

Story

I am working as a Nurse Practitioner in a Intensive Care Unit for Asthma and COPD.

One of my main responsibilities is to observe the breathing of a patient and also the climatic conditions in his/her space, because we have to guarantee optimum conditions for a healing at any time.

Hence, it is important to be informed about the supply of the body with oxygen at any time, because we have to react fast in case of need if, for example, the oxygen bottle is almost empty.

It is also important to know the exact usage of the oxygen, because too much oxygen usage can be an announcement of an asthma attack.

Because for the human breathing, the space climate is also important, it is important to know the exact status of the respective space climate at any time.

Persona



TOM

“ I like to make a life better with my work, than it was before. ”

Nurse Practitioner

About

- 35, married, 10 years of Intensive Care Unit experience.
- Being the person who takes care of the health status of the whole patients in the Intensive Care Unit
- temporary mobile, moving from patient to patient during the day
- temporary residential, observing patients
- I work with management of Care, the Chief Doctor, Nurses and Technicians

Pain Points

- It is difficult to handle preventative, because I have to check everything manual.
- The long ways are very time consuming.
- The technicians are often not reachable by phone.
- It is difficult to give a quick status of all patients if needed.

Needs

- I need the possibility to be informed about the whole patients status quick and at any time.
- I need information about the patients supply with oxygen in detail.
- I need information about all space climates in detail.

Main Goals

- Always to be centrally informed about all important information in detail.
- Better quality of Emergency nursing.

Responsibilities

- I am responsible for observing the breathing of asthma and COPD patients.
- I am responsible for the climatic conditions in all sick rooms.
- I am responsible for good healing conditions.

Point of View

As a nurse practitioner, responsible for the air quality and health of breathing of the intensive care unit, I need a way to observe the oxygen and air condition of all rooms centrally from one point, to meet their breathing requirements.

User Experience Journey

Actions	enter work place (ICU) start with work	go to first room	check Oxygen	swap oxygen if needed	check climate	inform technician if needed	go to next room
Mindset	another day to do my best!	I'm curious about	have I to swap?	I have to go to the store	how is the air?	I have to inform via phone	I'm curious about
Feeling	☹️						
Touch Points	Intensive Care Unit (ICU)	corridor ICU	oxygen cylinder set	oxygen store	air condition	telephone	corridor ICU

Prototype

BUILD – published Link:

<https://standard.build.me/prototype-editors/api/public/v1/snapshots/e3274923226a3b5e0e17a8a3/artifacts/latest/index.html>

**you have to use your own login data for Build, but if this link does not work, please use the following Screenshots!*

Screenshot Launch Page Stauferklinikum – Intensive Care Unit:

Stauferklinikum - Intensive Care Unit for COPD/Asthma

2 NOTIFICATION Air Conditioning Room 1 Needs Attention	2 NOTIFICATION Oxygen Cylinder Set Room 1 Needs Attention	0 NOTIFICATION Air Conditioning Room 2 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 2 everything OK	0 NOTIFICATION Air Conditioning Room 3 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 3 everything OK
0 NOTIFICATION Air Conditioning Room 4 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 4 everything OK	0 NOTIFICATION Air Conditioning Room 5 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 5 everything OK	0 NOTIFICATION Air Conditioning Room 6 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 6 everything OK
0 NOTIFICATION Air Conditioning Room 7 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 7 everything OK	0 NOTIFICATION Air Conditioning Room 8 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 8 everything OK	0 NOTIFICATION Air Conditioning Room 9 everything OK	0 NOTIFICATION Oxygen Cylinder Set Room 9 everything OK

Screenshot Connected Goods Air Conditioning:



Air Conditioning

AirCon-Room1_O ● Mapped

Geo-Match

📶 Connected ⚡ On

Technician Wayne, John

Notify

Cooling Fluid

9 %

2 mins ago



Notifications (2)

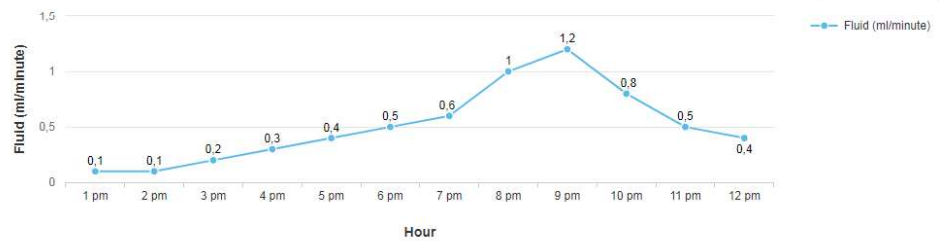
AirCon-Room1_O does has less than 10% of Cooling Fluid
AirCon-Room1_O has missed a cleaning cycle

June 29, 2017
June 29, 2017
[See All](#)

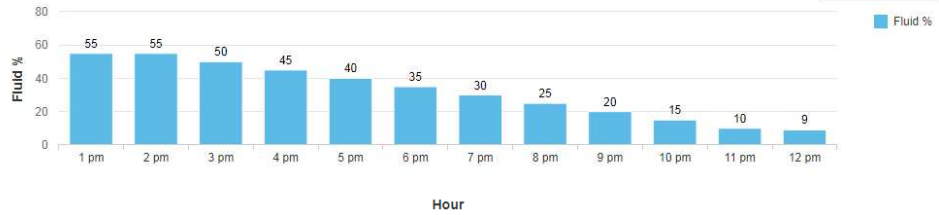
Stauferklinikum Schwäbisch Gmünd Wetzgauer Str. 85 73567 Mutlangen



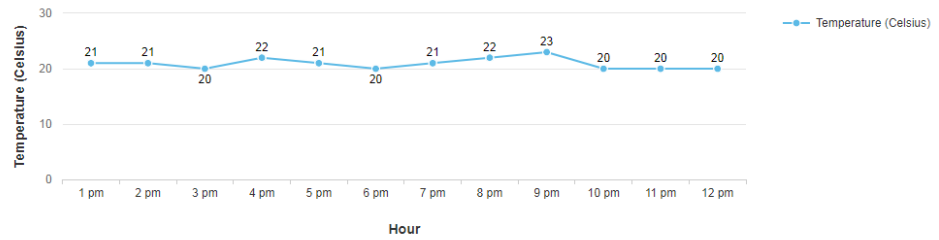
COOLING FLUID CONSUMPTION



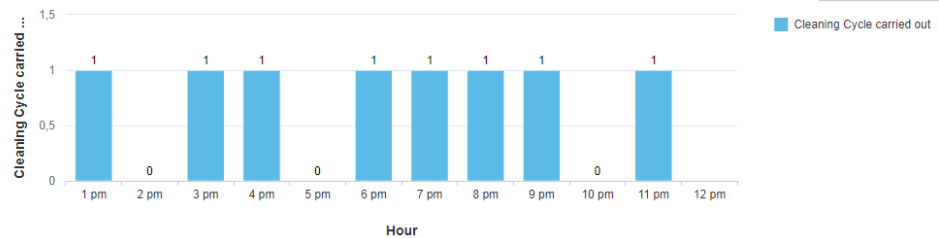
COOLING FLUID LEVEL



AVERAGE ROOM TEMPERATURE



CLEANING CYCLES



Screenshot - Air Conditioning – Geo-Match:

Intensive Care - Air Conditioning Room 1

Air Conditioning

AirCon-Room1_O ● Mapped Geo-Match 📶 Connected ⚡ On 👤 Technician Wayne, John

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Map Store

COOLING FLUID LEVEL

0.5 0.4

11 pm 12 pm

Cancel Map Store

Screenshot - Air Conditioning – Notify:

Intensive Care - Air Conditioning Room 1

Air Conditioning

AirCon-Room1_O ● Mapped Geo-Match 📶 Connected ⚡ On 👤 Technician Wayne, John Notify

Cooling Fluid 9% 2 mins ago

Notifications (2)

- AirCon-Room1_O does has less than 10% of Cooling Fluid June 29, 2017
- AirCon-Room1_O has missed a cleaning cycle June 29, 2017

Notify

John Wayne

Type your message here

OK Cancel

Fluid (ml/minute)

1.5 1 0.5 0

1 pm 2 pm 3 pm 4 pm 5 pm 6 pm 7 pm 8 pm 9 pm 10 pm 11 pm 12 pm

Screenshot Connected Goods Oxygen Cylinder Set:

<
Intensive Care - Oxygen Cylinder Set Room 1



Sauerstoff Set für den Heimgebrauch:
 1 x Druckminderler mit Flowmeter
 1 x Sauerstoffflasche gelb/rot 2 Liter
 1 x Sauerstoffflasche Grün/Blau
 1 x Sauerstoffflascheblau
 SETWEG!



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 73557 Mutlangen

Oxygen Cylinder Set

OxyCyl-1-Room1_O ● Mapped Geo-Match ● Connected ⚡ On

110 hPa
 LIVE PRESSURE
 Feb 17, 2017 00:00:00

Notifications (2)
 The pressure is lower than 100 hPa
 Maintenance is necessary

June 29, 2017
 June 29, 2017
[See All](#)

Responsible Nurse
 Harlowe Barton, Clarissa

Notify



MAINTENANCE STATUS

Yearly ▼



Month	Carried Out
January	1
February	1
March	1
April	1
May	1
June	0
July	0
August	0
September	0
October	0
November	0
December	0

Month

AVERAGE PRESSURE (IN hPa)

Hourly ▼



Hour	Pressure (hPa)
2PM	200
3PM	200
4PM	185
5PM	170
6PM	155
7PM	140
8PM	125
9PM	110
10PM	100
11PM	100
12PM	80

Hour

AVERAGE DURATION OF USAGE (IN SEC)

Hourly ▼



Hour	Duration (sec)
2PM	60
3PM	60
4PM	80
5PM	85
6PM	90
7PM	95
8PM	120
9PM	120
10PM	130
11PM	135
12PM	140

Hour

NUMBER OF USAGES PER HOUR

Hourly ▼



Hour	Number
2PM	10
3PM	10
4PM	12
5PM	13
6PM	14
7PM	15
8PM	20
9PM	25
10PM	30
11PM	40

Hour

Screenshot Oxygen Cylinder Set – Geo-Match:

Intensive Care - Oxygen Cylinder Set Room 1

Oxygen Cylinder Set

Seewartstoff Set für den Notfall:
 1 X Druckminderler mit Flowmeter
 1 X Seewartstoffflasche gefüllt 2 Liter
 1 X Seewartstoffflasche Druckwaage
 1 X Seewartstoffpassierhilfe

SETPRO 1

OxyCyl-1-Room1_O ● Mapped Geo-Match Connected On

Responsible Nurse Harlowe Barton, Clariss

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Map Store

June 29, 20
 June 29, 20
[See All](#)

0 0
 November December

Cancel Map Store

200 200 185 170

Screenshot Oxygen Cylinder Set – Notify:

Intensive Care - Oxygen Cylinder Set Room 1

Oxygen Cylinder Set

Seewartstoff Set für den Notfall:
 1 X Druckminderler mit Flowmeter
 1 X Seewartstoffflasche gefüllt 2 Liter
 1 X Seewartstoffflasche Druckwaage
 1 X Seewartstoffpassierhilfe

SETPRO 1

OxyCyl-1-Room1_O ● Mapped Geo-Match Connected On

Responsible Nurse Harlowe Barton, Clarissa Notify

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LIVE PRESSURE
 110 hPa
 Feb 17, 2017 00:00:00

Notifications (2)
 The pressure is lower than 100 hPa
 June 29, 2017

Notify

OK

Clarissa Harlowe Barton

Type your message here

Cancel

AVERAGE PRESSURE (IN hPa)
 Hourly

300
 200
 100

■ PRESSURE