



WIAD 2017

LOCAL CONNECTIONS. GLOBAL IMPACT.

BARCELONA, SPAIN



Information Architecture in eHealth

Doctors and Patients
designing together

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THE ROLE OF INFORMATION ARCHITECTURE IN E-HEALTH

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CHOOSING APPROACH
WHAT IS THE GOOGLE DESIGN SPRINT?

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PATIENTS
HOW TO HELP PATIENTS MANAGING
THEIR SITUATION?

03
MEDICAL DOCTORS
HOW TO HELP MEDICAL DOCTORS
KEEPING TRACK OF THEIR PATIENTS?

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WHAT HAVE WE LEARNED

THE MISSION

Build a health system through the design and implementation of data driven solutions that respond to real user needs and provide patients at home with tools for healthier lives.

THE PROJECT

Creating a new digital solution for cancer patients
helping them to manage their situation.

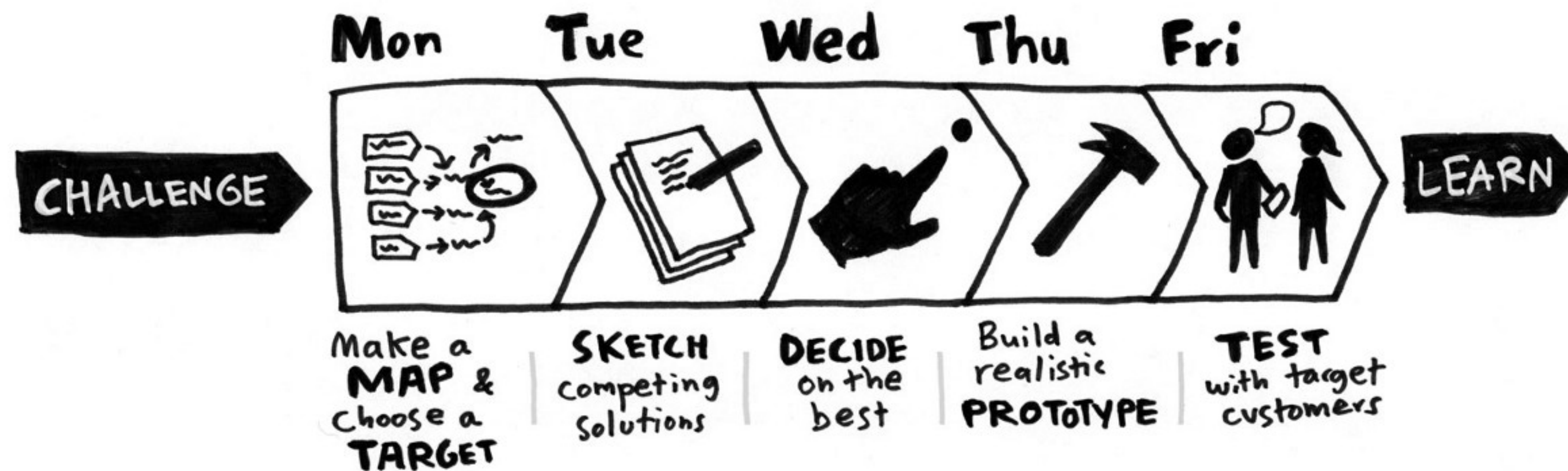
THE GOAL

Understand how to design and develop in the most effective way a digital application for an effective healthcare.

THE APPROACH

Google Venture Design Sprints can work well in any industry, so why not using this model to design better healthcare solutions?!

The big idea of the Google Design Sprint is to establish a small team, plan the schedule for a week, and rapidly move from a problem to a tested solution.



DAY 1 UNDERSTAND

Lightning talks,
“How might we”
questions: how could the
app resolve user
problems?



DAY 2 DIVERGER / SKETCH

Review of existing ideas to
remix and improve. Making
sketches, to emphasize critical
thinking and to create a big
number of ideas and concepts.

DAY 3 DECIDING

Choice of the concept that have
the best chance of achieving
our long-term goal.

Create a step-by-step plan for
the prototype.

DAY 4 PROTOTYPING

DAY 5 USER TESTS

RESULT | We need to empower patients to be an **active** part of their health care

How can we empower the patients?

Patients need the right information at the right time!

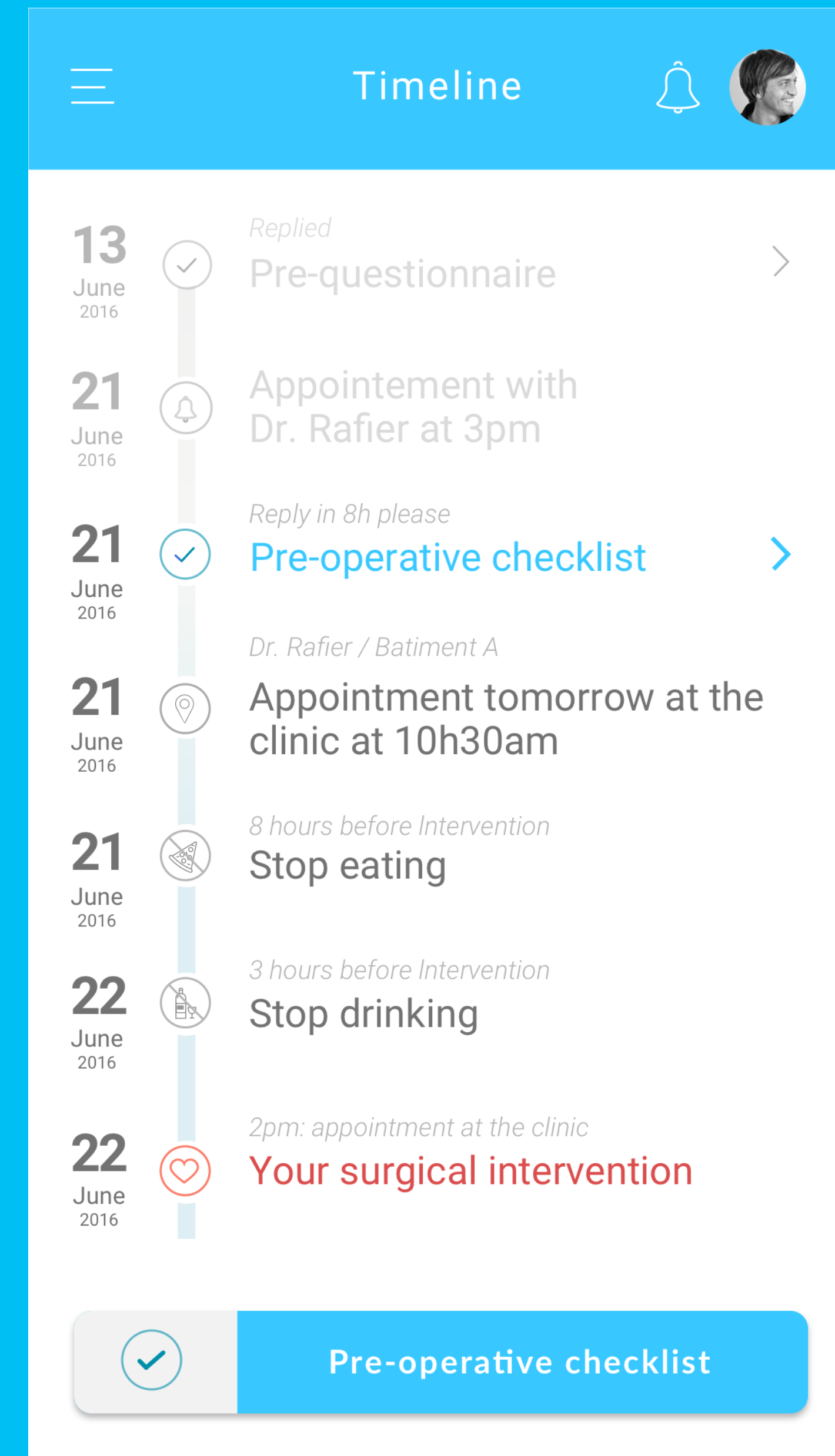
How can we help the medical doctor?

They need as well relevant information at the right moment.

This can save lives!

Help patients to stay organised:

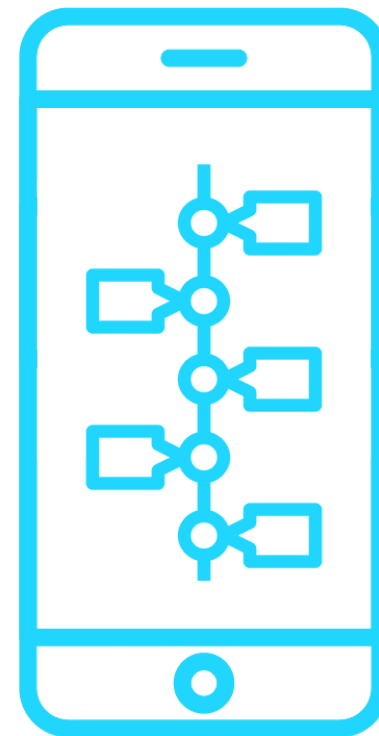
- Live with their disease and give them **personalized information**
- Organisation of **medical appointments** and to respect **medical treatment plans**
- Be prepared for surgical interventions



Other informational benefits for the patient

**SEND PUSH
NOTIFICATIONS**

Send push notifications to update, remind and activate patients and their family and friends about their treatment.

**DYNAMIC
TIMELINE**

Effectively educate patients through a dynamic timeline about the next steps in their treatments.

**ASK
QUESTIONS**

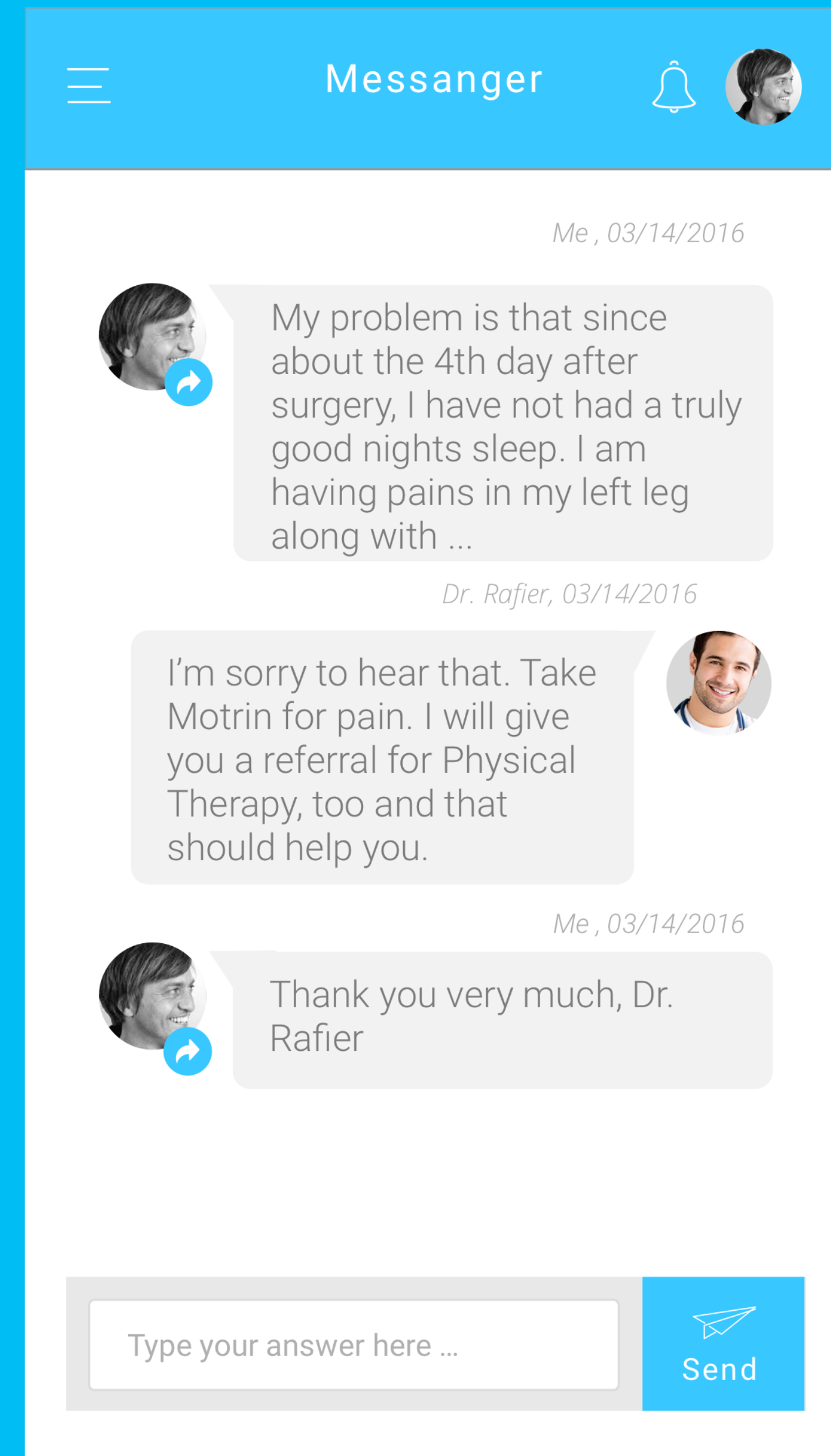
Request feedback from patients by asking questions about their rehabilitation, pain level or other experiences.

**VISUAL
CONTENT**

Inform patients about their treatments and organisation by adding visual content.

Write personal messages to the medical doctor

- Help the patient to be an active member of the health care team
- Exchanges with the medical doctor build trust and leads to better results, quality, safety, and satisfaction.



Healthcare professionals:
Bring the important
information to the
surface.

*If content is king,
then the context
is god:*

1. Remote monitoring
2. Operation day
3. Office day
4. Consulting day



HOW TO PRESENT THE INFORMATION

« A picture is worth
a thousand words »

Information
dashboard design is
the effective visual
communication of
data.

Example:

2003 Call Volume (in thousands)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
United States	1,983	2,343	2,593	2,283	2,574	2,838	2,382	2,634	2,938	2,739	2,983	3,493
Europe	574	636	673	593	644	679	593	139	599	583	602	690
	2,557	2,979	3,266	2,876	3,218	3,517	2,975	2,773	3,537	3,322	3,585	4,183

Figure 1: A tabular display of call volume data.

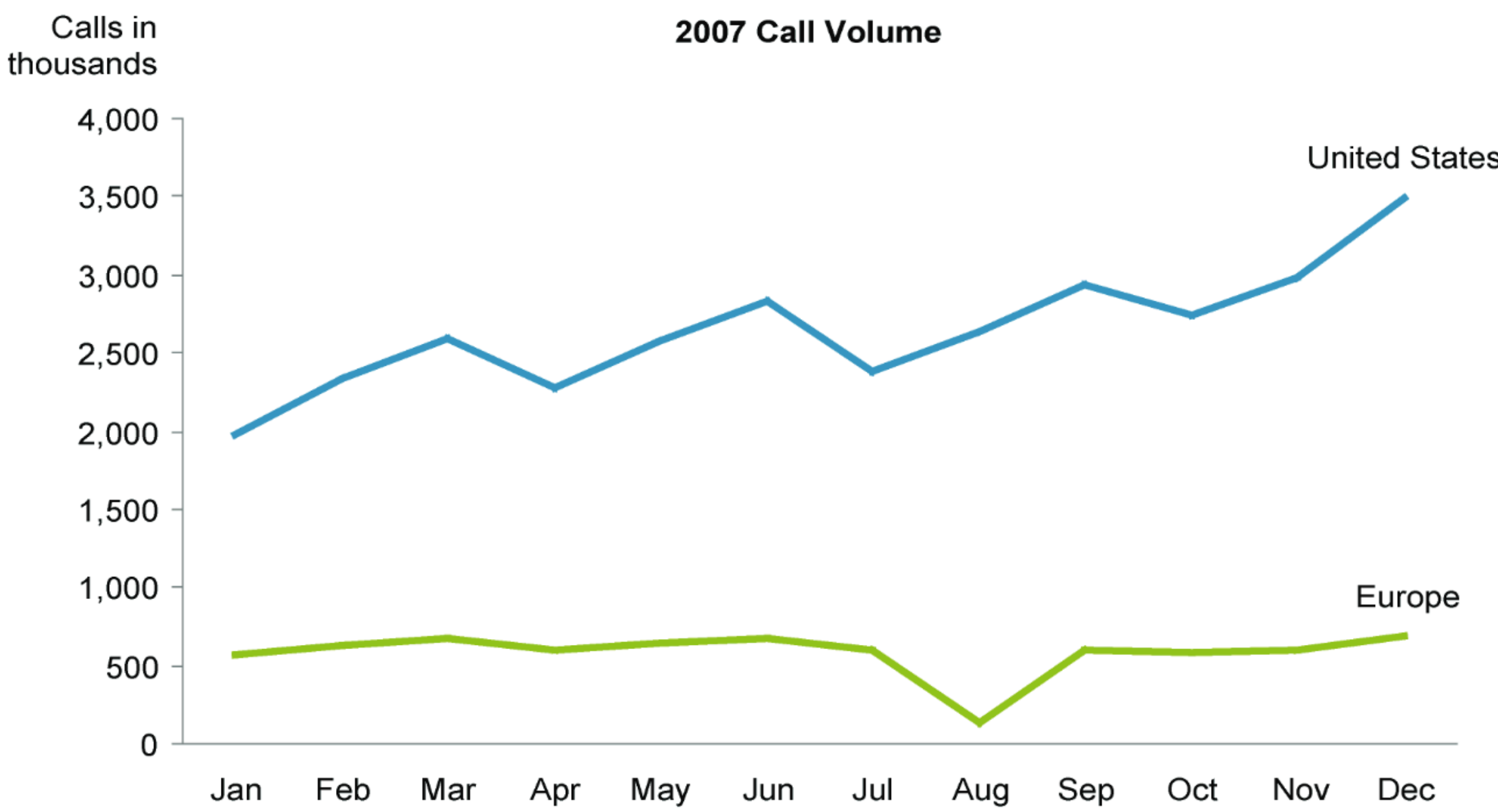
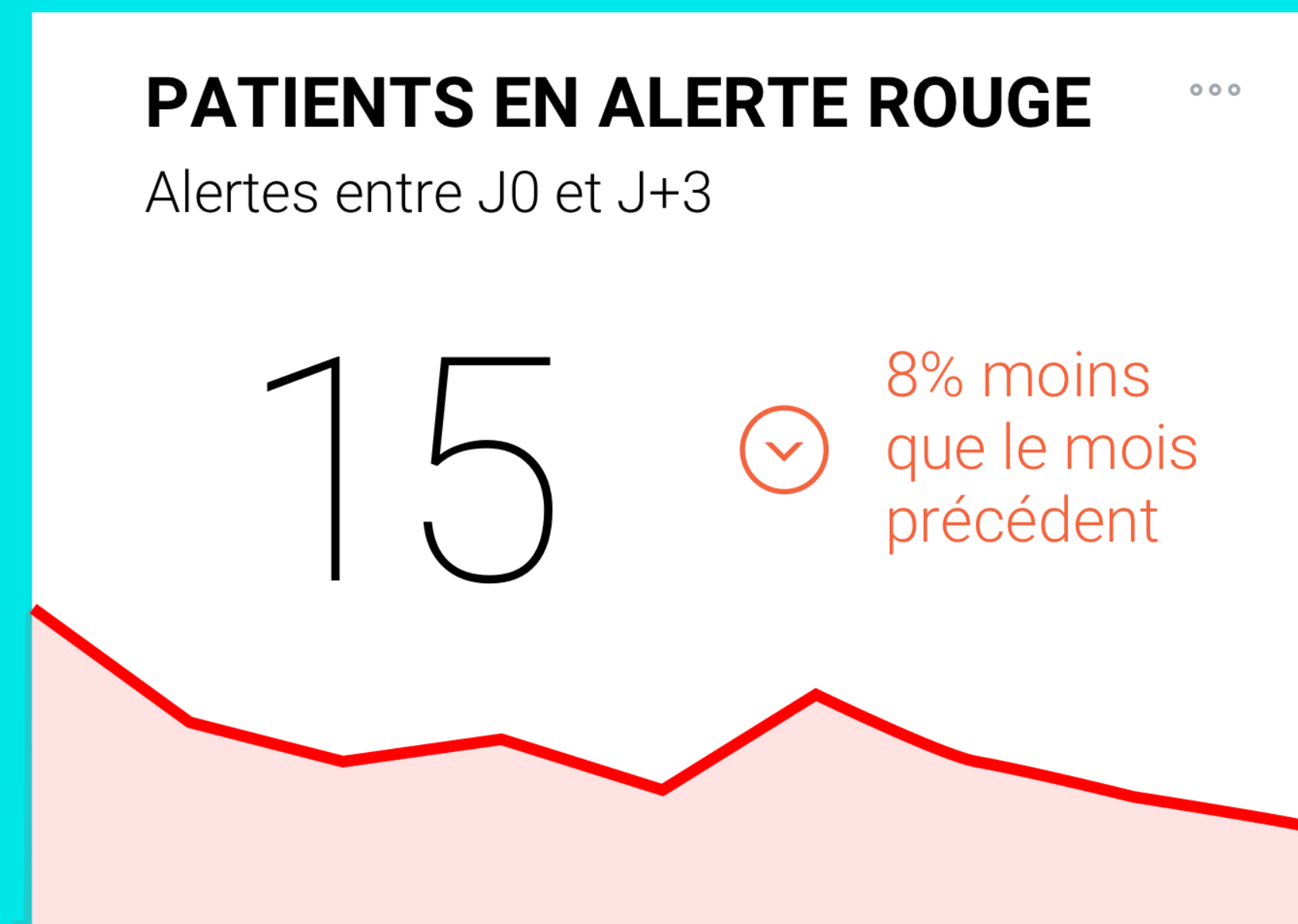


Figure 2: The same call volume data as before, but presented in a way that brings patterns, trends, and exceptions to light.

FURTHER MAIN PRINCIPLES

Designing a real-time operational dashboard:

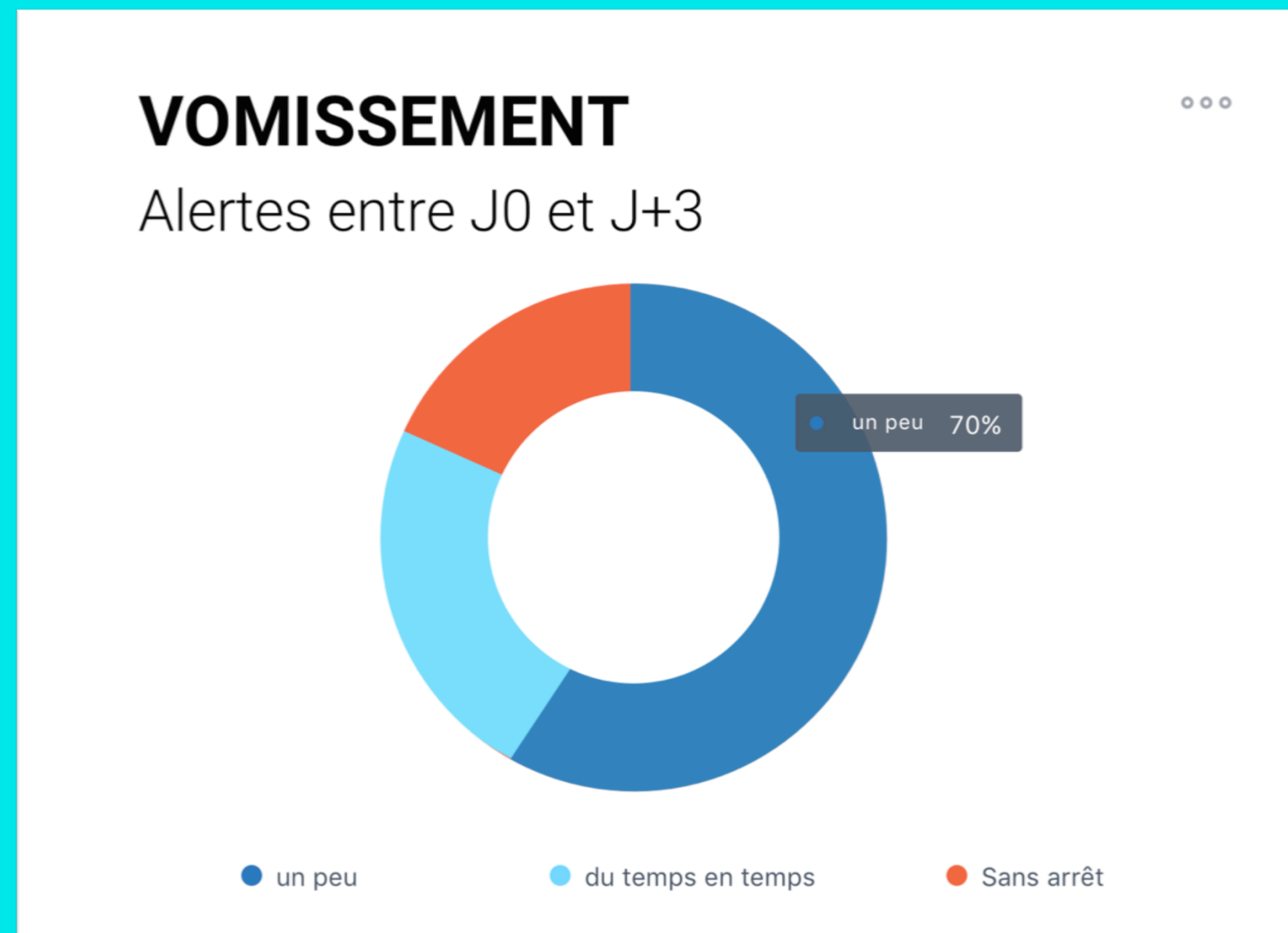
- Indicate tendencies instead of too many alert conditions
- Put the numbers in the right context



FURTHER MAIN PRINCIPLES

Designing a real-time operational dashboard:

- "Call out" of single important numbers
- Using charts



Nombre total des suivis

DEPUIS DÉBUT DE L'ANNÉE

231 patients

⬆ 34 plus que dans l'année 2016

PATIENTS EN ALERTE ROUGE

Alertes entre J0 et J+3

3 plus de 39°

[Voir plus](#)

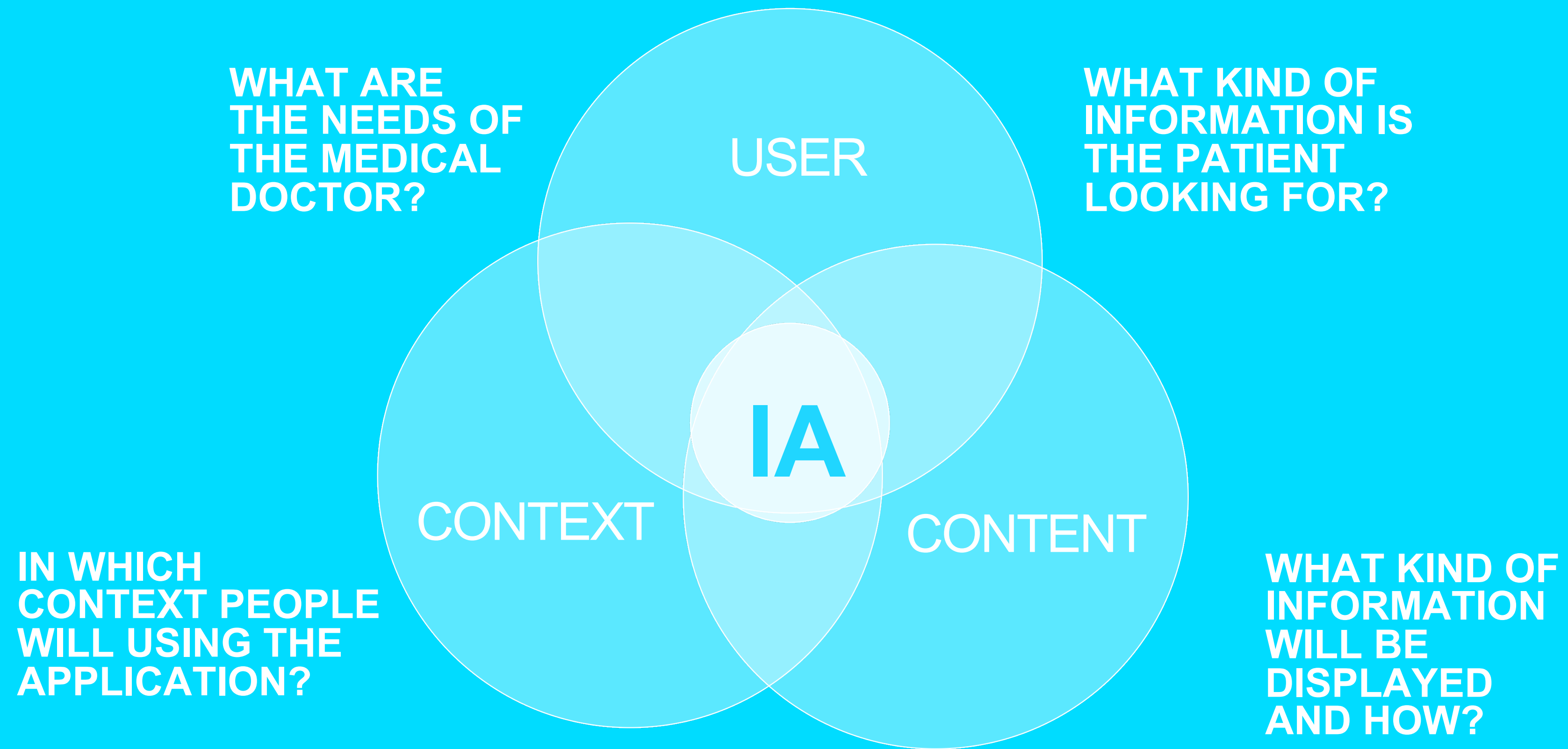
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The goal is to inform people with precisely what they need in the way that they need it day in and day out.

SUMMARY | A dashboard's strength depends on providing your audience with the current status of key metrics.

CONCLUSION



GOOD RESEARCH MEANS ASKING
THE RIGHT QUESTIONS

CONCLUSION

Participatory design reduce the risk of failure for your end-product.

DESIGN SPRINT

Understand
prototype
test

User participation

SKETCH SOLUTIONS

Find an
answer for the
problem

User validation

DESIGN MOCKUPS

Check to
respond to real
user needs

UI-DESIGN

Interface
design of the
Application

User testing

CONCLUSION |

Design Sprint is a user centered approach and especially in Healthcare:

EMPATHY IS KEY!

The major part of the problem solving is actually to define the problem:

**DESIGNING TOGETHER IS
THE SOLUTION!**



Image source:
www.hermanmiller.com/why/in-this-together.html

THANK YOU.



QUESTIONS?

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