

Formative test excel skills for HSOM – Answers to questions.

Question 1a

Calculate the average age of the patients	77,4
Calculate the median age of the patients	80,0
Calculate the mode of the age of the patients	83,0

Question 2a

age	male/female	admission date	discharge date	discharge to	LoS hospital
81	male	6-03-13	15-03-13	care home	9
59	male	21-01-13	28-01-13	care home	7
84	female	19-09-13	29-09-13	care home	10
79	female	21-10-13	25-10-13	home	4
66	female	2-04-13	13-04-13	care home	11
81	female	23-02-13	2-03-13	care home	7
64	female	22-11-13	6-12-13	care home	14
62	male	10-12-13	20-12-13	care home	10
83	female	29-10-13	8-11-13	care home	10
84	female	7-05-13	17-05-13	care home	10
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83	female	20-06-13	4-07-13	care home	14
79	male	6-11-13	13-11-13	home	7
82	female	31-01-13	13-02-13	care home	13

Remark: if you count both the admission and the discharge date as a full day of hospital stay, your results will be exactly one day higher. This is also correct.

Question 2b

Calculate the average length of stay	9.3
Calculate the standard deviation of the length of stay	3.1
Calculate the minimum length of stay	4.0
Calculate the maximum length of stay	15.0

Remark: if you count both the admission and the discharge date as a full day of hospital stay, your results will be 10.3; 3.1; 5.0; 16 days. That is also correct.

Question 3a

Count the number of patients	100
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Question 3b

		# patients
Calculate the number of females	female	58
Calculate the number of male-patients	male	42

Question 3c

		male	female
Calculate the number of male and female patients discharged from rehabilitation to their home	home	10	10
Calculate the number of male and female patients discharged from rehabilitation to a their home	care home	32	48

Question 4a

Calculate the total number of beddays	934
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Question 4b

		#total beddays
Calculate the total number of beddays for patients discharged home	home	151
Calculate the total number of beddays for patients discharged to a care home	care home	783

Question 4c

		male	female
Calculate the total number of beddays for male and female patients discharged home	home	80	71
Calculate the total number of beddays for male and female patients discharged to a care home	care home	310	473

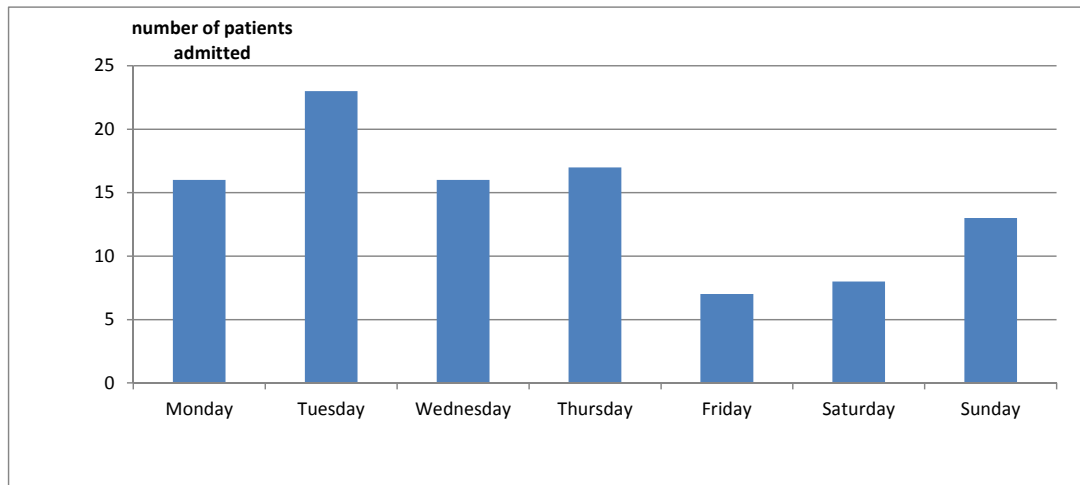
Question 5a

		hospital				weekdays
age	male/female	admission date	discharge date	discharge to	LoS hospital	admission hospital
81	male	6-03-13	15-03-13	care home	9	3
59	male	21-01-13	28-01-13	care home	7	1
84	female	19-09-13	29-09-13	care home	10	4
79	female	21-10-13	25-10-13	home	4	1
66	female	2-04-13	13-04-13	care home	11	2
81	female	23-02-13	2-03-13	care home	7	6
64	female	22-11-13	6-12-13	care home	14	5
62	male	10-12-13	20-12-13	care home	10	2
83	female	29-10-13	8-11-13	care home	10	2
84	female	7-05-13	17-05-13	care home	10	2
...
83	female	20-06-13	4-07-13	care home	14	4
79	male	6-11-13	13-11-13	home	7	3
82	female	31-01-13	13-02-13	care home	13	4

Question 5b

	weekday	number of admissions in hospital
1	Monday	16
2	Tuesday	23
3	Wednesday	16
4	Thursday	17
5	Friday	7
6	Saturday	8
7	Sunday	13

Question 5c



Question 6a

age	male/ female	hospital		discharge to	LoS hospital	weekdays	reduction LoS	
		admission date	discharge date			admission hospital	new discharge date	new LoS
81	male	6-03-13	15-03-13	care home	9	3	14-03-13	8
59	male	21-01-13	28-01-13	care home	7	1	27-01-13	6
84	female	19-09-13	29-09-13	care home	10	4	28-09-13	9
79	female	21-10-13	25-10-13	home	4	1	25-10-13	4
66	female	2-04-13	13-04-13	care home	11	2	12-04-13	10
81	female	23-02-13	2-03-13	care home	7	6	1-03-13	6
64	female	22-11-13	6-12-13	care home	14	5	5-12-13	13
62	male	10-12-13	20-12-13	care home	10	2	19-12-13	9
83	female	29-10-13	8-11-13	care home	10	2	7-11-13	9
84	female	7-05-13	17-05-13	care home	10	2	16-05-13	9
...
83	female	20-06-13	4-07-13	care home	14	4	3-07-13	13
79	male	6-11-13	13-11-13	home	7	3	13-11-13	7
82	female	31-01-13	13-02-13	care home	13	4	12-02-13	12

Question 6b

Calculate the average for the new Length of Stay in the hospital	8.5
Calculate the Standard Deviation for the new Length of Stay in the hospital	3.0