If the walls could speak...

Meaningful interior design in children’s hospitals

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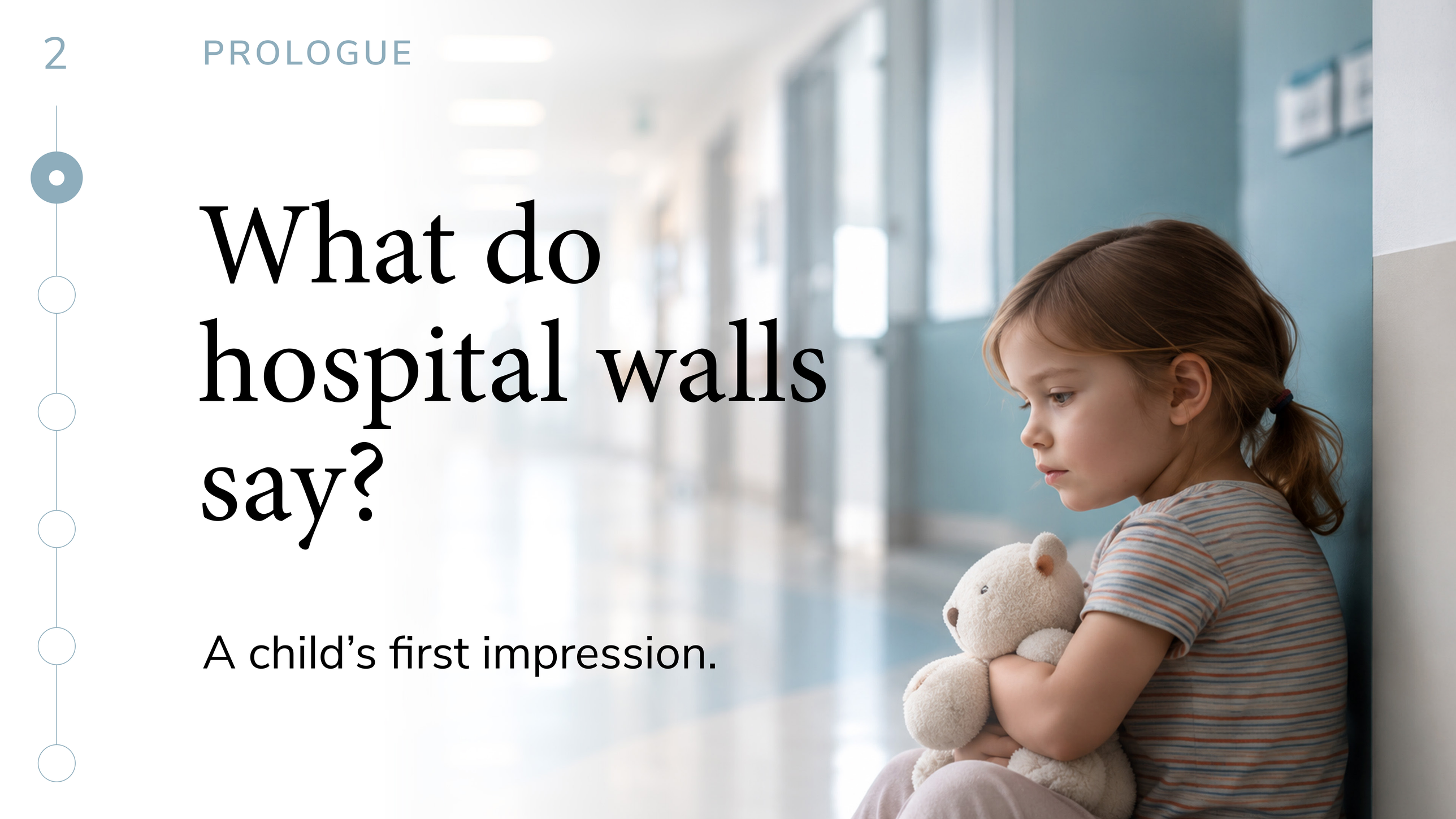
What do hospital walls say?

A child’s first impression.



THE EMOTIONAL REALITY

Clean.
Functional.
But impersonal.



What does this environment say to a child?

Psychological and emotional needs of hospitalized children

1. Need for **security and safety**
2. Need for **love and belonging**
3. Need for **self-esteem**
4. Need for **control and autonomy**
5. Need for **play and normalcy**
6. Need for **expression**



Children understand the world through **stories, characters, play, imagination and exploration.**

What if walls could guide,
reassure, inspire
and give strength?

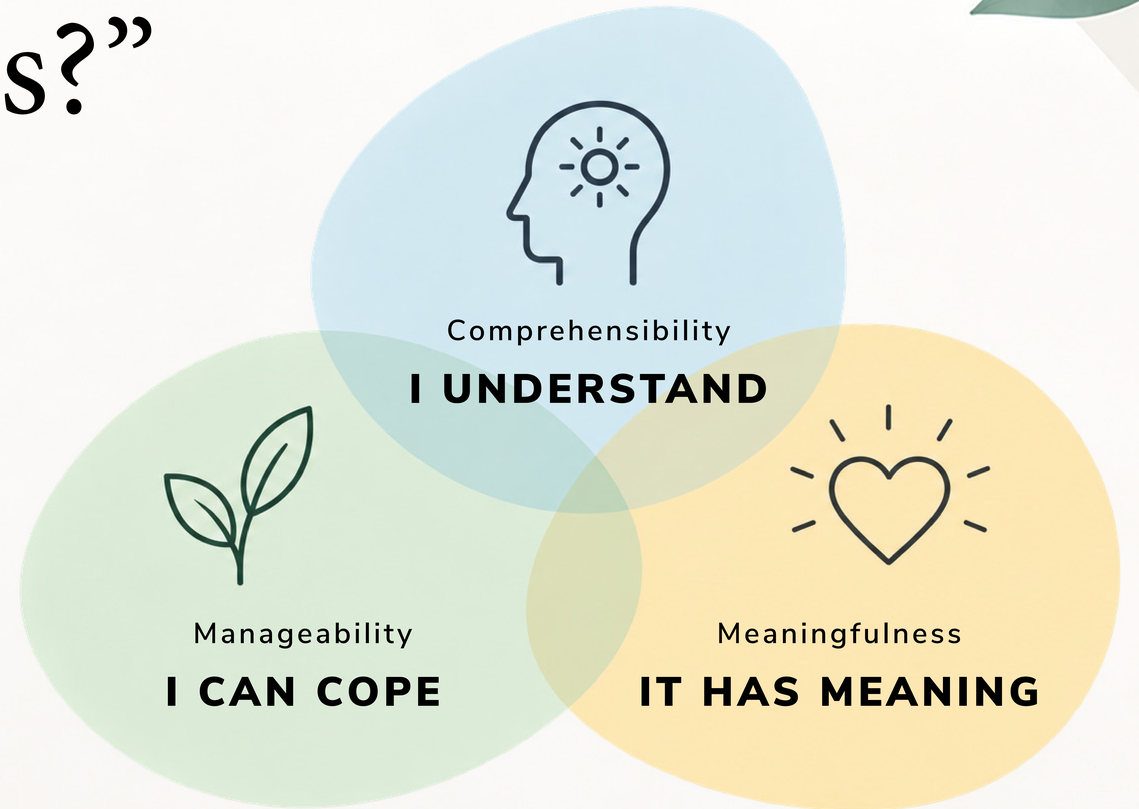


not only

„What causes stress?”

but

„What helps people cope?”



Antonovsky’s three dimensions of Sense of Coherence

How can the environment **support a child** in hospital?

EVIDENCE & MECHANISM

Research suggests that a well-designed physical environment can influence children's stress, sense of control and overall heathcare expperience. [1234]



WAYFINDING & LEGIBILITY

• predictability • orientation
• reduced cognitive load

„Where am I? Where am I going?"



PERCEIVED CONTROL

• choice • predictability
• agency

„What will happen next? What can I influence?"



POSITIVE DISTRACTION

• attention shift • anxiety regulation
• procedural coping

„What can I focus on instead?"



POSITIVE IDENTITY & ENGAGEMENT

• participation • self-efficacy
• resilience

„Who am I in this experience?"

Environmental graphics can become a salutogenic layer - translating these principles into the everyday experience of the hospital.

Selected evidence: Antonovsky, 1987 · Ulrich et al., 2008 · Quan et al., 2016 · Pati et al., 2020

01 Metro on foot

Can a story help a child understand where to go?

NARRATIVE WAYFINDING

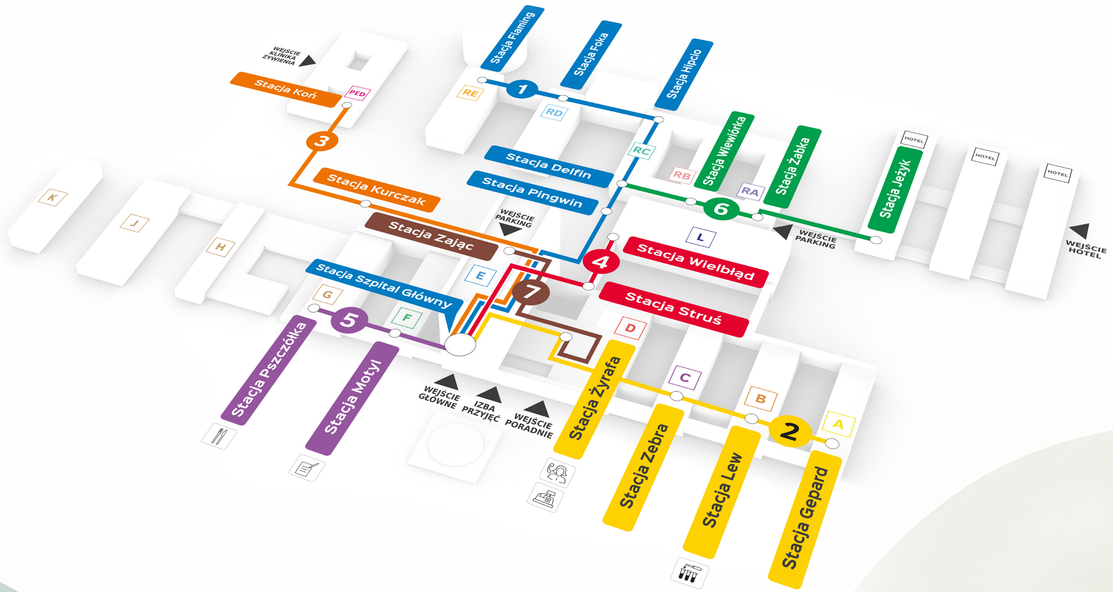


COMPREHENSIBILITY

A story can turn navigation into orientation - and orientation into a

sense of safety.





water



1

safari



2

farm



3

desert



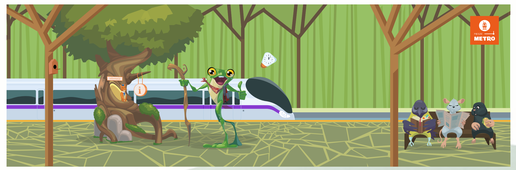
4

meadow



5

forest



6

mountains



7

A large hospital
can be a difficult system
for a patient to decode.

What if a child could read the hospital like a map

ROUTES
hospital paths

→

METRO LINES
colours + symbols

→

STATIONS
intersections

→

ORIENTATION
I know where I am



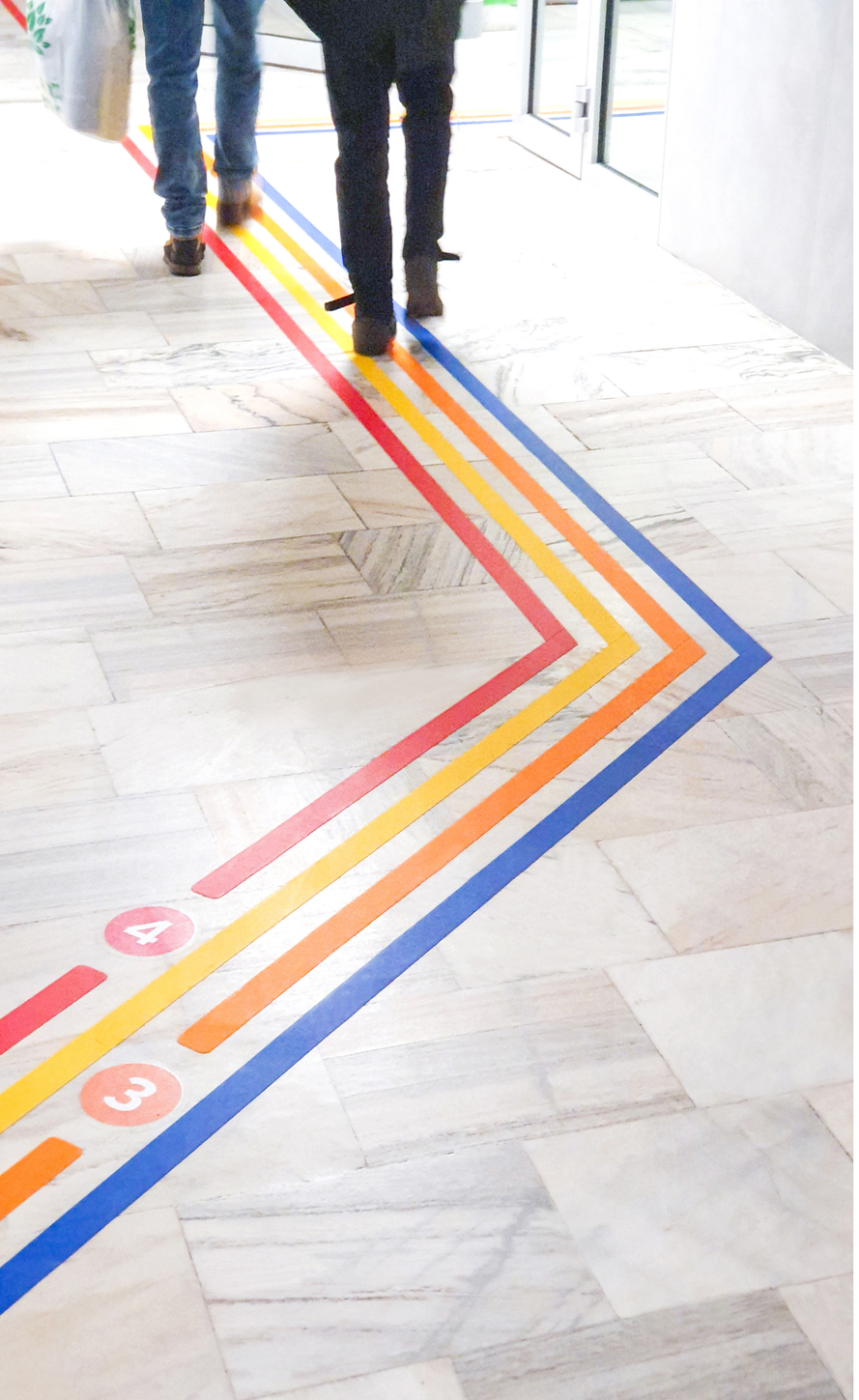

RC
BUDYNEK
Stacja Delfin
Linia
1
Szpital Główny
Pingwin
Delfin
Hipcio
Foka
Flaming
Wiewiórka
Żabka
Jeżyk


Ł7
PASAŻ
Stacja Pingwin
Linia
1


RE
BUDYNEK
Stacja Flaming
Linia
1
Flaming
Foka
Hipcio
Delfin
Pingwin
Szpital Główny

Blue Line 1

Yellow Line 2





Orange Line 3


Stacja Wielbłąd
4


D
BUDYNEK
Stacja Struś
4

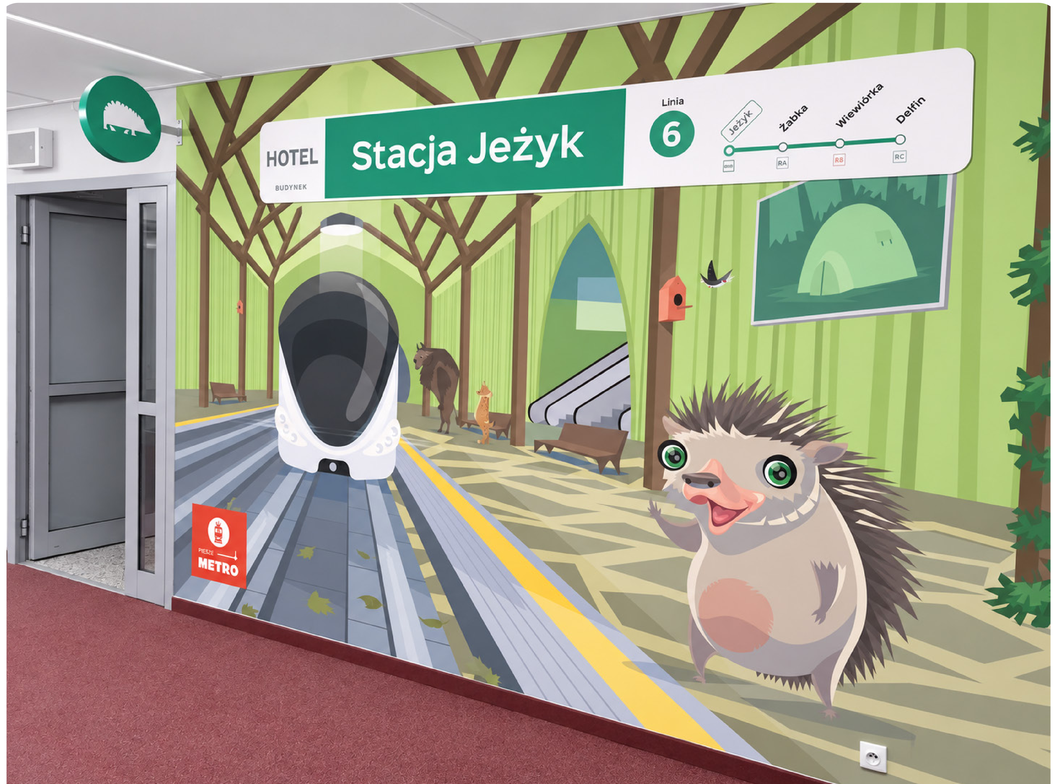
Red Line 4


L
BUDYNEK
Stacja Wielbłąd
Linia
4
Wielbłąd
Struś
Szpital Główny
Blok Operacyjny
PIESZE
METRO


Informacja
PIESZE
METRO




RA
BUDYNEK
Stacja Żabka
Linia
6
Informacja
Legenda
BUDYNKI
A | B | C | D | E | F | G | H | I | J | K


HOTEL
BUDYNEK
Stacja Jeżyk
Linia
6
Jeżyk
Żabka
Wiewiórka
Delfin
PIESZE
METRO

Green Line 6

02

CT Rooms

Can a story change how a child experiences a medical procedure?



The same procedure.

A different story.





- Positive distraction.
- A natural conversation starter.
- Easier communication.
- Better cooperation.


Aquilion Prime SP
Canon
wielka orkiestra świątecznej pomocy
wielka orkiestra świątecznej pomocy
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wielka orkiestra świątecznej pomocy





- → LESS ANXIETY
- → BETTER COOPERATION
- → POTENTIALLY LOWER NEED FOR SEDATION

Evidence from pediatric imaging environments suggests that non-pharmacological anxiety-reduction strategies can support successful procedures without sedation in some children.


Aquilion Prime SP
Canon
wielka orkiestra świątecznej pomocy


27
2019 FINAŁ
DAR FUNDACJI




ONE
Aquilion
Canon
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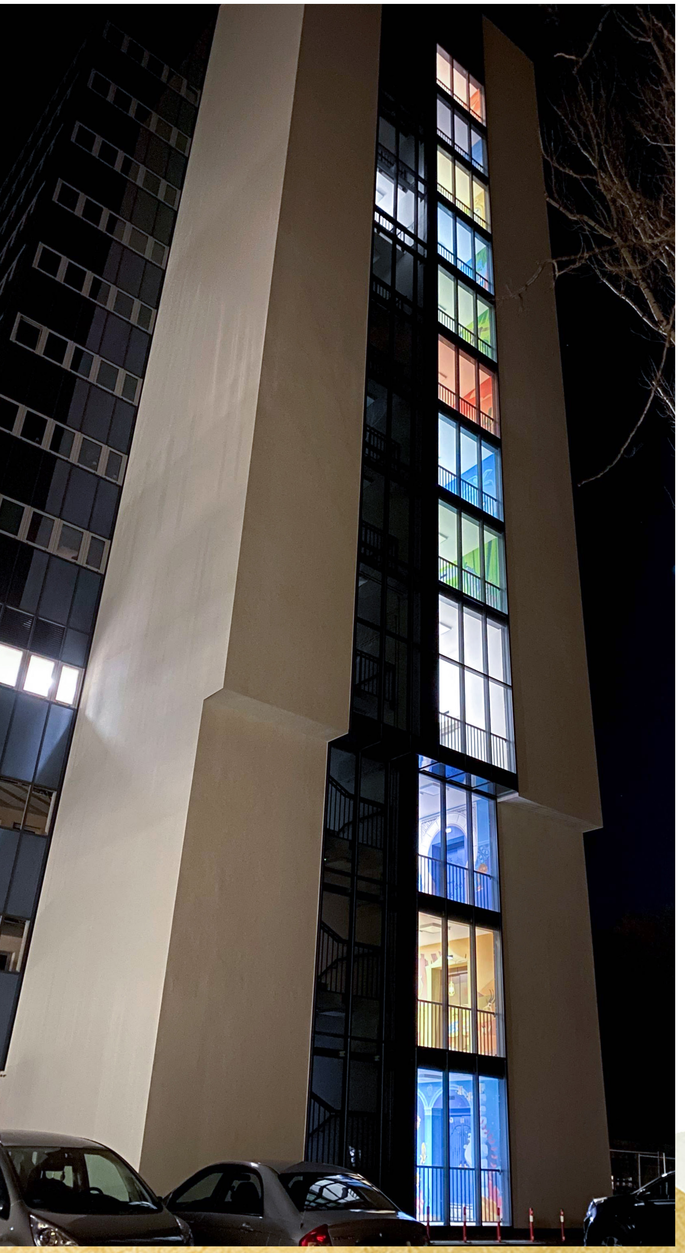
03 12 Floors Around the World

Psychologically supportive design









The journey
to the operating room
can be stressful.

For a child, every floor
is another step
towards the unknown.

12 floors.
12 places.
One journey.







What if every floor became a new destination?







We cannot change the destination - but we can change the experience of getting there





- → RECOGNITION
- → ANTICIPATION
- → LESS UNCERTAINTY
- → GREATER SENSE OF CONTROL



04 Travel, Dream, Discover



Can a journey open new perspectives and spark curiosity?





Not only a patient.

AN EXPLORER.

A clear framework makes
a challenging experience
easier to understand.

The child becomes an active participant.



Every visit became part of an ongoing exploration. Art, storytelling and wayfinding were designed as

one continuous experience.

ARRIVAL → CHECK-IN → TRAVEL TICKET → JOURNEY → DESTINATION












„PODRÓŻUJ, ŚNIJ, ODKRYWAJ."
MARK TWAIN
Poradnia dla podróżnych
następuj mnie!

Can a hospital stay
become an adventure
rather than
an interruption
of childhood?















TOKIO



LOS ANGELES



SYDNEY



ATENY






Paszport
Paszport



05 Discover your Superpowers

Can the environment strengthen the motivation?













In hospital, a child is often defined by illness.
We asked a different question:

What is your superpower?

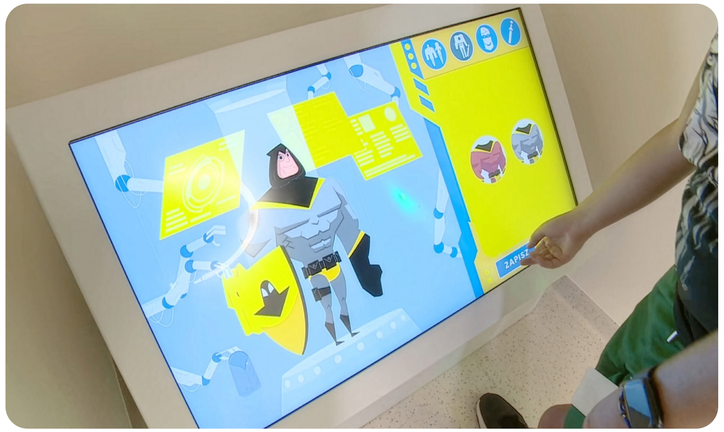
DISCOVER YOUR SUPERPOWERS

SELF-RELIANCE POSITIVITY RESILIENCE OPTIMISM EMOTION STRENGHT
UNIQUENESS ENERGY PLAY WILLPOWER ROUTINE











You are more than your illness.

IDENTITY • RESILIENCE • AGENCY • OPTIMISM

CHOICE
I choose.

CONTROL
I have influence.

ACTION
I can act.

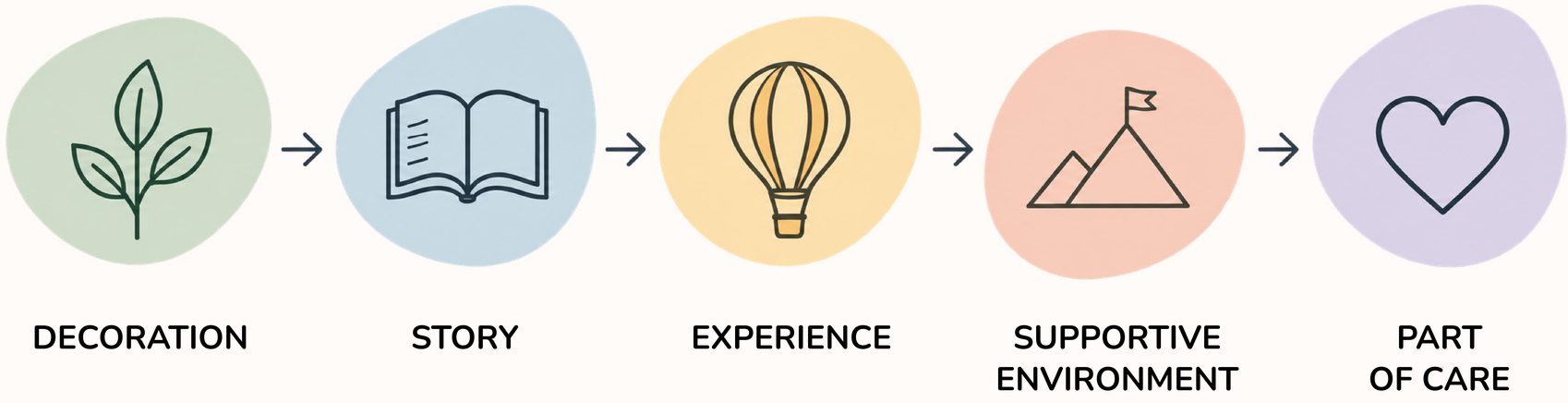
Interactive rehabilitation games.

EPILOGUE

If the walls could speak, what should they say?



FROM DECORATION TO CARE



When story, information and environment work together, design can become part of the care experience.

Design effects / outcomes

NARRATIVE WAYFINDING

Project: Metro on Foot



Explanation of the most difficult route in one sentence:

“Follow the red line until you reach Camel Station.”

DECORATION

Positive distraction



The Children’s Hospital of Pittsburgh redesigned its CT, MRI, PET/CT rooms to create a child-friendly atmosphere.

- reducing the need for sedatives by 87% in the first year after introduction and by 99% in the following year
- increasing team work efficiency through shorter examinations
- reducing waiting time for examinations to a minimum, despite a 10.9% increase in the number of examinations provided
- positive distraction

MOTIVATION

Psychologically suportive design



“I can’t wait to come back to the hospital!”

VALUE FOR A WIDER COMMUNITY

Supportive healthcare design can create value across the whole care ecosystem.



CHILDREN

- safety
- control
- reduced anxiety
- positive distraction



CAREGIVERS

- reduced stress
- greater engagement
- reduced feeling of guilt
- trust



MEDICAL STAFF

- communication
- cooperation
- smoother procedures
- lower level of professional burnout



HOSPITAL MANAGEMENT

- operational efficiency
- institutional identity
- positive image building
- cost-effectiveness

DESIGN THE EXPERIENCE, NOT ONLY THE SPACE.

A route can become a journey.
A procedure can become a story.
A hospital can become a place
that feels easier to understand
and find your way through.



Because hospital walls
will always speak.

medical design STUDIO

Our responsibility as designers is to decide what they say.

Thank you.



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