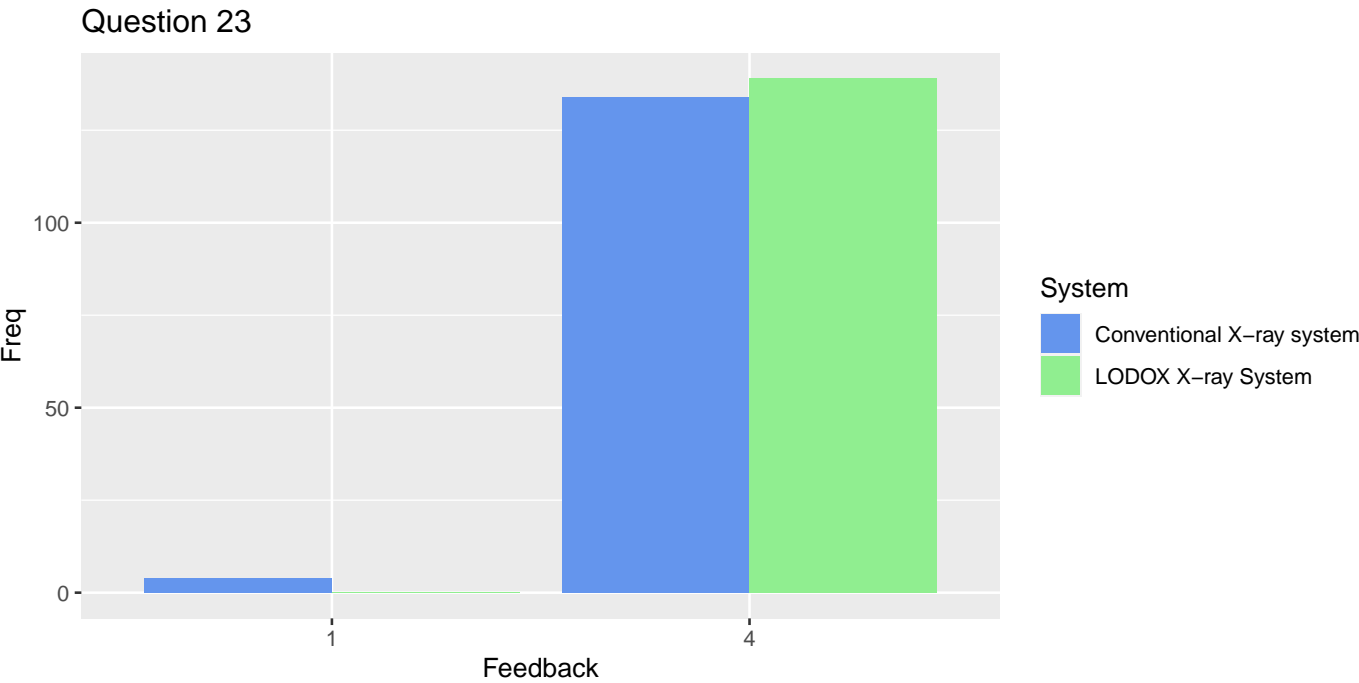
[1] 0.0000004343092



5.23 Question 23

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 23			
Missing Values	1	1	1
min	1	1	4
max	4	4	4
mean (sd)	277; 3.96 ± 0.36	138; 3.91 ± 0.51	4.00 ± 0.00
median (iqr)	277; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 23			
Missing Values	1	1	1
Visible or Good	4 (1.44%)	4 (2.90%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	273 (98.56%)	134 (97.10%)	139 (100.00%)

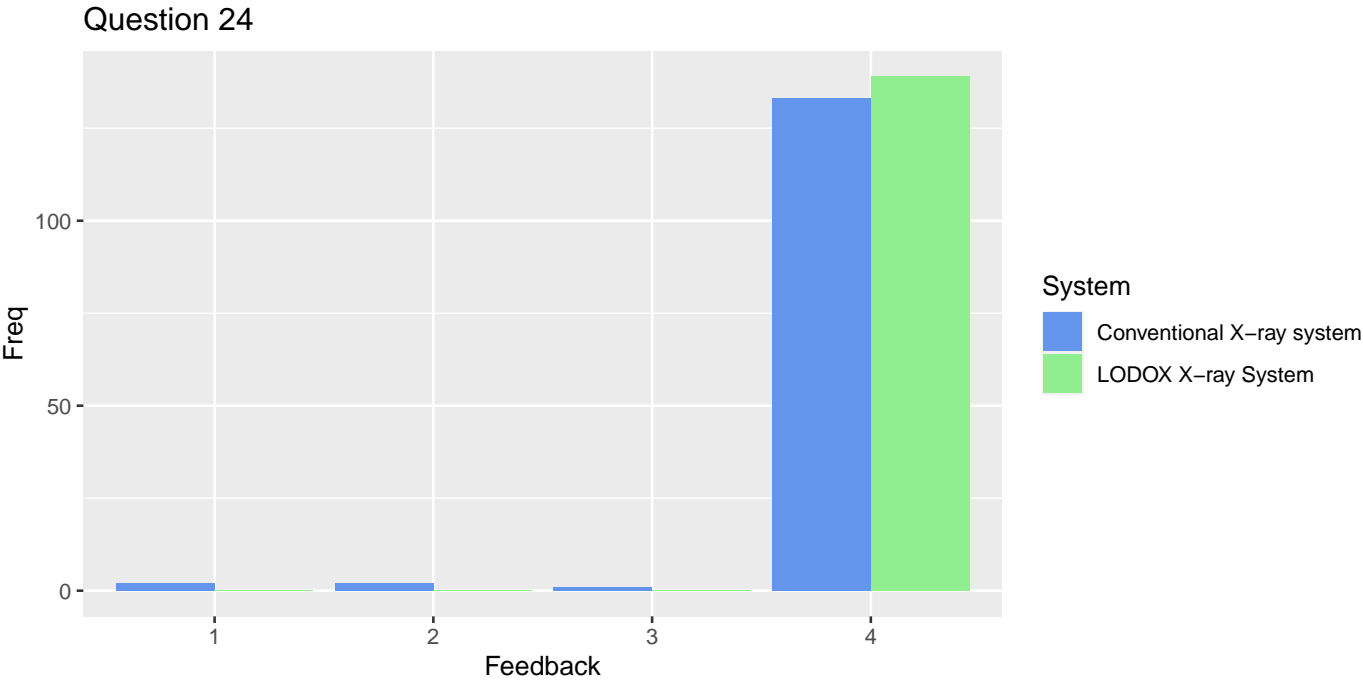
[1] 0.04394637



5.24 Question 24

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 24			
Missing Values	1	1	1
min	1	1	4
max	4	4	4
mean (sd)	277; 3.96 ± 0.31	138; 3.92 ± 0.44	4.00 ± 0.00
median (iqr)	277; 4.00 (4.00, 4.00)	138; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 24			
Missing Values	1	1	1
Visible or Good	2 (0.72%)	2 (1.45%)	0 (0.00%)
Partially visible or Satisfactory	2 (0.72%)	2 (1.45%)	0 (0.00%)
Poor/Invisible	1 (0.36%)	1 (0.72%)	0 (0.00%)
Absent	272 (98.19%)	133 (96.38%)	139 (100.00%)

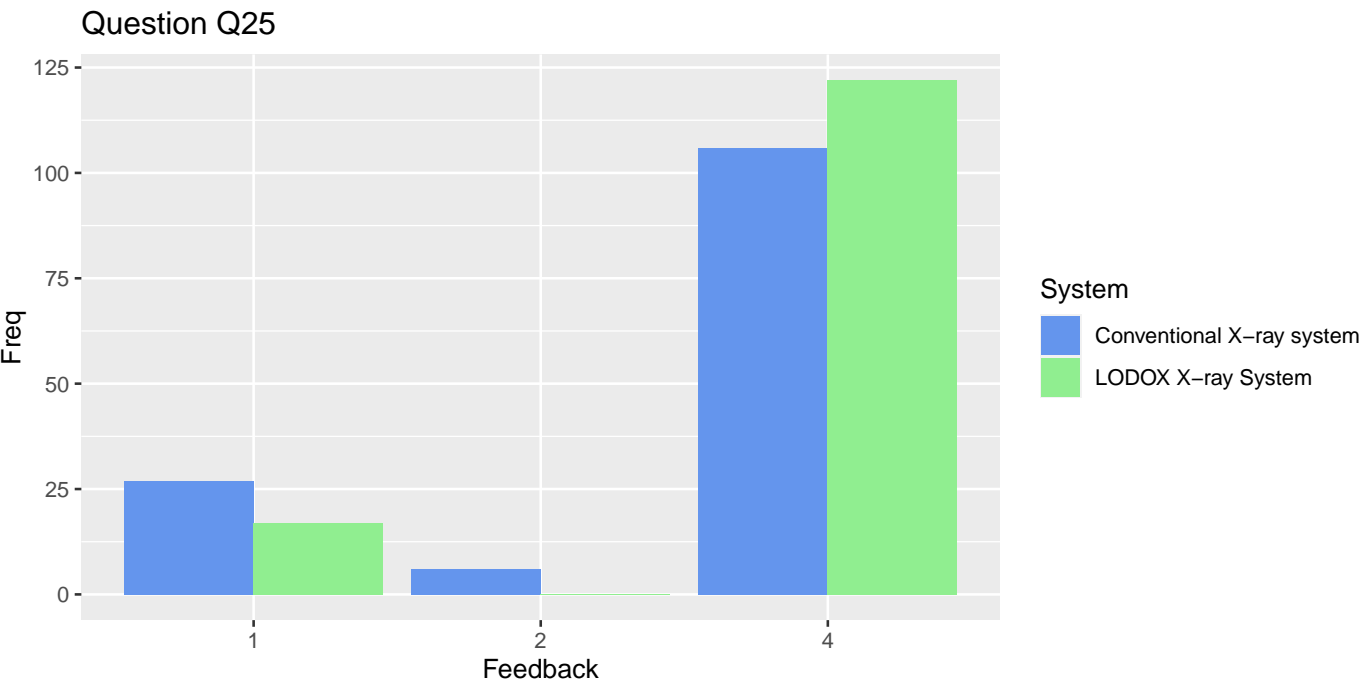
[1] 0.02399337



5.25 Question 25

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 25			
Missing Values	0	0	0
min	1	1	1
max	4	4	4
mean (sd)	3.48 ± 1.12	3.33 ± 1.22	3.63 ± 0.99
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 25			
Missing Values	0	0	0
Visible or Good	44 (15.83%)	27 (19.42%)	17 (12.23%)
Partially visible or Satisfactory	6 (2.16%)	6 (4.32%)	0 (0.00%)
Poor/Invisible	0 (0.00%)	0 (0.00%)	0 (0.00%)
Absent	228 (82.01%)	106 (76.26%)	122 (87.77%)

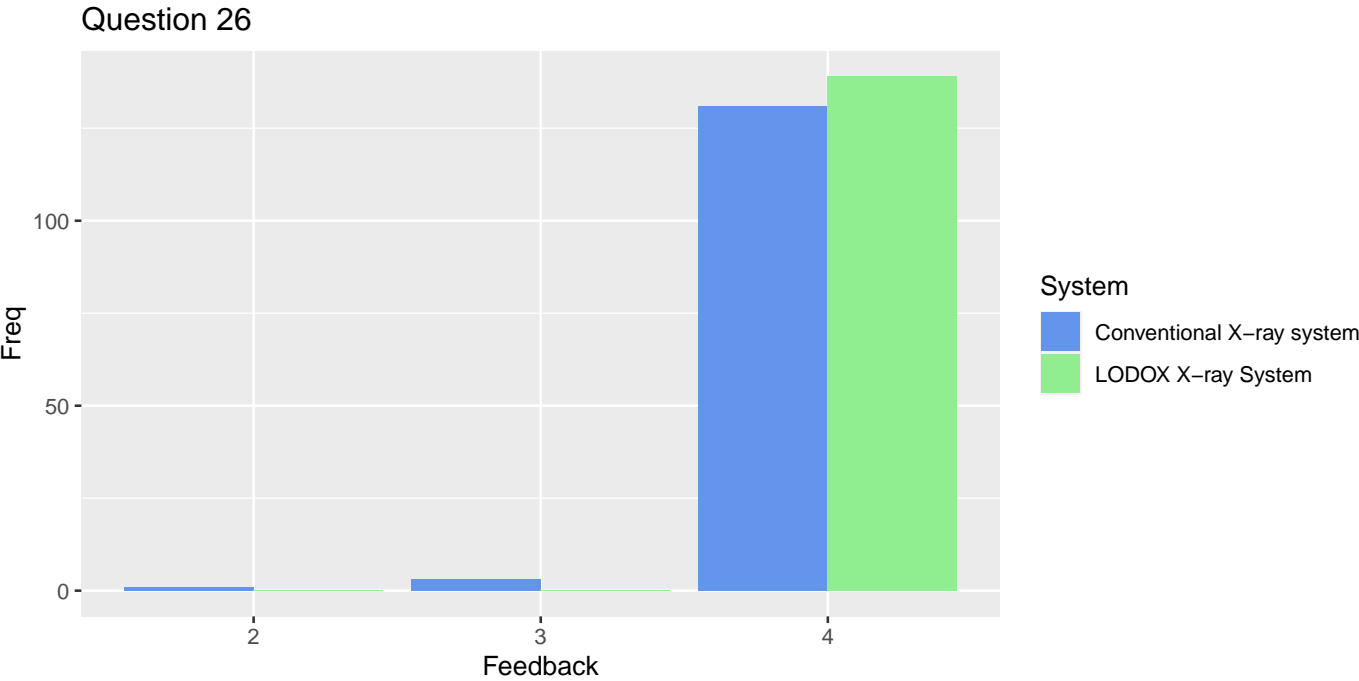
[1] 0.02399337



5.26 Question 26

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 26			
Missing Values	4	4	4
min	2	2	4
max	4	4	4
mean (sd)	274; 3.98 ± 0.16	135; 3.96 ± 0.23	4.00 ± 0.00
median (iqr)	274; 4.00 (4.00, 4.00)	135; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 26			
Missing Values	4	4	4
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	1 (0.36%)	1 (0.74%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.22%)	0 (0.00%)
Absent	270 (98.54%)	131 (97.04%)	139 (100.00%)

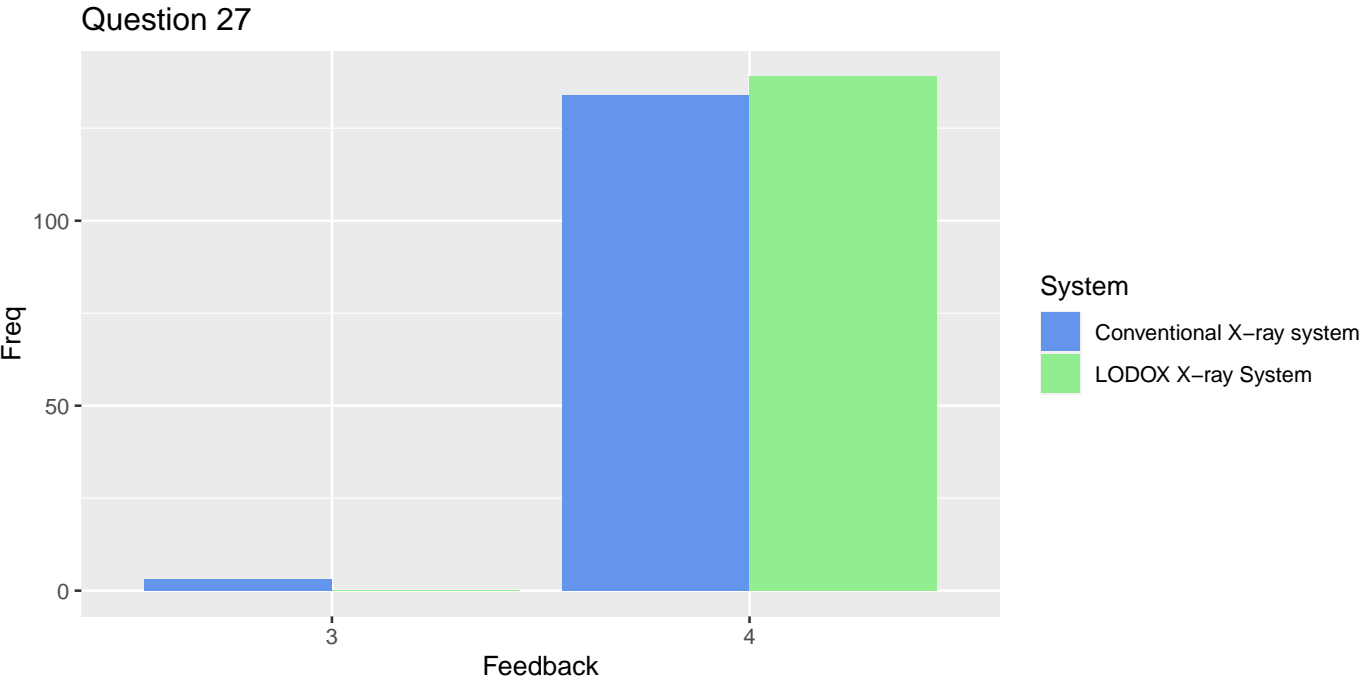
[1] 0.04165554



5.27 Question 27

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 27			
Missing Values	2	2	2
min	3	3	4
max	4	4	4
mean (sd)	276; 3.99 ± 0.10	137; 3.98 ± 0.15	4.00 ± 0.00
median (iqr)	276; 4.00 (4.00, 4.00)	137; 4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 27			
Missing Values	2	2	2
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	3 (1.09%)	3 (2.19%)	0 (0.00%)
Absent	273 (98.91%)	134 (97.81%)	139 (100.00%)

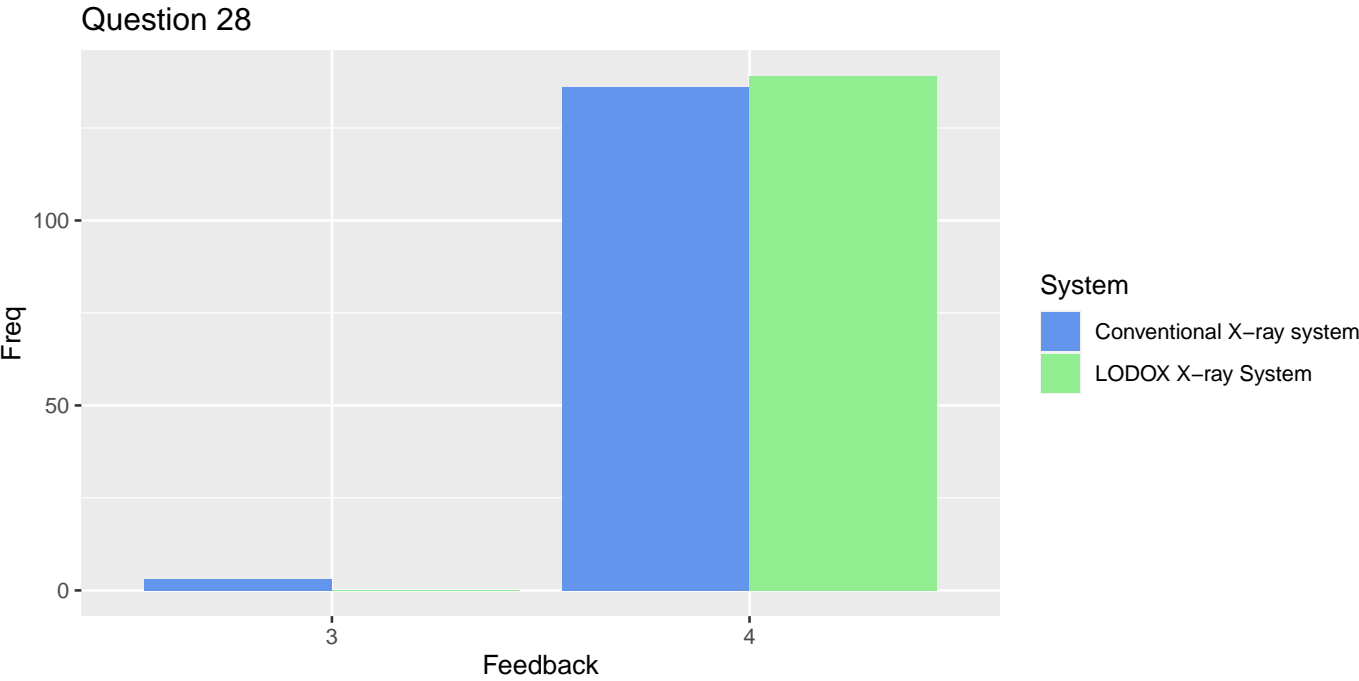
[1] 0.08066725



5.28 Question 28

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 28			
Missing Values	0	0	0
min	3	3	4
max	4	4	4
mean (sd)	3.99 ± 0.10	3.98 ± 0.15	4.00 ± 0.00
median (iqr)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)	4.00 (4.00, 4.00)
Question 28			
Missing Values	0	0	0
Visible or Good	0 (0.00%)	0 (0.00%)	0 (0.00%)
Partially visible or Satisfactory	0 (0.00%)	0 (0.00%)	0 (0.00%)
Poor/Invisible	3 (1.08%)	3 (2.16%)	0 (0.00%)
Absent	275 (98.92%)	136 (97.84%)	139 (100.00%)

[1] 0.08288809



5.29 Question 29

	DataA (N = 278)	Conventional X-ray system (N = 139)	LODOX X-ray System (N = 139)
Question 29			
Missing Values	0	0	0
min	1	1	1
max	4	4	3
mean (sd)	1.29 ± 0.55	1.40 ± 0.65	1.19 ± 0.41
median (iqr)	1.00 (1.00, 2.00)	1.00 (1.00, 2.00)	1.00 (1.00, 1.00)
Question 29			
Missing Values	0	0	0
Visible or Good	205 (73.74%)	91 (65.47%)	114 (82.01%)
Partially visible or Satisfactory	68 (24.46%)	44 (31.65%)	24 (17.27%)
Poor/Invisible	1 (0.36%)	0 (0.00%)	1 (0.72%)
Absent	4 (1.44%)	4 (2.88%)	0 (0.00%)

[1] 0.001505899

