

D SOFA Display Survey



Load unfinished

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Survey for integrating and designing the SOFA Score

Dear online survey participants,

Welcome to this survey for my Master Thesis about implementing a data pipeline using different data sources, processing it and returning a predictive score, here SOFA, for ICUs. The goal is to interoperate and integrate it into any IT hospital environments. This survey aims to find the best ways to encode and display the score in an ICU Dashboard. You will be shown various dashboards and I would appreciate if you could answer my short questionnaire about them. The estimated time requires about 20-30 minutes.

Participation is voluntary. Your anonymity during the survey is guaranteed. The evaluation of the data will be carried out in compliance with data protection law by the team of BeST. There will be no personal tracing of participation in the survey. Your entered data will only be used for the purpose stated above. In order to continue with the questionnaire, you must confirm that you have understood the privacy policy and agree to it by clicking the small box at the bottom of this page.

Thank you for your cooperation!

Margaux Gatrio

There are 17 questions in this survey.

This survey is anonymous.

The record of your survey responses does not contain any identifying information about you, unless a specific survey question explicitly asked for it.

If you used an identifying token to access this survey, please rest assured that this token will not be stored together with your responses. It is managed in a separate database and will only be updated to indicate whether you did (or did not) complete this survey. There is no way of matching identification tokens with survey responses.








To continue please first accept our survey data policy.

[Show policy](#)

☐

Next

* 1 It is evening and you want to check on you patients at your ICU station. Therefore, you take a look at this Patients Overview Dashboard.

Patients Overview						
Hospital ABC		Station A1		Warnings 	<input type="text" value="search Patient"/>	
20 / Beds		12 / Occupied beds		60% Utilization		
1.1 <small>Room/Bed No.</small>	Patient A <small>Age: 42</small> 	65 bpm <small>/ Heart Rate</small>	96 mmHg <small>/ Mean Blood Pressure</small>	13bpm <small>/ Respiratory Rate</small>	38.2 °C <small>/ Temperature</small>	11 <small>/ SOFA</small>
1.2 <small>Room/Bed No.</small>	Patient B <small>Age: 69</small> 	62 bpm <small>/ Heart Rate</small>	87 mmHg <small>/ Mean Blood Pressure</small>	16bpm <small>/ Respiratory Rate</small>	38.4 °C <small>/ Temperature</small>	17 <small>/ SOFA</small>
2.1 <small>Room/Bed No.</small>	Patient C <small>Age: 54</small> 	82 bpm <small>/ Heart Rate</small>	120 mmHg <small>/ Mean Blood Pressure</small>	13bpm <small>/ Respiratory Rate</small>	36.8 °C <small>/ Temperature</small>	14 <small>/ SOFA</small>
2.2 <small>Room/Bed No.</small>	Patient A <small>Age: 72</small> 	73 bpm <small>/ Heart Rate</small>	92 mmHg <small>/ Mean Blood Pressure</small>	18bpm <small>/ Respiratory Rate</small>	37.9 °C <small>/ Temperature</small>	18 <small>/ SOFA</small>

What are the first three things that you notice?

★ 2 Take a look at the Dashboard again.

Patients Overview

Hospital ABC

Station A1

Warnings

20 / Beds

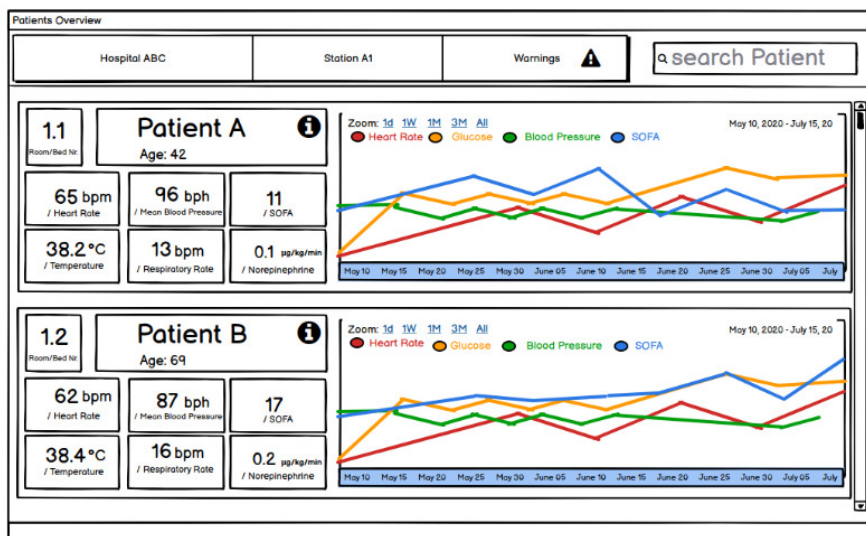
12 / Occupied beds

60% Utilization

1.1 <small>Room/Bed Nr</small>	Patient A <small>Age: 42</small>	65 bpm <small>/ Heart Rate</small>	96 mmHg <small>/ Mean Blood Pressure</small>	13 bpm <small>/ Respiratory Rate</small>	38.2 °C <small>/ Temperature</small>	11 <small>/ SOFA</small>
1.2 <small>Room/Bed Nr</small>	Patient B <small>Age: 69</small>	62 bpm <small>/ Heart Rate</small>	87 mmHg <small>/ Mean Blood Pressure</small>	16 bpm <small>/ Respiratory Rate</small>	38.4 °C <small>/ Temperature</small>	17 5 <small>/ SOFA</small>
2.1 <small>Room/Bed Nr</small>	Patient C <small>Age: 54</small>	82 bpm <small>/ Heart Rate</small>	120 mmHg <small>/ Mean Blood Pressure</small>	13 bpm <small>/ Respiratory Rate</small>	36.8 °C <small>/ Temperature</small>	14 2 <small>/ SOFA</small>
2.2 <small>Room/Bed Nr</small>	Patient A <small>Age: 72</small>	73 bpm <small>/ Heart Rate</small>	92 mmHg <small>/ Mean Blood Pressure</small>	18 bpm <small>/ Respiratory Rate</small>	37.9 °C <small>/ Temperature</small>	18 2 <small>/ SOFA</small>

How would you interpret the SOFA scores and the patients status now?

What would you like to see next?

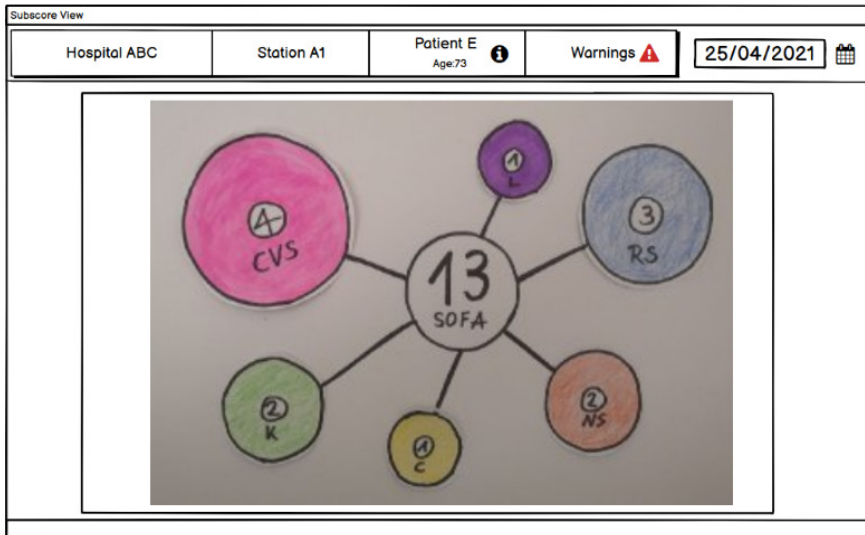


* 4

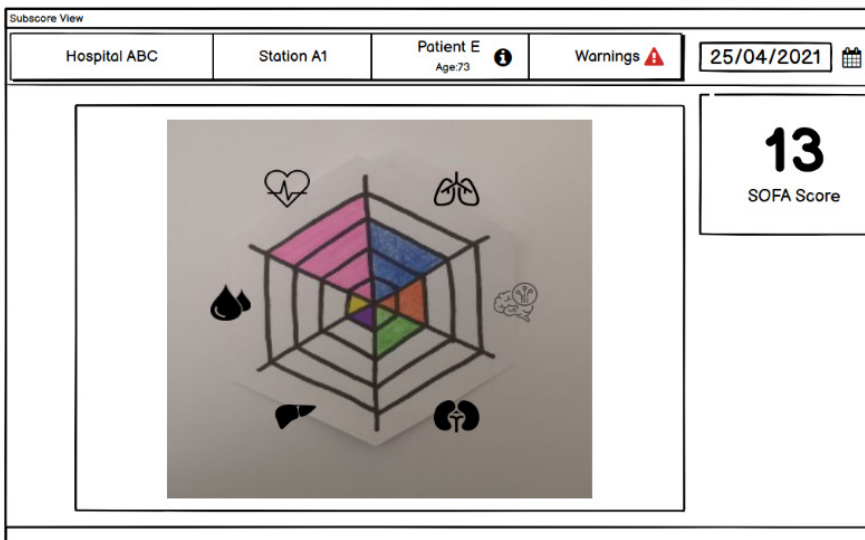
<div>17 / SOFA</div> <div>1</div>	<div>17↑ / SOFA</div> <div>2</div>	<div>17↑5 / SOFA</div> <div>3</div>
<div>17⚠ / SOFA</div> <div>4</div>	<div>17☹ / SOFA</div> <div>5</div>	<div>17 / SOFA</div> <div>6</div>

If you would check the SOFA score, which of these versions would you prefer and why?

★ 5 Take a look on these two charts showing a patients SOFA score.



(1)



(2)

Which one would find more helpful and why?

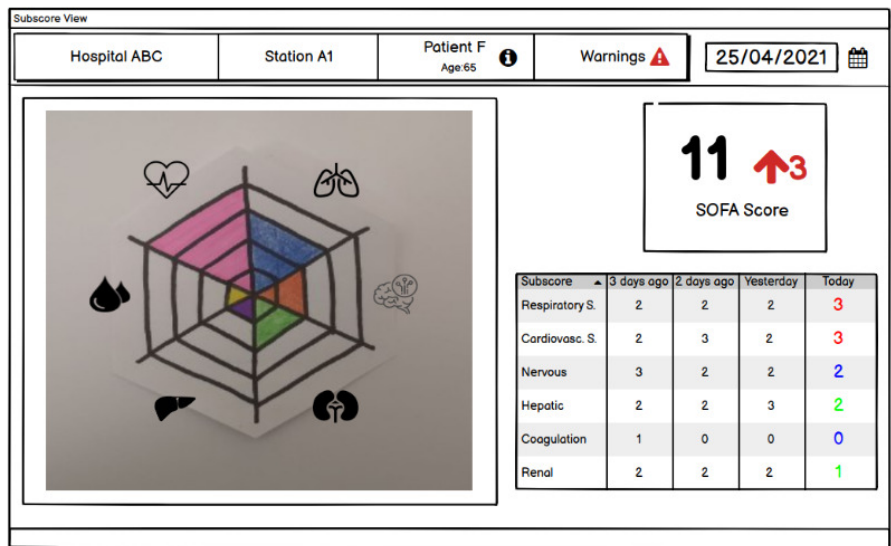
📌 Choose one of the following answers

☐ 1)

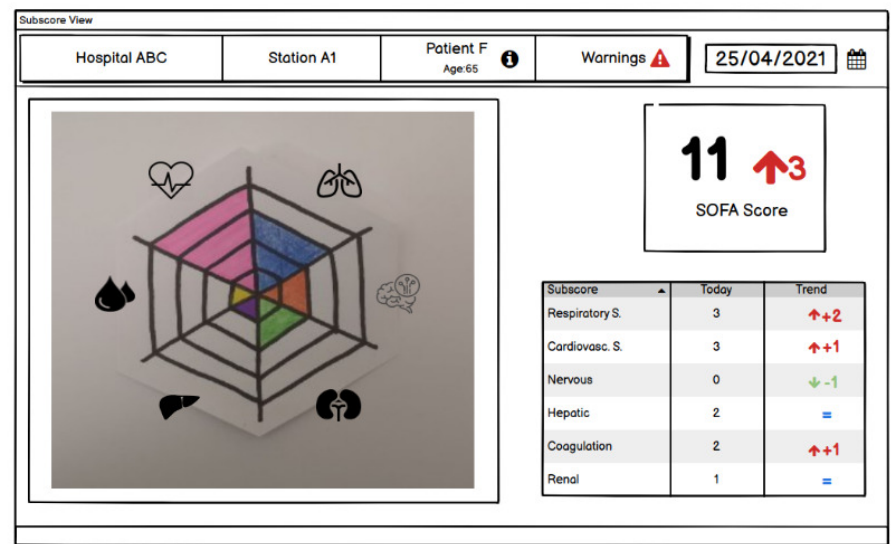
☐ 2)

Please enter your comment here:

* 6 Take a look on these dashboards with additional tables.



(1)



(2)

Which of these versions would you prefer and why?

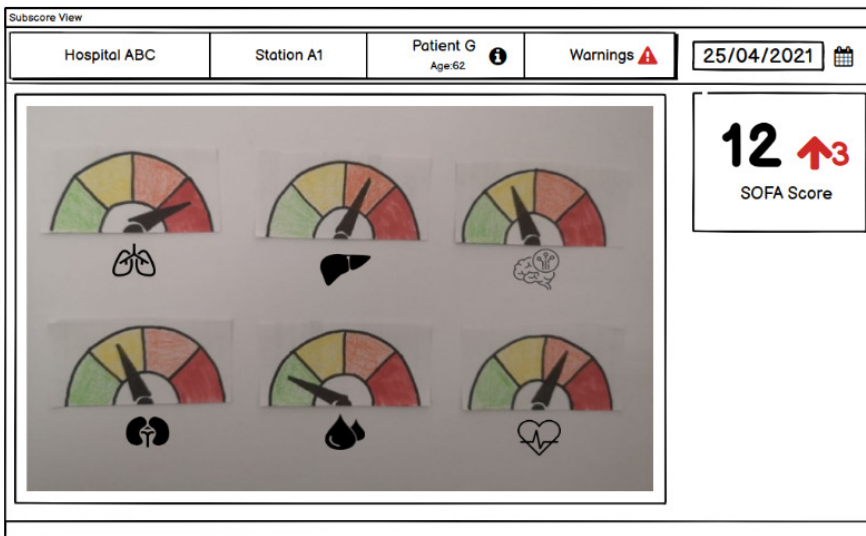
Choose one of the following answers

☐ (1)

☐ (2)

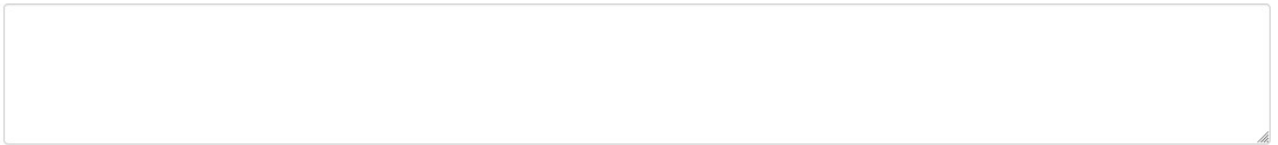
Please enter your comment here:

* 7



What would you understand from these diagrams?

✱ 8 Lets say you just checked one of the previous charts on a patients SOFA scores and the score has alarmingly increased since yesterday. What would you like to check next?



* 9 Imagen you were looking on a higher SOFA Score and you had clicked on it to understand the SOFA Subscores. Assuming that was your intention and you would see this dashboard.

Subscore View			
Hospital ABC	Station A1	Patient A Age:63 ⓘ	Warnings ⚠
25/04/2021 📅			
Scoring	Score	Parameter	Value
SOFA	17		
Respiratory	4 ⬆️ ₂	PaO2/FiO2 (mmHg) Mechanically Ventilated	420 Yes
Cardiovascular	4 ⬆️ ₁	Dopamine (µg/kg/min)	18
Nervous	2 ⬆️ ₁	Glasgow coma scale	11
Hepatic	2 =	Bilirubin (mg/dl)	3.4
Coagulation	2 ⬆️ ₁	Plateletsx10^3/µl	82
Renal	3 ⬆️ ₂	Creatinine (mg/dl) (µmol/L)	3.9

What you gather from this view?

Would that answer your expectation on the subscore information or would you need more?

What else would you have wanted to see after clicking the SOFA Score?

* 10 The view includes now a button that would lead you to a view with the recommended guidelines.

Subscore View

Hospital ABC






Station A1

Patient B
Age: 69

Warnings




SOFA Guidelines


25/04/2021

Scoring	Score	Parameter	Value
SOFA	17		
Respiratory	4  2	PaO2/FiO2 (mmHg) Mechanically Ventilated	420 Yes
Cardiovascular	4  1	Dopamine (µg/kg/min)	18
Nervous	2  1	Glasgow coma scale	11
Hepatic	2 =	Bilirubin (mg/dl)	3.4
Coagulation	2  1	Plateletsx10^3/µl	82
Renal	3  2	Creatinine (mg/dl) (µmol/L)	3.9

Under which circumstances would you consult these guidelines?

Trend View

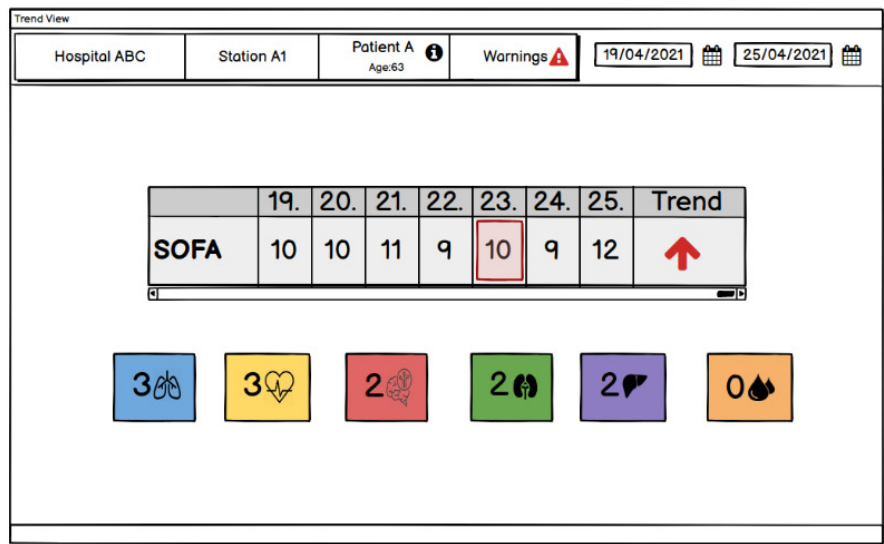
Hospital ABC	Station A1	Patient A Age: 63	Warnings 	19/04/2021 	25/04/2021 
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	19.	20.	21.	22.	23.	24.	25.	Trend
SOFA	10	10	11	9	10	9	12	 +3

What would you understand from this view?

What would you expect, if you tipped on one of these values?

* 12 This is what could happen, if you tipped on one the values.

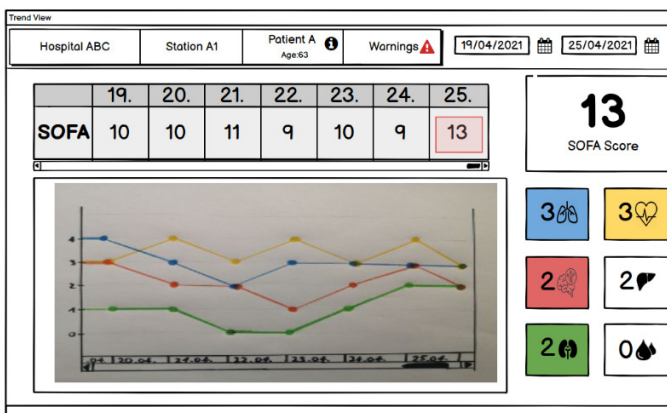


What would you understand from this?

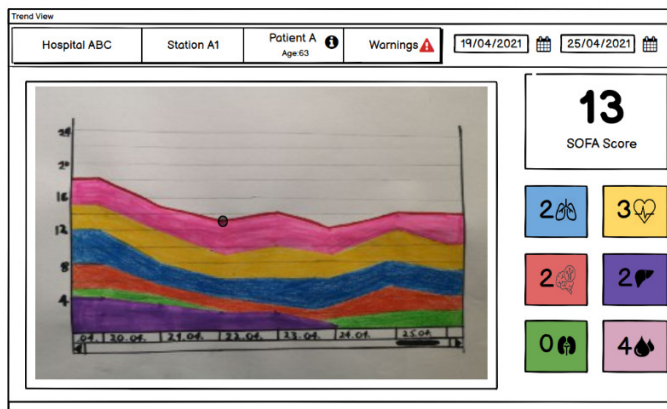
★ 13 Lets say, instead of showing the subscores for just one of these values, you would like to see the subscores for all of them.

Trend View									
Hospital ABC	Station A1	Patient A Age 63	Warnings	19/04/2021	25/04/2021				
	19.	20.	21.	22.	23.	24.	25.	Trend	
SOFA	10	10	11	9	10	9	12	↑ +3	
	1	2	2	2	2	1	3	↑ +2	
	3	2	2	2	2	2	3	↑ +1	
	2	2	2	1	1	1	0	↓ -1	
	0	0	1	1	1	2	2	= 0	
	2	1	1	1	2	1	2	↑ +1	
	2	3	3	2	2	2	2	= 0	

(1)



(2)



(3)

Comparing these three views, which one would you use under which circumstances and why? (Note: The button on the right side of the 2. and 3. view can be used to enable and disable subscore lines in the trend chart)

Choose one of the following answers

- ☐ (1)
- ☐ (2)
- ☐ (3)

Please enter your comment here:

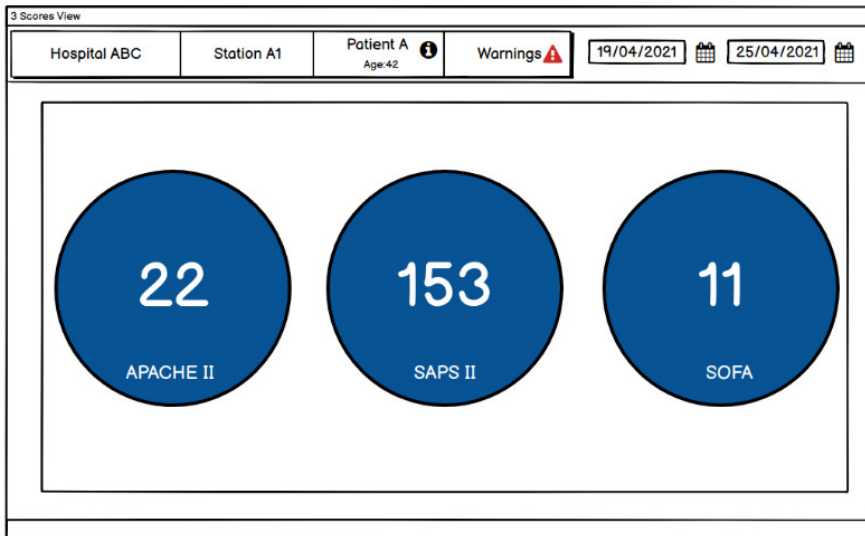
* 14



What do you understand from this view?

What would like to have added here?

* 15

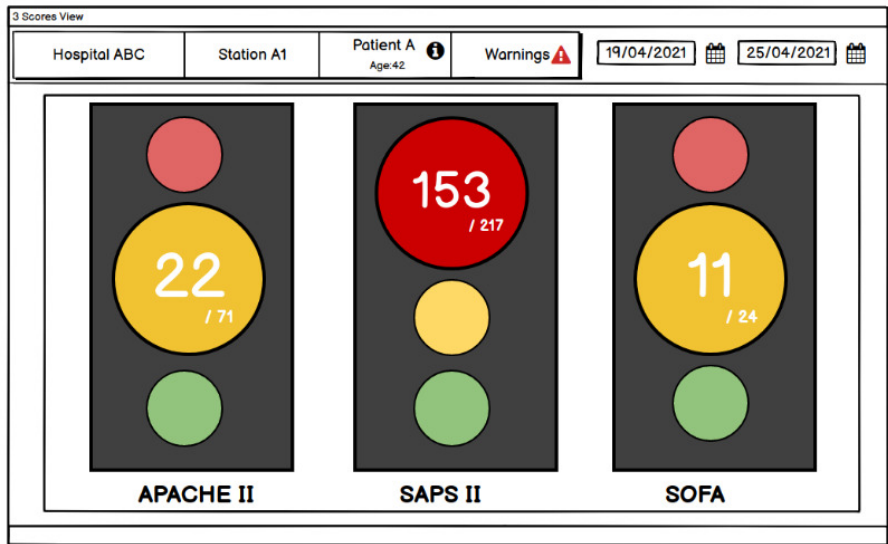


How would you like a view to compare different scores?

What do you understand from this view?

What else would you want to see here?

* 16 Here you can see two other examples.



(1)



(2)

Which one would you use and why?

Choose one of the following answers

☐ (1)

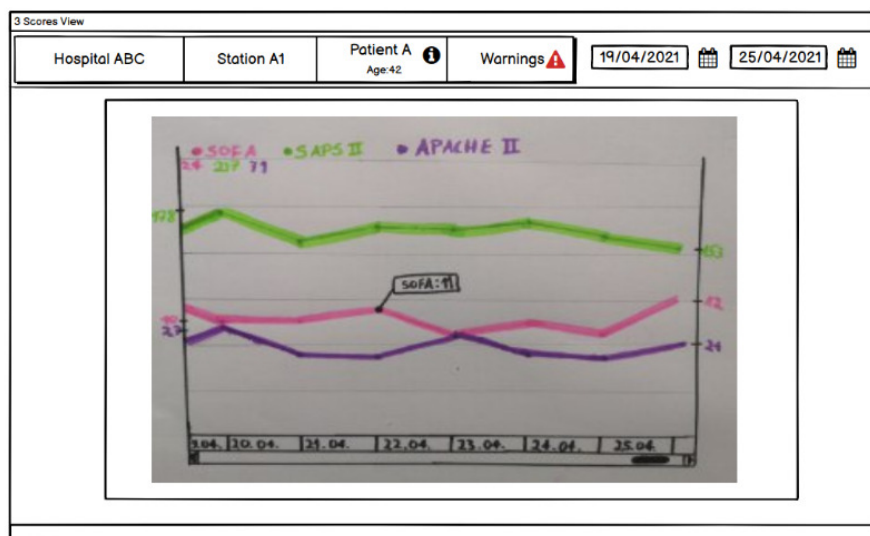
☐ (2)

Please enter your comment here:

* 17 How about these two views.

3 Scores View								
Hospital ABC	Station A1	Patient A Age: 42	Warnings	19/04/2021		25/04/2021		
Score	19.	20.	21.	22.	23.	24.	25.	Trend
SOFA	10	10	11	9	10	9	12	↑ 3
APACHE	27	21	20	26	21	20	24	↑ 4
SAPS	178	156	168	165	170	162	153	↓ 9

(1)



(2)

Which one would use when and why?

Choose one of the following answers

- ☐ (1)
- ☐ (2)

Please enter your comment here: