Happier + Healthier

The role of people, process and place in new approaches to designing for service

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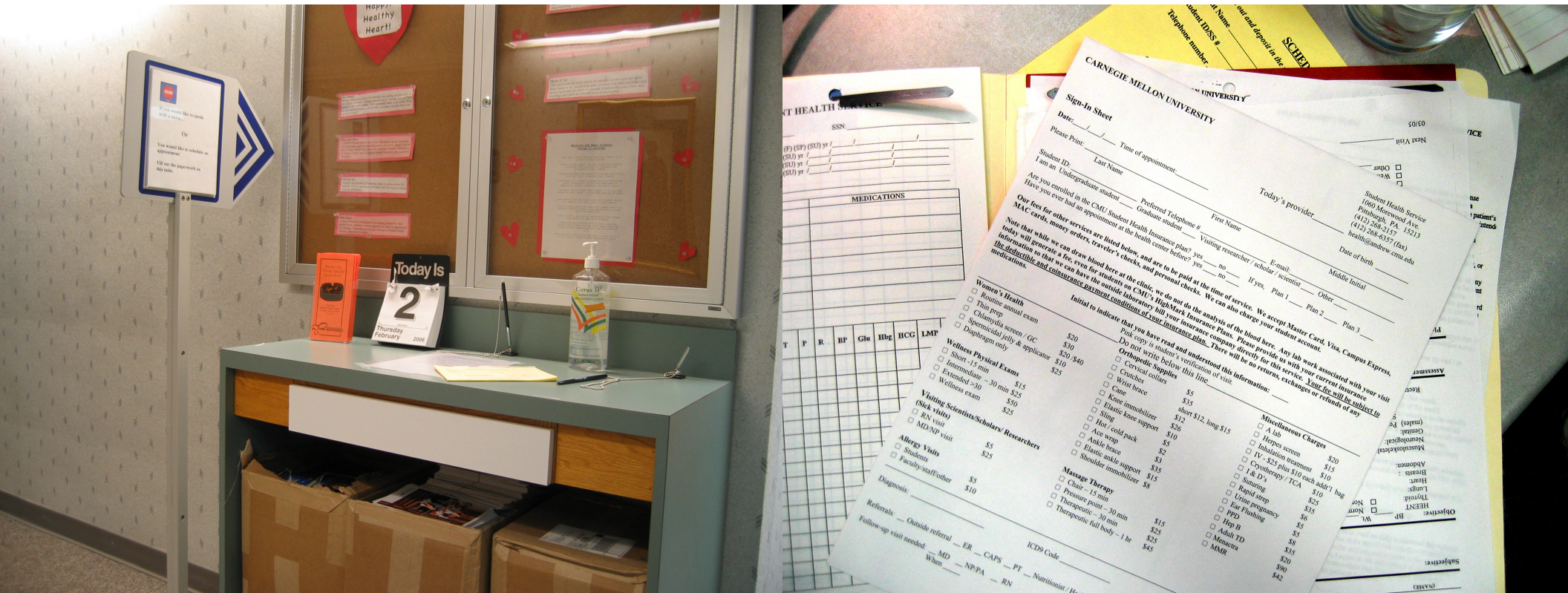evenson@andrew.cmu.edu

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Student Health Services at Carnegie Mellon University

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Offers a variety of basic medical services to university students much like a doctor's office

Deals with prevention and treatment of minor illnesses and injuries

The SHS clinic

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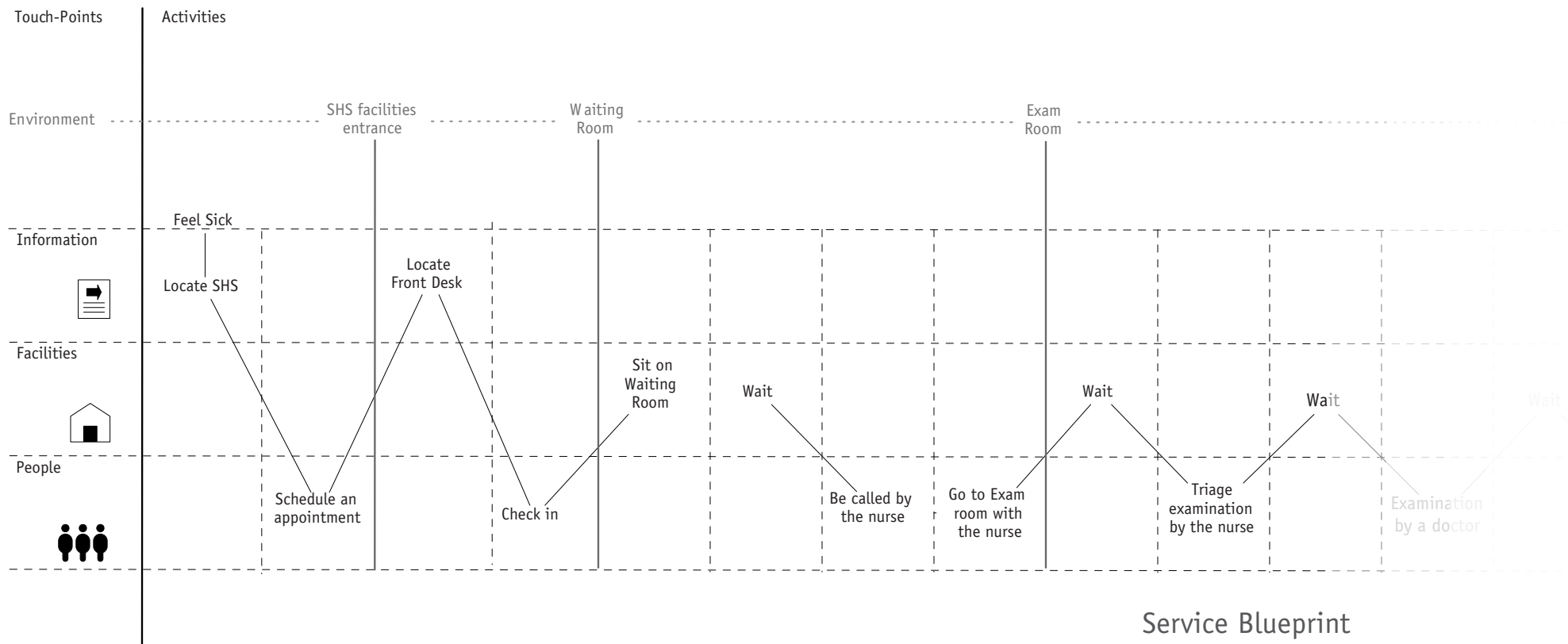
Lack of conscious design with regard to the space has led to the staff to find ways to improvise

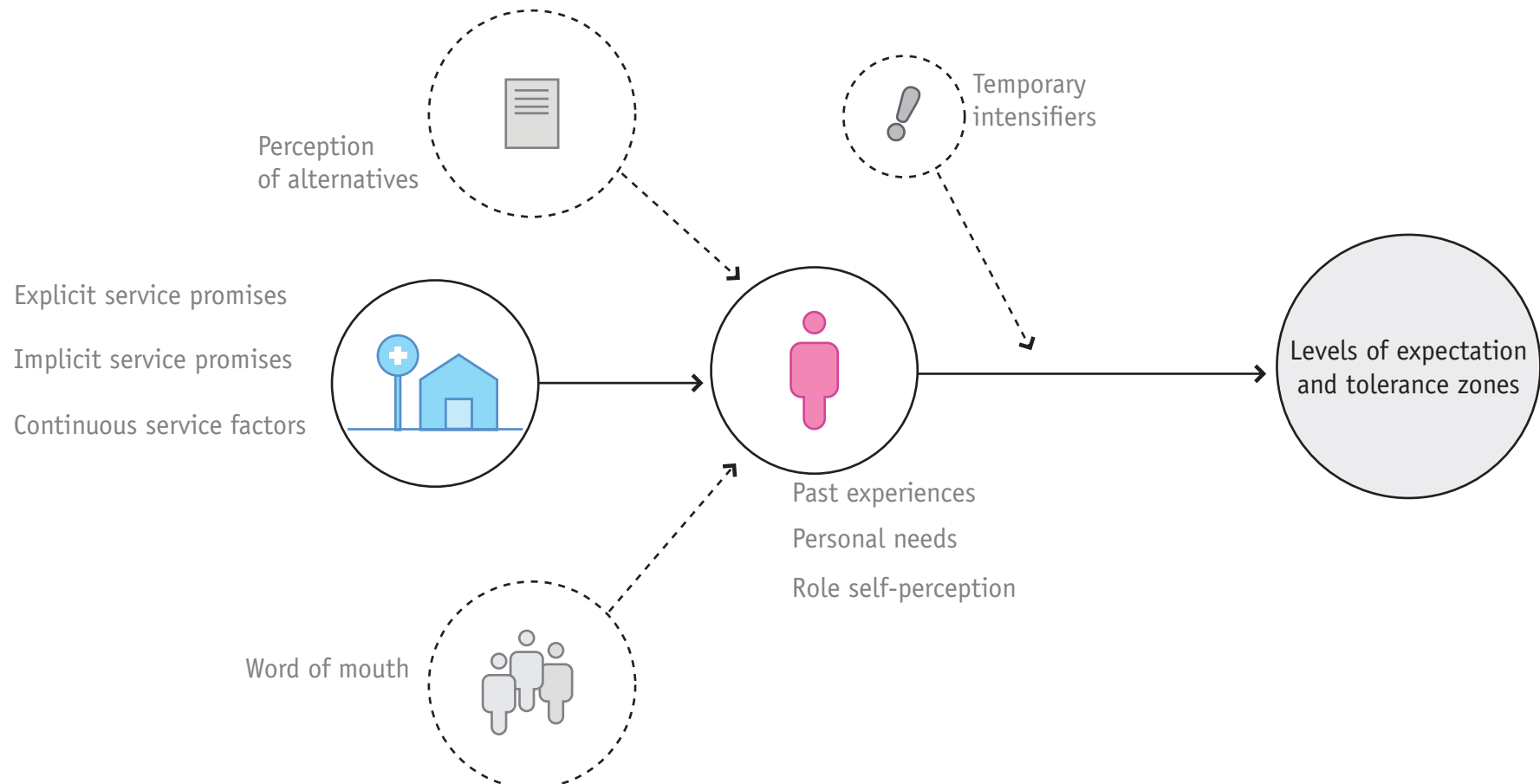The staff of the SHS is professional and caring and wanted an opportunity to improve their work and the emotional well being of patients.

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Service Design

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Service design is a form of architecture that involves processes rather than bricks and mortar

The perception of a service is influenced by many factors such as time, people, places and processes

Touch-Points | Activities

Environment — SHS facilities entrance — Waiting Room — Exam Room

Information

Facilities

People

Feel Sick

Locate SHS

Locate Front Desk

Schedule an appointment

Check in

Sit on Waiting Room

Wait

Be called by the nurse

Go to Exam room with the nurse

Wait

Triage examination by the nurse

Wait

Wait

Examination by a doctor

Service Blueprint

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Influencers and Tolerance

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Perception
of alternatives

Temporary
intensifiers

Explicit service promises

Implicit service promises

Continuous service factors

Levels of expectation
and tolerance zones

Past experiences

Personal needs

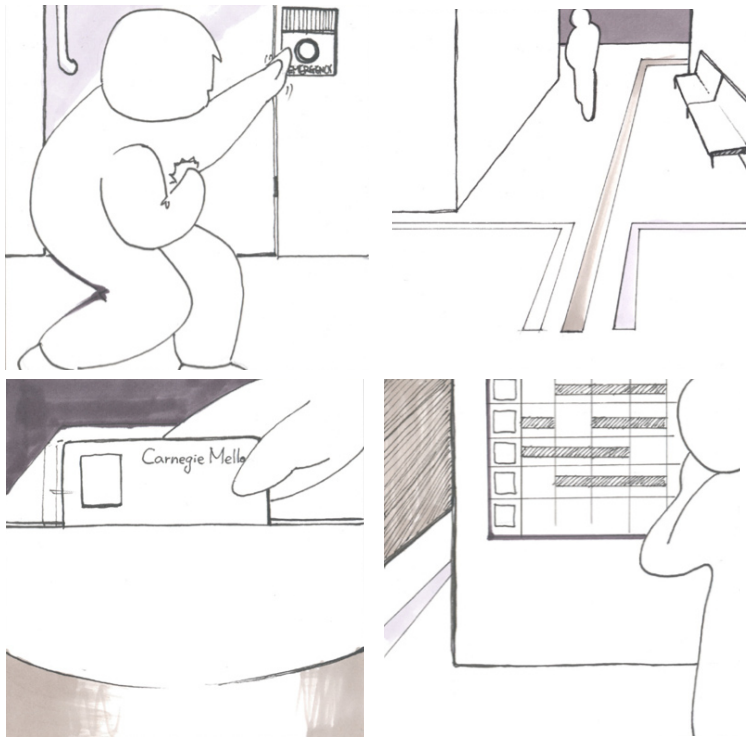Role self-perception

Word of mouth

The service designer must identify and respond to customer expectations by designing all the elements or resources that have the potential to influence the experience

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Three week exercise

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A small team of design students conducted a Three-Week exercise

Centered on the patients' discomfort and its influencers

High impact & low cost concepts were embodied in a scenario and presented to the director of the clinic

SELECTED DIRECTIONS
IMPACT VS COST

!!

Front Desk Redesign
Online + Phone reservation
Schedule calendar on the wall (show available slots)
Waiting Rules
Redesign Signage
Color paths on the floor

Digitize Medical Record
Rebuild the space to optimize workflow
Hire more specialists
Student ID used for electronic sign in

!

Greeting Rules
On-campus Student Job to help with the reservations
Emergency Button inside buildings
Comprehensive Webpage
Numbering System

University Center advice Kiosk
Specialized ER

$

$$

The clinic's management accepted the ideas and made some attempts of implementation.

The staff's implementation

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Traces of the re-design were hard to see

Discovered big dissimilarities between the staff and the student's experiences

The caregivers found themselves unable to feel related to the suggested improvements

The staff found it difficult to relate to sources of discomfort

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Lessons learned

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Designers must understand how organizations work at all levels

A Service Design intervention should suggest improvements and provide tools for the internal stakeholders so that changes are not only executed and effective but also embraced and sustainable over time

Service innovation through Participation:
Design development should be 'for the people' and be done 'by the people'

Stakeholders Map

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Rediscovering the challenge

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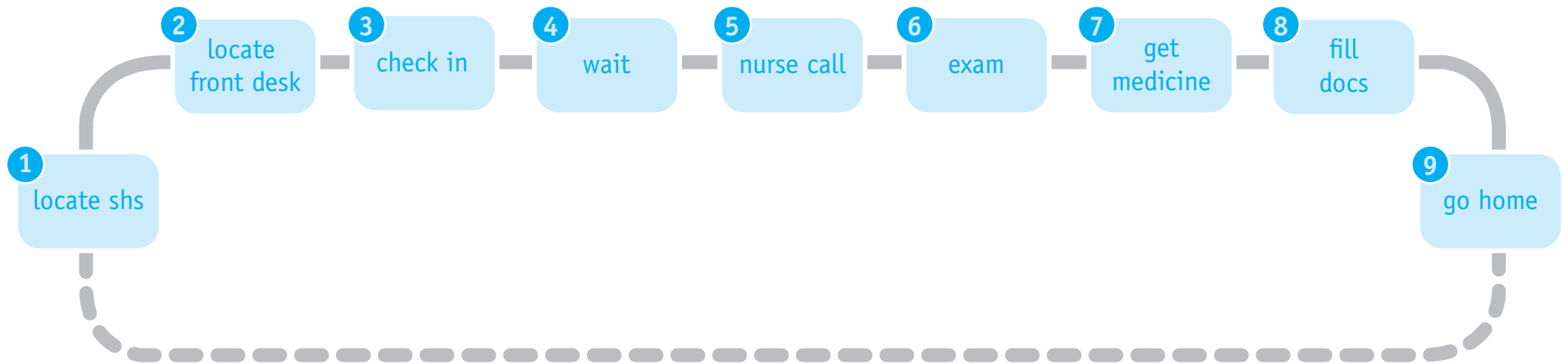| *Goal*	*Channel*	*Walk In Journey*	*Parient Research & Observation*	*Staff Interviews & Journals*
		Feel Sick	more visible website / awareness campaign / campus signage / information desk @ UC	
be informed & make an appointment	CMU campus & online info	Locate SHS		
		Schedule an Appointment	more efficient phone system / online reservations / chat reservations	
check in	SHS facilities entrance	Locate Front Desk	on-site signage / facilities layout	*online scheduling for massage and non clinical appointments
		Check In	new check in process / campus id + rfid	*how to make it easier for the front desk staff?*
wait	Waiting room	Sit on Waiting Room	support work / academic activities / provide opportunities for relaxing	*community dedicated website wellness opportunities made more explicit
		Wait	**feedback about waiting time left** / **transparent process** / **do not sit & wait, be paged**	
exam	Exam room	Be called by the Nurse	bright sign	
		Go to Exam Room with the Nurse		
		Wait	**reduce uncertainty** / **provide information**	
		Triage Examination by the Nurse	make the process transparent (know which step you are in)	
		Wait	why no one is with you? process transparency / relax / work opportunities	*communication between the front & back office
		Examination by a Doctor	not just pain killers	*how to make it easier for the doctor?*
		Wait	*connectedness* / *interactivity and intelligence* / *physical presentation* / *emotional abilities*	***revamp of the appointment area**
		Doctor / Nurse brings medications		*how to make it easier for the nurse?*
		Doctor / Nurse fills docs		*more efficient paperwork, check instead of writting
arrange for follow up & exit	SHS internal hallways	Go to the Front Desk	**find your way out (signage, floor lines...)**	*more and better planned office space
		Make an Appointment	be conforted, go back to work unworried / make it quick, make it simple / reservation boards, pick your spot / reservation touch screens on site & UC / make your reservation on the exam room, dont stop on your way out / make your resercation later online	*campus awareness and branding
		Go Home		

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Design Target

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The Advice and Appointment (A&A) area surfaced as difficult both from the student side and the staff side

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Service Journey

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Patient Journey for the A&A area

① locate shs

② locate front desk

③ check in

④ wait

⑤ nurse call

⑥ exam

⑦ get medicine

⑧ fill docs

⑨ go home

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Walk a mile study How does the clinic feels like?

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Goal: Locate the clinic

It can be very chaotic, the clinic is not visible from the street

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Walk a mile study How does the clinic feels like?

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Goal: Locate the front desk

Lots of information, none of it really helpful

Walk a mile study How does the clinic feels like?

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Goal: Sign In

Misterious Process, the information is either missing or too confusing

Walk a mile study How does the clinic feels like?

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Goal: Wait to be seen (be seen as soon as possible)

No indicator for the waiting time, the waiting room is uncomfortable

Town Meeting How do we make it better?

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Participatory Design Session

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Town Meeting How do we make it better?

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"You are the experts"

All the staff was involved

4 Teams - conformed randomly

Advice and Appointment Journey was analyzed

Particular and open ended tasks were assigned to each team

Analog + Dynamic involvement through "Moment Flip-Books"

Moment Flip-Book

Step **2**

Imagine this is your first time at the clinic, and you need to **locate front desk**

What if...

welcome

What do you think of this solution?
What would you add to it?
How would you do things different?

Thank You!

1. Introduce the task & difficulties   2. Suggest improvements   3. Refine / discuss

Town Meeting How do we make it better?

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Meeting Dynamics

discover & discuss
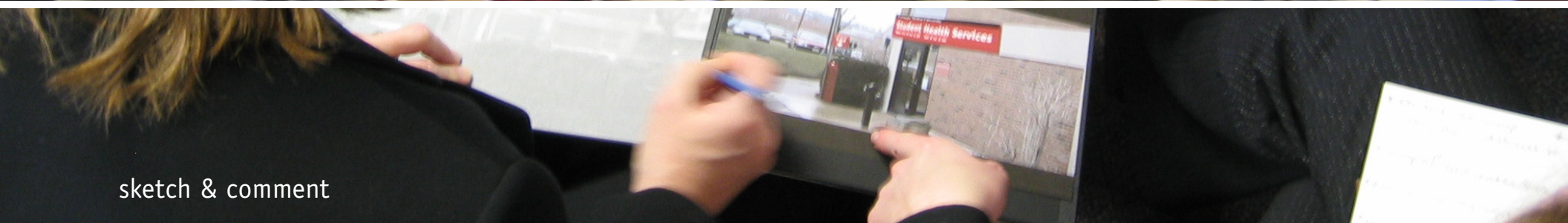
sketch & comment

present & reflect

Town Meeting How do we make it better?

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Staff's sketches
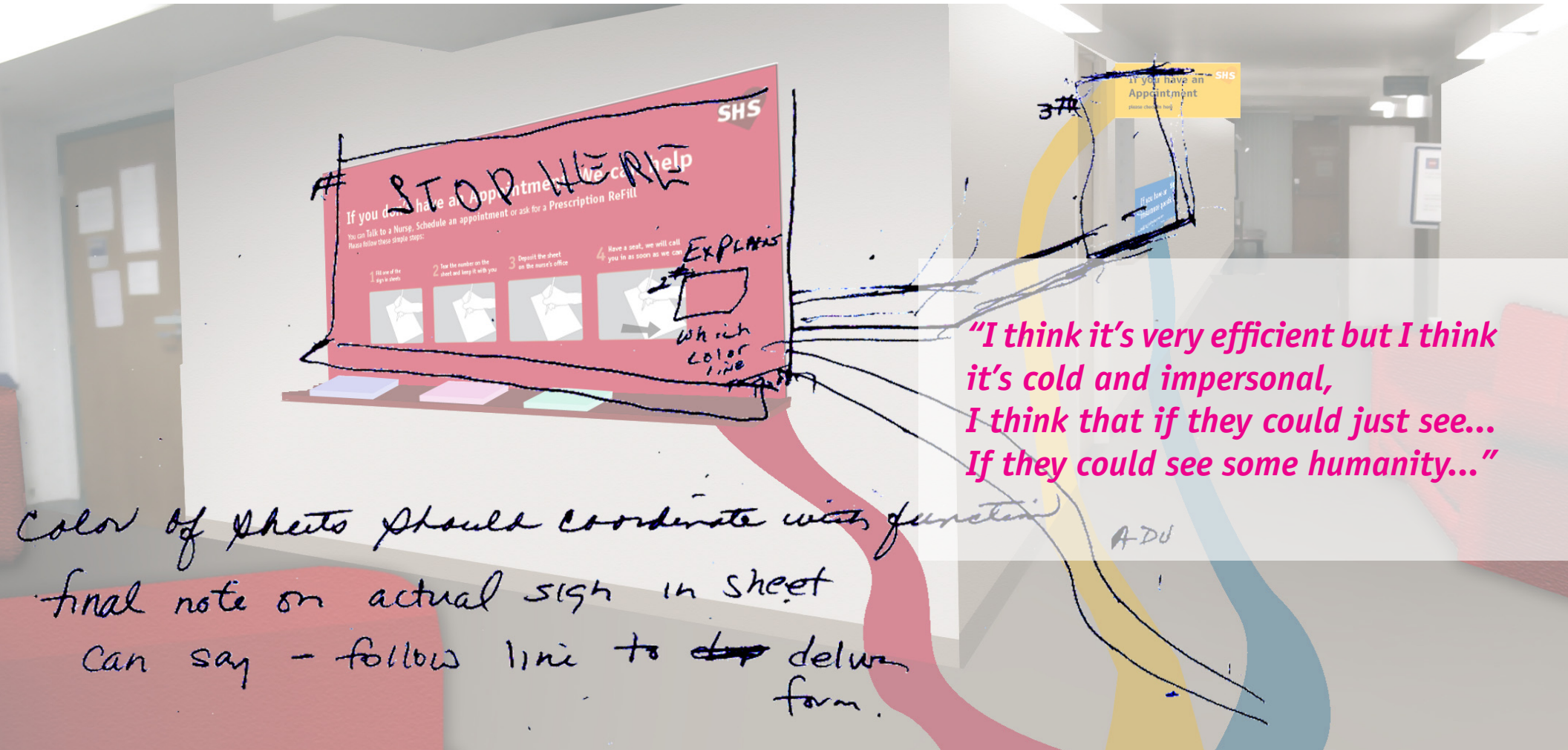
"I think it's very efficient but I think it's cold and impersonal, I think that if they could just see... If they could see some humanity..."

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Action Principles

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Context & People
student's situation
caregiver needs
use "human language"

Expectations
State what the service is
What is it for?
How long it takes to access it
What is the procedure
for accessing it?

anticipate

acknowledge

SHS

inform

innovate

optimize

*Make use of On-Campus resources as
a way to develop innovative changes

*Constant validation strategies

Processes
Simplify Paperwork
Automate tasks
More human resources taking
care of the front line

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Phase 1

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Stage 1: Implement new sign in forms, improve interior signage
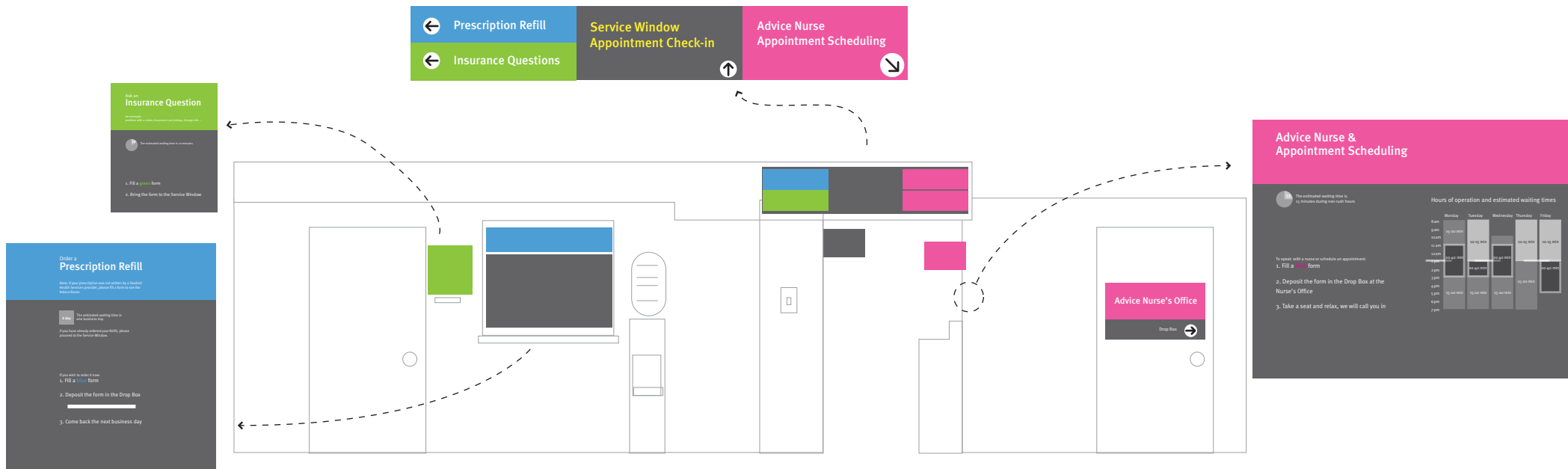
Stage 2: Improve exterior signage, improve web site

Stage 3: Make SHS presence more evident inside campus (external touch points)
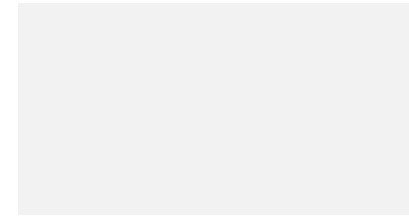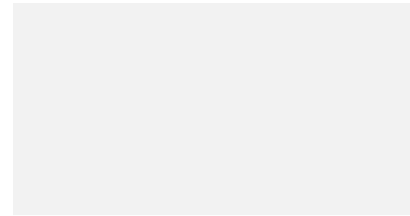
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Phase 2

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Stage 4: Implement electronic records

Stage 5: Recondition space inside the clinic

4 see nurse

a&a nurse's translucent room

5 walk out

a&a electronic sign in

service window

3 wait

2

sign in

reception area
study, relax, rest...

wayfinding sign
"Information Totem"

1 start

Plan of Action

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Scaffold improvements - Experience Road map

Provide campus contacts
for the design of
particular touch points

SHS Action Principles

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Influent factors

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Service Design for Human to Human services should consider:

Managing expectations

Any service to be perceived as good it needs to fulfill not only the client's expectations but also the ones of the service provider.

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Influent factors

Service Design for Human to Human services should consider:

Managing expectations	Organic systems and emotion			
Any service to be perceived as good it needs to fulfill not only the client's expectations but also the ones of the service provider.	The emotional state of the service provider will influence their ability to provide not only specialized help but also to make it in a warm and caring way. Provider's Mood + Service = customer's perception More than expected= good Less than expected = bad			

Influent factors

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Service Design for Human to Human services should consider:

Managing expectations	Organic systems and emotion	Clear and tangible interventions		
Any service to be perceived as good it needs to fulfill not only the client's expectations but also the ones of the service provider.	The emotional state of the service provider will influence their ability to provide not only specialized help but also to make it in a warm and caring way.	Prototyping can play an important role in making tangible the types of changes ideated		
	Provider's Mood + Service = customer's perception More than expected= good Less than expected = bad			

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Service Design for Human to Human services should consider:

Managing expectations	Organic systems and emotion	Clear and tangible interventions	Participation and emotional investment	
Any service to be perceived as good it needs to fulfill not only the client's expectations but also the ones of the service provider.	The emotional state of the service provider will influence their ability to provide not only specialized help but also to make it in a warm and caring way.	Prototyping can play an important role in making tangible the types of changes ideated	The participants are not only investing time but also creativity and intelligence. This involvement results in an emotional bondage through ownership	
	Provider's Mood + Service = customer's perception More than expected= good Less than expected = bad			

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Service Design for Human to Human services should consider:

Managing expectations	Organic systems and emotion	Clear and tangible interventions	Participation and emotional investment	Ownership and sustainability
Any service to be perceived as good it needs to fulfill not only the client's expectations but also the ones of the service provider.	The emotional state of the service provider will influence their ability to provide not only specialized help but also to make it in a warm and caring way.	Prototyping can play an important role in making tangible the types of changes ideated	The participants are not only investing time but also creativity and intelligence. This involvement results in an emotional bondage through ownership	The redesign must belong to the people inside the service
	Provider's Mood + Service = customer's perception More than expected= good Less than expected = bad			

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Thank You

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