

Is lunch time available to nurses in OR ?

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Why work on Lunch Break in OR ?

- **Claim** from nurses that sometimes LB is not possible
- LB **not traced** in Information System (no hard data)
- Nurse's time, out of the room, is not recorded (no hard data)
- LB is **legal**
- LB is part of the **wellbeing** at work
- Between Liège and Lyon : we had the **same problem !**

Aim of the work : get **EVIDENCE** to the claim

Definitions

FTE : Full-Time Equivalent

ORU : Operating Room Utilization for surgery

Rationale

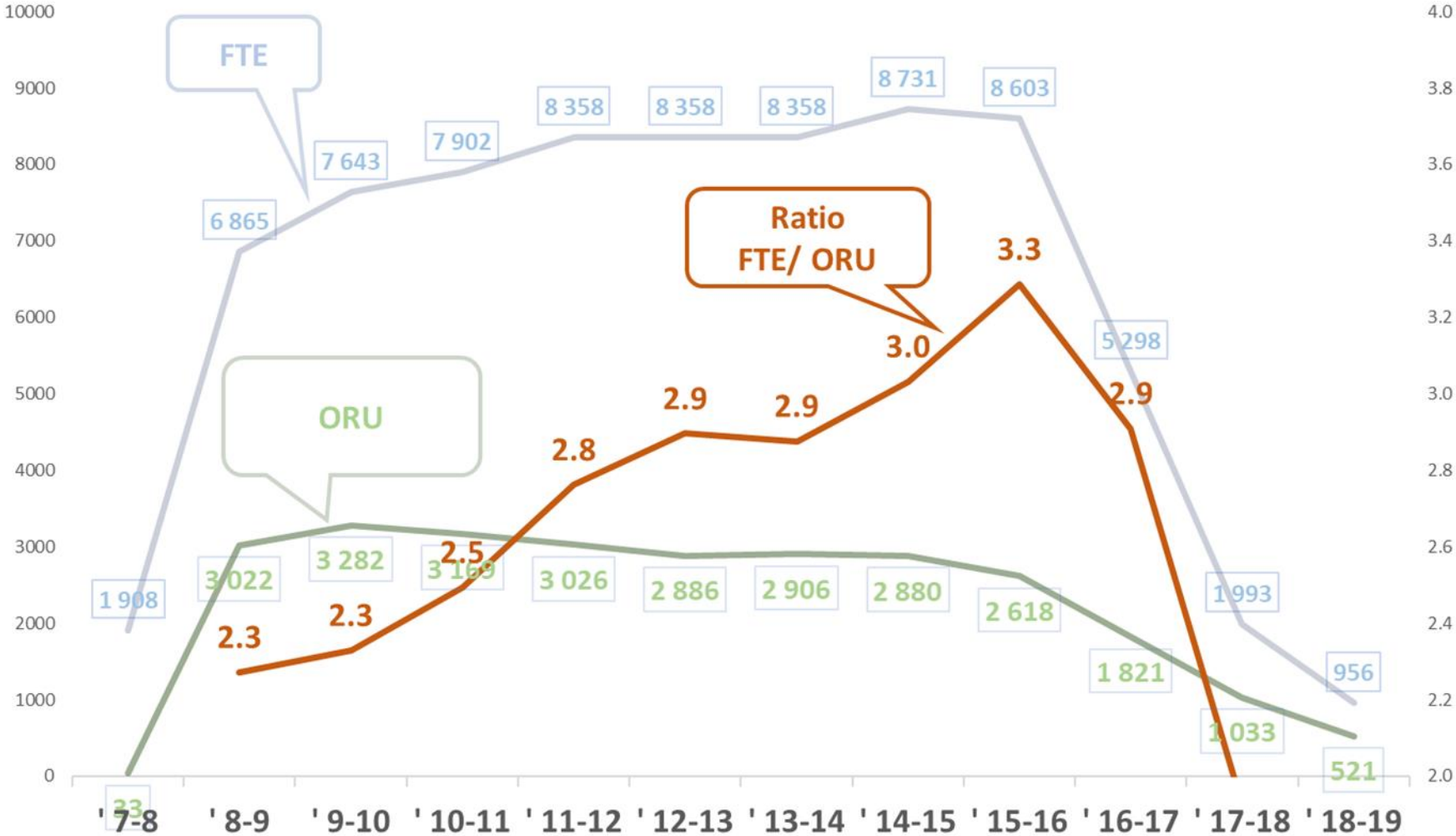
Construct an indicator : **FTE/ORU** for every hour

From 2 Data Base : **Human Resources** and **OR activity**

Citadelle 2018 Working Days		Timeline : ' 7-8 ' 8-9 ' 9-10 ' 10-11 ' 11-12 ' 12-13 ' 13-14 ' 14-15 ' 15-16 ' 16-17									
FTE / h	<u>02/01/2018</u> Tuesday	6.0	21.0	24.0	25.0	27.0	27.0	27.0	28.5	28.0	18.0
	<u>03/01/2018</u> Wednesday	7.0	25.0	28.0	29.0	31.0	31.0	31.0	32.5	32.0	20.0
	<u>04/01/2018</u> Thursday	7	23.0	26.0	27.0	29.0	29.0	29.0	30.5	30.0	19.0
ORU / h	<u>02/01/2018</u> Tuesday	0.2	7.1	8.5	9.2	8.8	8.9	8.1	7.6	6.3	3.7
	<u>03/01/2018</u> Wednesday	0.1	10.0	10.6	9.7	9.2	6.8	8.1	9.0	7.2	5.7
	<u>04/01/2018</u> Thursday	0	10.3	11.4	11.6	10.7	10.2	11.0	11.8	9.3	8.2
FTE/ORU	<u>02/01/2018</u> Tuesday	36	3.0	2.8	2.7	3.1	3.1	3.3	3.8	4.5	4.8
	<u>03/01/2018</u> Wednesday	84	2.5	2.6	3.0	3.4	4.6	3.8	3.6	4.4	3.5
	<u>04/01/2018</u> Thursday	195	2.2	2.3	2.3	2.7	2.8	2.6	2.6	3.2	2.3

Citadelle OR = 16 rooms staffed with 2 nurses : scrub and circulating

Distribution : Ratio FTE/ORU CIT 2018 : Working days

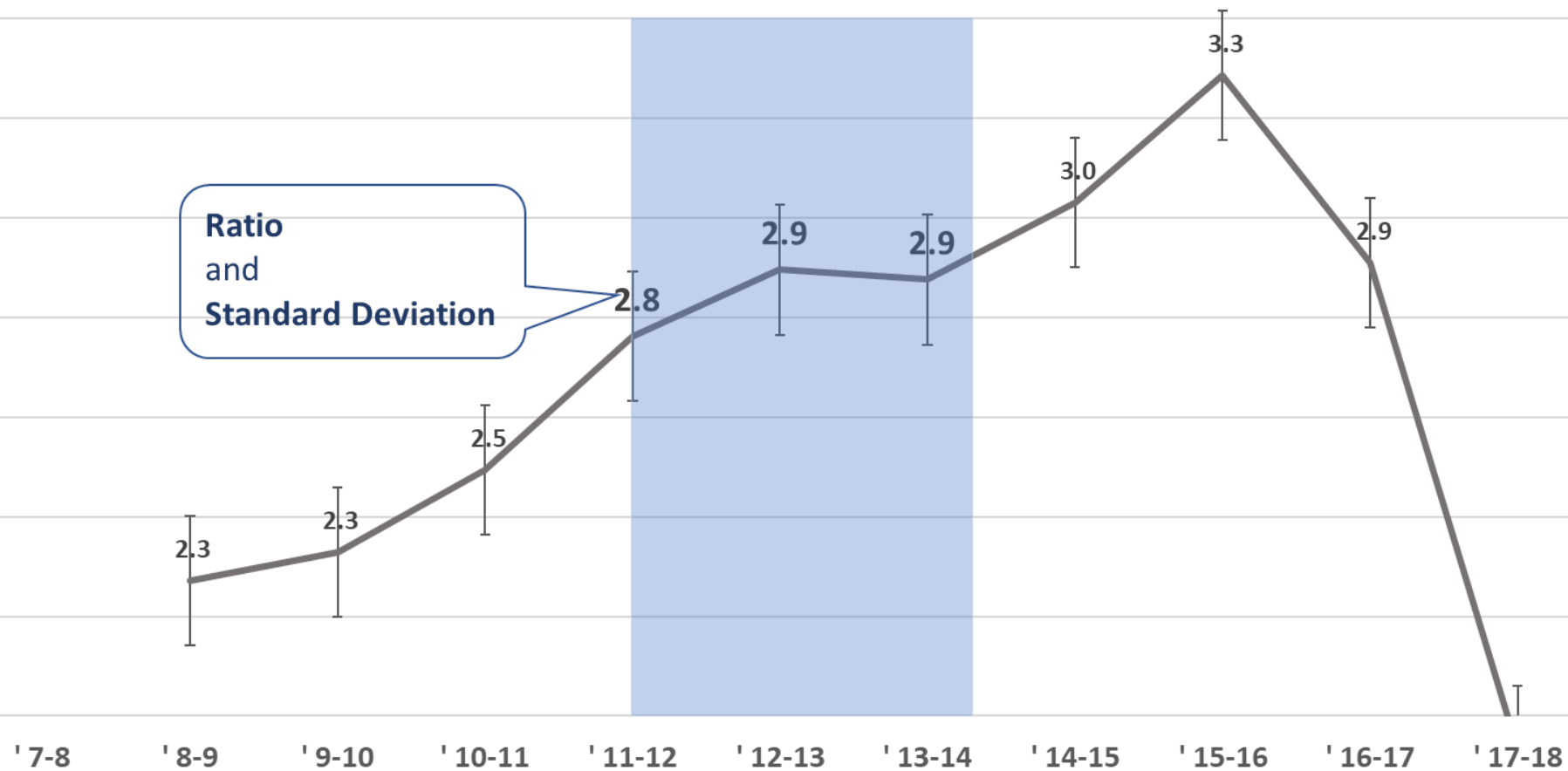


Lunch Break characteristics :

between 11:00 to 14:00
last 45 ' (0.75 unit hour)

3 hours time slot

Ratio
and
Standard Deviation



What is a "good" ratio compatible with L_B ?

Rationale for		3 hours time slot		
		' 11-12	' 12-13	' 13-14
Nurses	For 1 Room			
	Circulating	1	1	1
	Scrub	1	1	1
	Lunch Break	0.75	0.75	
	Ratio per hour	2.75	2.75	2
		$(2.75 + 2.75 + 2)/3$		
Mean Ratio per Slot		2.5		

Numbers of days when Lunch Break was not possible

N_days
253

< 2.5 23 9%

In 23 days the Lunch Break raised a "problem" in the platform

If two rooms don't need special staffing for L_B
Then Ratio = 2.4

<2.4 15 6%

Ratio	Frequency	%
1.7	1	
1.8	1	
2.1	2	9%
2.2	4	
2.3	7	
2.4	8	
2.5	28	
2.6	33	
2.7	34	
2.8	29	
2.9	26	
3.0	12	
3.1	14	
3.2	14	
3.3	11	
3.4	5	
3.5	2	
3.6	3	
3.7	3	
3.9	1	
4.1	1	
4.7	1	
4.9	1	
5.4	1	
5.8	1	
6.2	1	
6.7	1	
8.7	1	
9.9	1	
10.4	1	
10.5	1	
11.3	1	
15.1	1	7
22.1	1	

Comments :

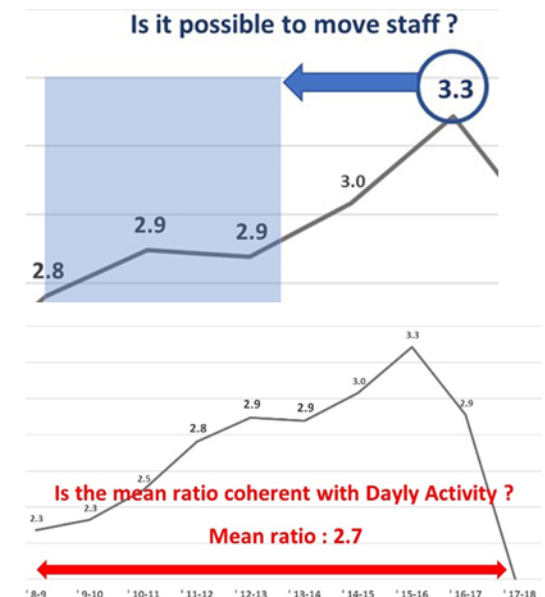
1) Bias : FTE and ORU depend on data quality

2) We tried to gain some perspectives : survey w20

- From 140 LB, 9 were not possible (6%)

3) The Ratio FTE/ORU is a tool for :

- Staff positioning along the timeline
- Staff allocation during the working days (if ratio includes peri-operating time)



(Incorrect staff allocation is the main cause of failure of the system !)

Conclusion

This work wants to be a **plea** to use **FTE /ORU** as :
an **indicator** to **manage** Operating Room

It is easy to manipulate

It is easier than a linear statistical model

Beyond the “math” behind this exercise,
the quality of exchanges were the most fruitful.

Thank you

