

Part 1

Healthcare for Young Women with Periodontitis

Color

●

fc2d6

unhealthy purple gums

●

eb7575

healthy pink gums

●

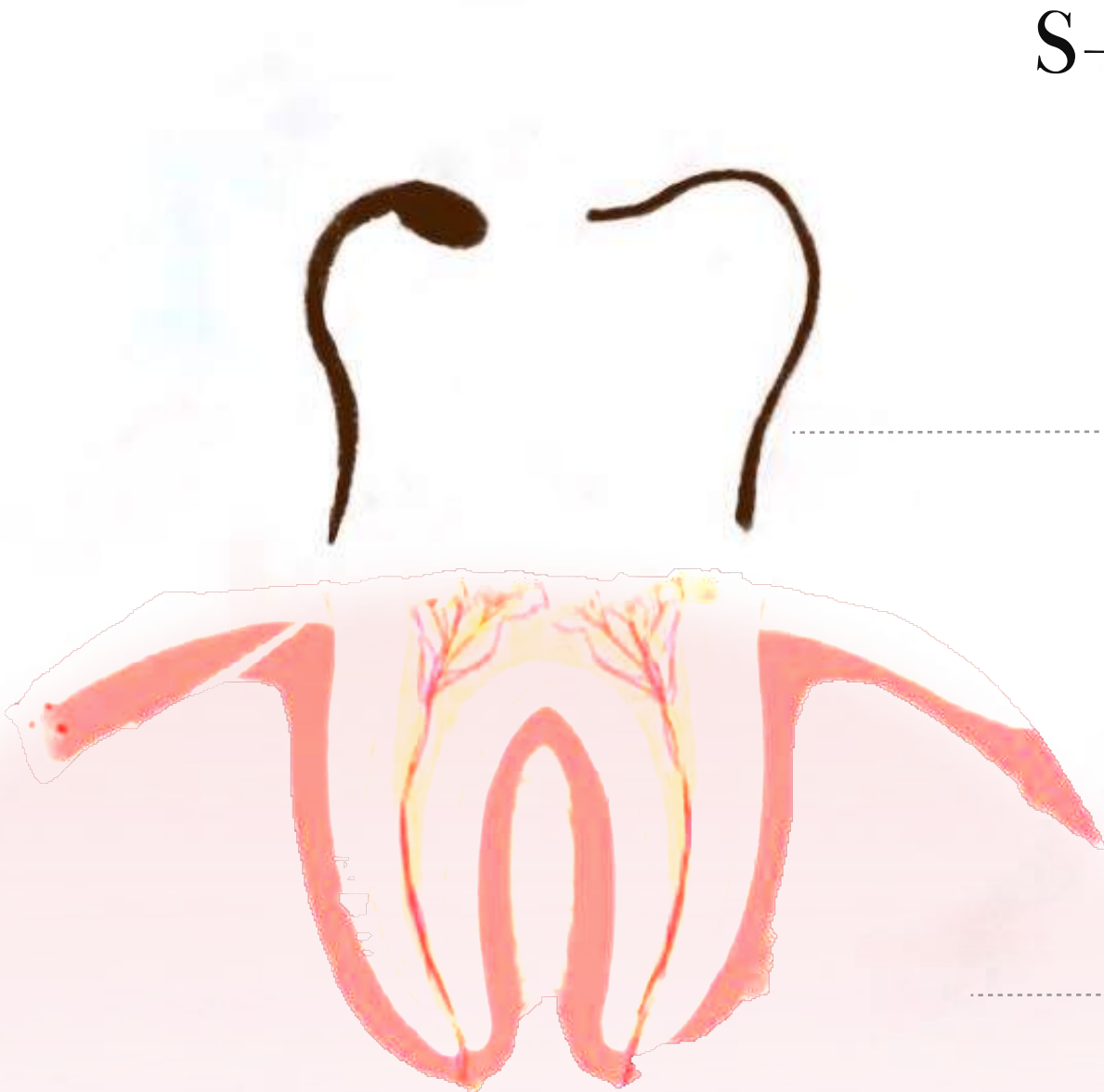
d9d9d9

rational thinking

●

cdf5ee

young and energetic



S-CURVE: SYMBOL OF FEMININITY

TOOLS FOR TREATING PERIODONTITIS:
MOUTH MIRROR AND GINGIVAL SCALER

LINEAR: COLOR CHANGE IN GUMS
(FROM UNHEALTHY TO HEALTHY)
HALF MOON: FEMININE SYMBOL

O I

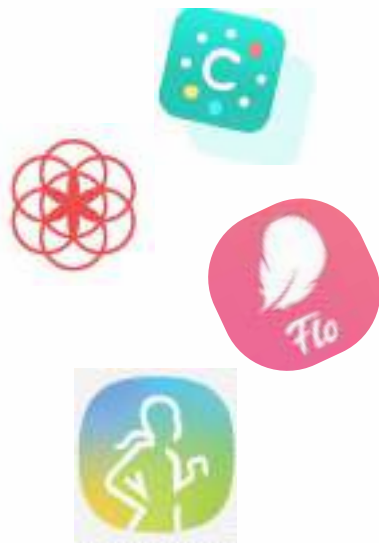
HEALTHCARE FOR YOUNG WOMEN WITH PERIODONTITIS

TO CURE, RELIEVE AND COMFORT THE YOUNG FEMALE PATIENT WITH PERIODONTAL DISEASE

DESIGN FOR FEMALE/ SERVICE DESIGN/ Co-CREATION



FEMTECH IS HELPING TO
MATCH CAPITAL AND
TALENT TO UNMET
NEEDS



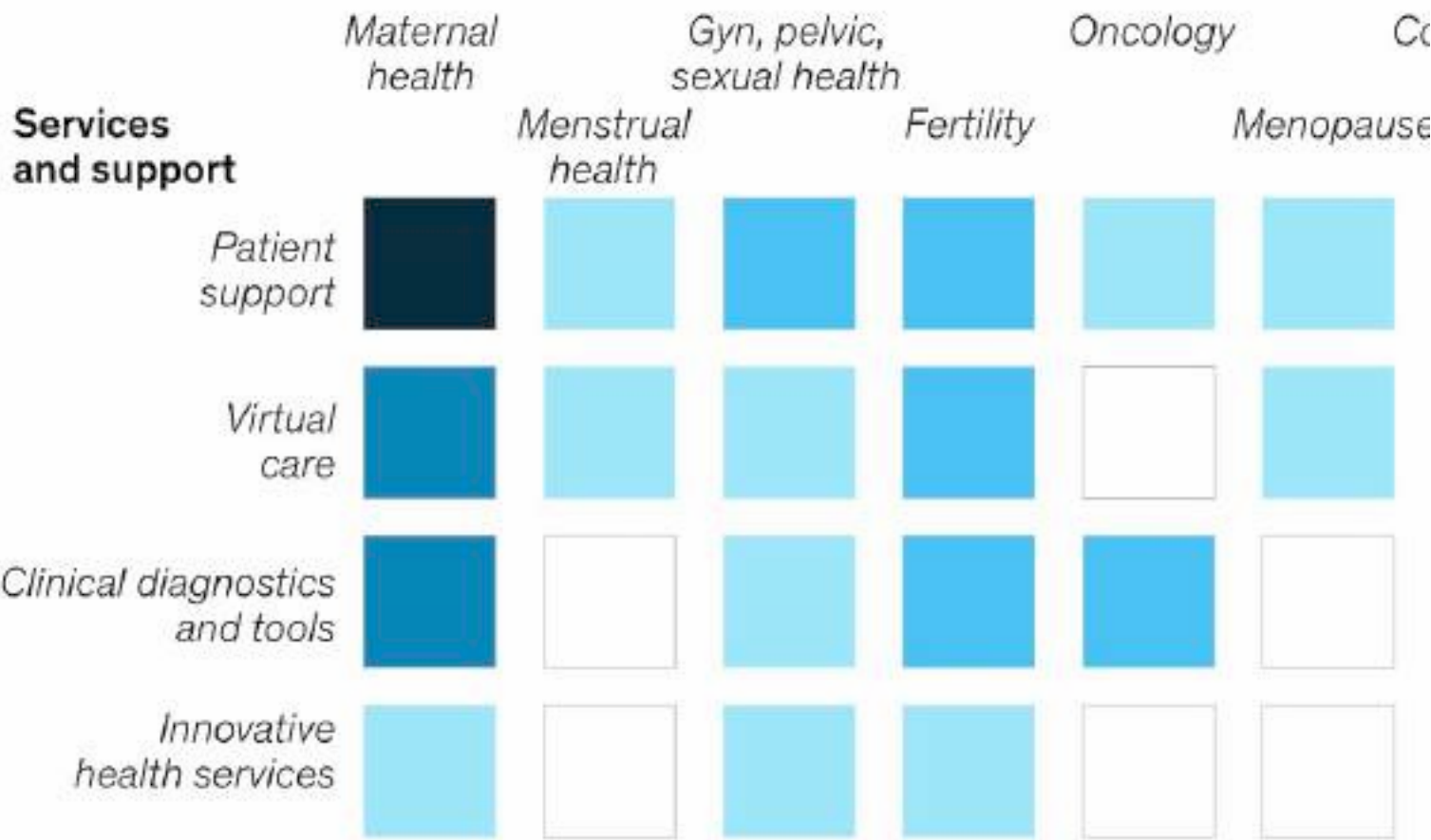
CLUE
2016

FEMTECH

FROM EUROPE TO ASIA

UNDER THE SAME CIRCUMSTANCES,
WOMEN ARE MORE LIKELY TO BE
AFFECTED BY HORMONES

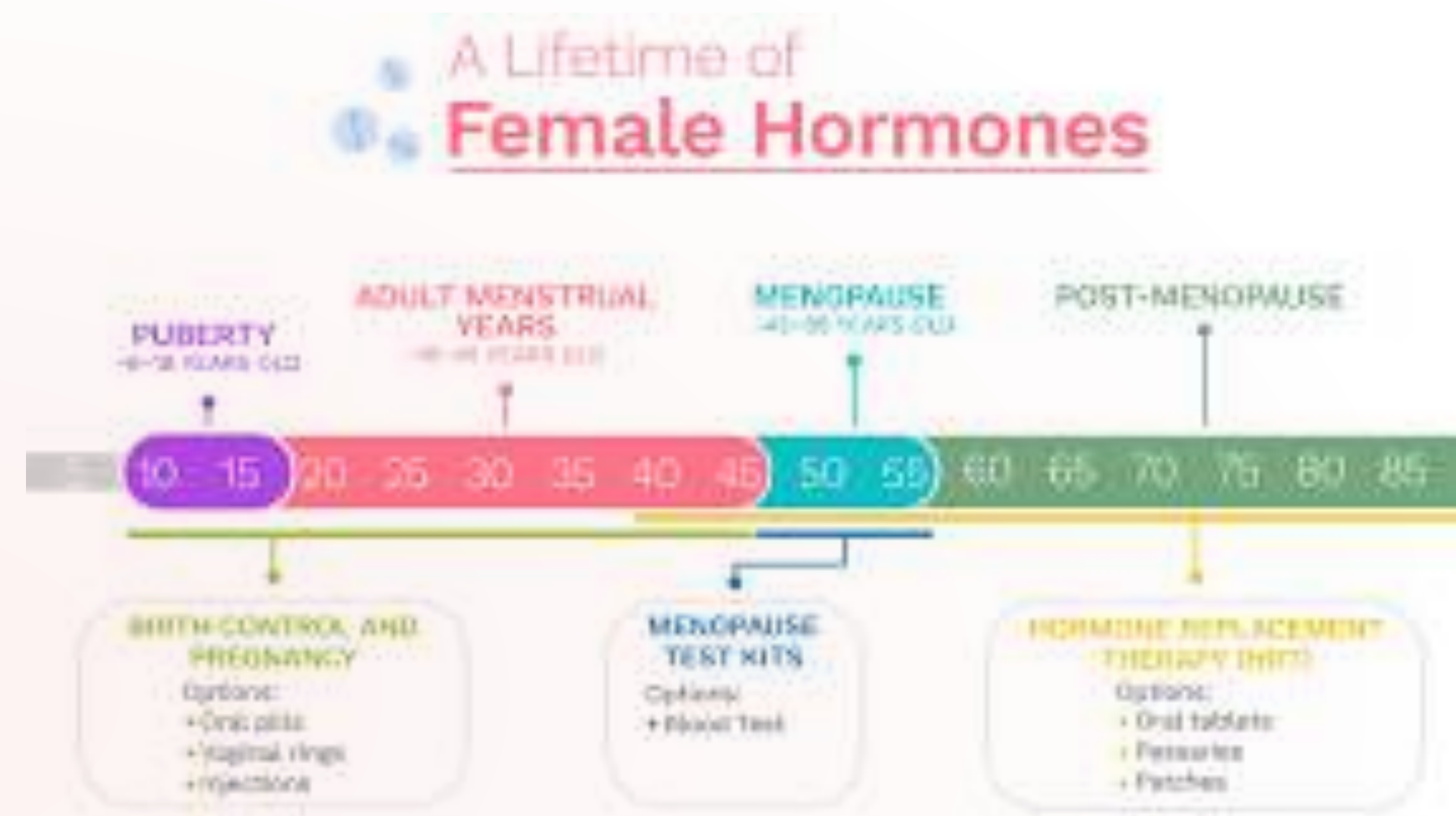
FemTech start-ups, by type and therapy area



HEALTHY ORAL HEALTH ACTION PLAN OF THE NATIONAL HEALTH COMMISSION (2019-2025)

FOR YOUNG PEOPLE ———
FOCUS ON MAINTAINING
PERIODONTAL HEALTH

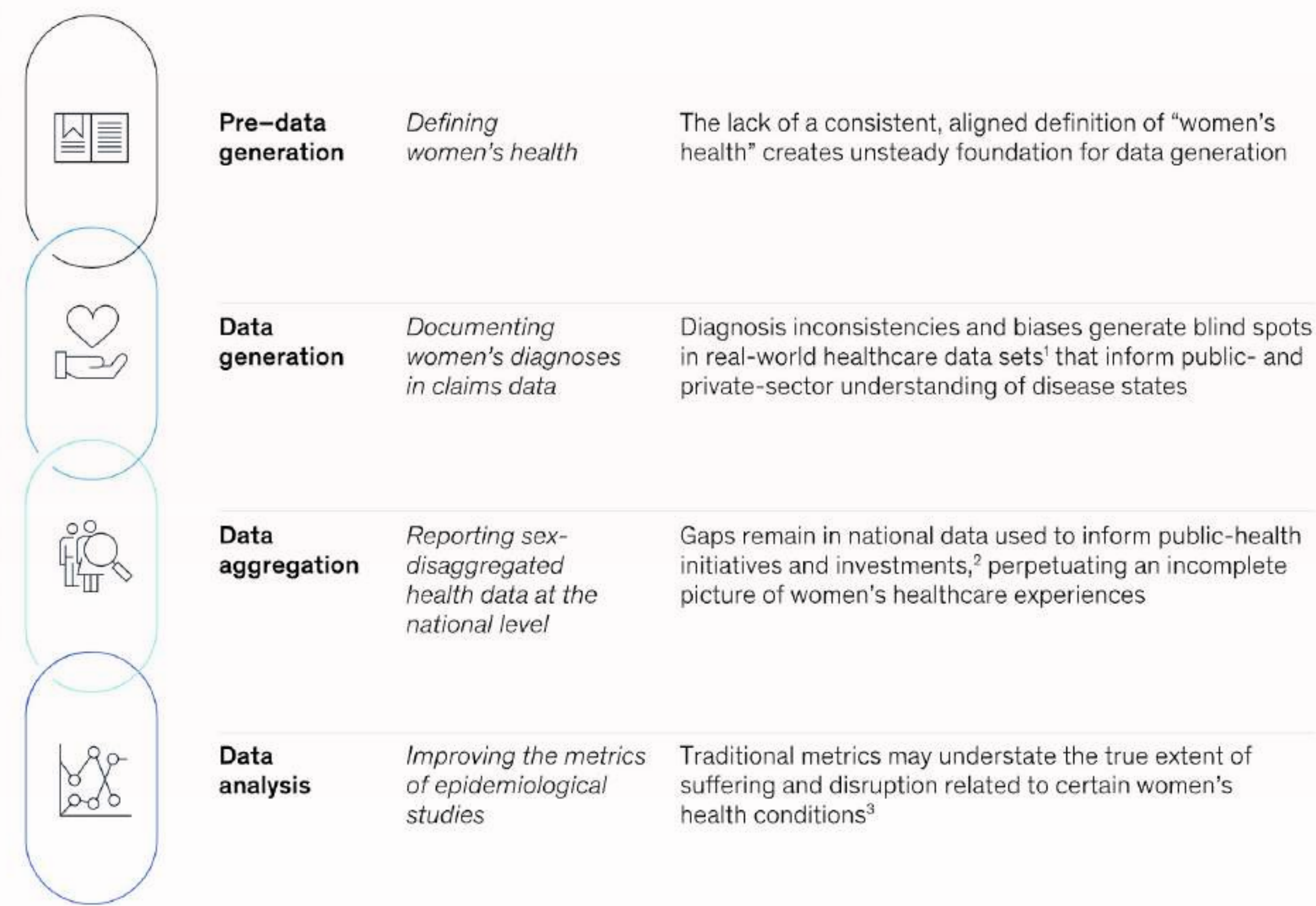
”PERIODONTITIS TREATMENT
IS LIKE BRAKING ON A HILL”,
EARLY TREATMENT IS KEY



PUBERTY – MENSTRUAL PERIOD – PREGNANCY PERIOD

“CONTINUOUS
RECORDING AND
INFORMATION
EXCHANGE OF
RESIDENTS’
ORAL HEALTH FILES
RELYING ON THE
INTERNET”

Shortcomings exist at each stage of the data value chain in women’s health.

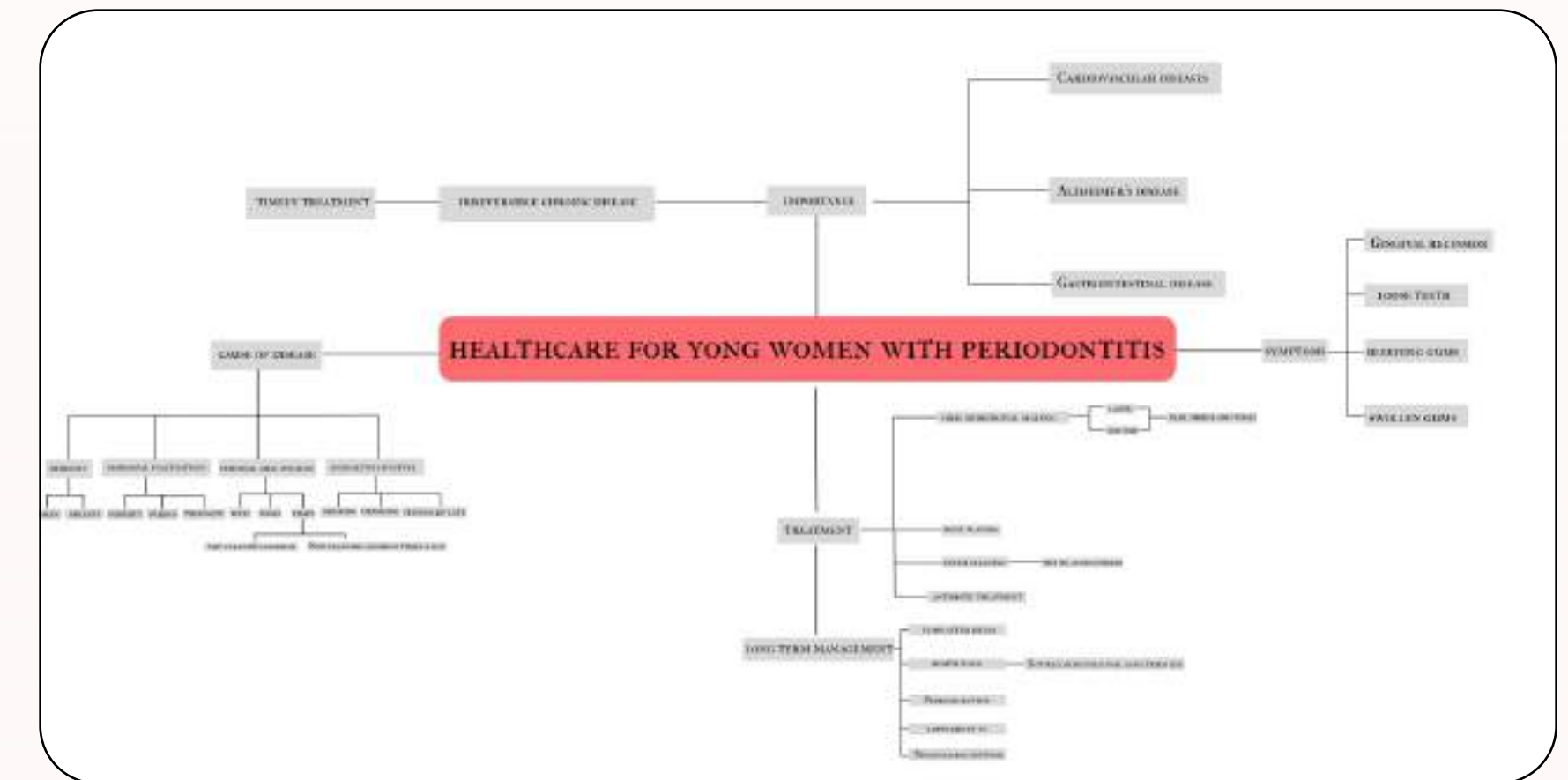


STEP 3. RESEARCH MATERIAL PREPARATION

问题情境设计:

各位牙周炎患者们，你们好。对于年轻牙周炎患者的健康服务需求进行慢性病管理的研究调查。这项研究将有利于人们养成更加健康的生活方式，有利于改善医疗水平和优化服务体验。我们将严格保障患者的隐私，并将最后的结果匿名化。

- 1.您是第一次听说牙周炎吗？（选择对牙周炎的熟悉程度）0到10
- 2 您的年龄是
- 3 您目前的治疗方式是什么样的
- 4 您的症状有哪些
- 5 您是怎么发现的
- 6 您什么时候出现的第一次症状
- 7 您是否因此问题之前就诊过牙科
- 8 您多久复查一次
- 9 您对于患此病感到的焦虑程度 0到10
- 10 生活方式调查
- 11 您的文化程度
- 12 您的家人中有人患此病吗
- 13 您想获得怎样的针对女性的慢性病管理服务
- 14 您还希望获得牙周炎的哪些服务
- 15 您还希望用哪个平台获得帮助
- 16 您当前每个月的有償收入是多少
- 17 您能详细描述一下你的就医流程吗？第一次和复诊的？

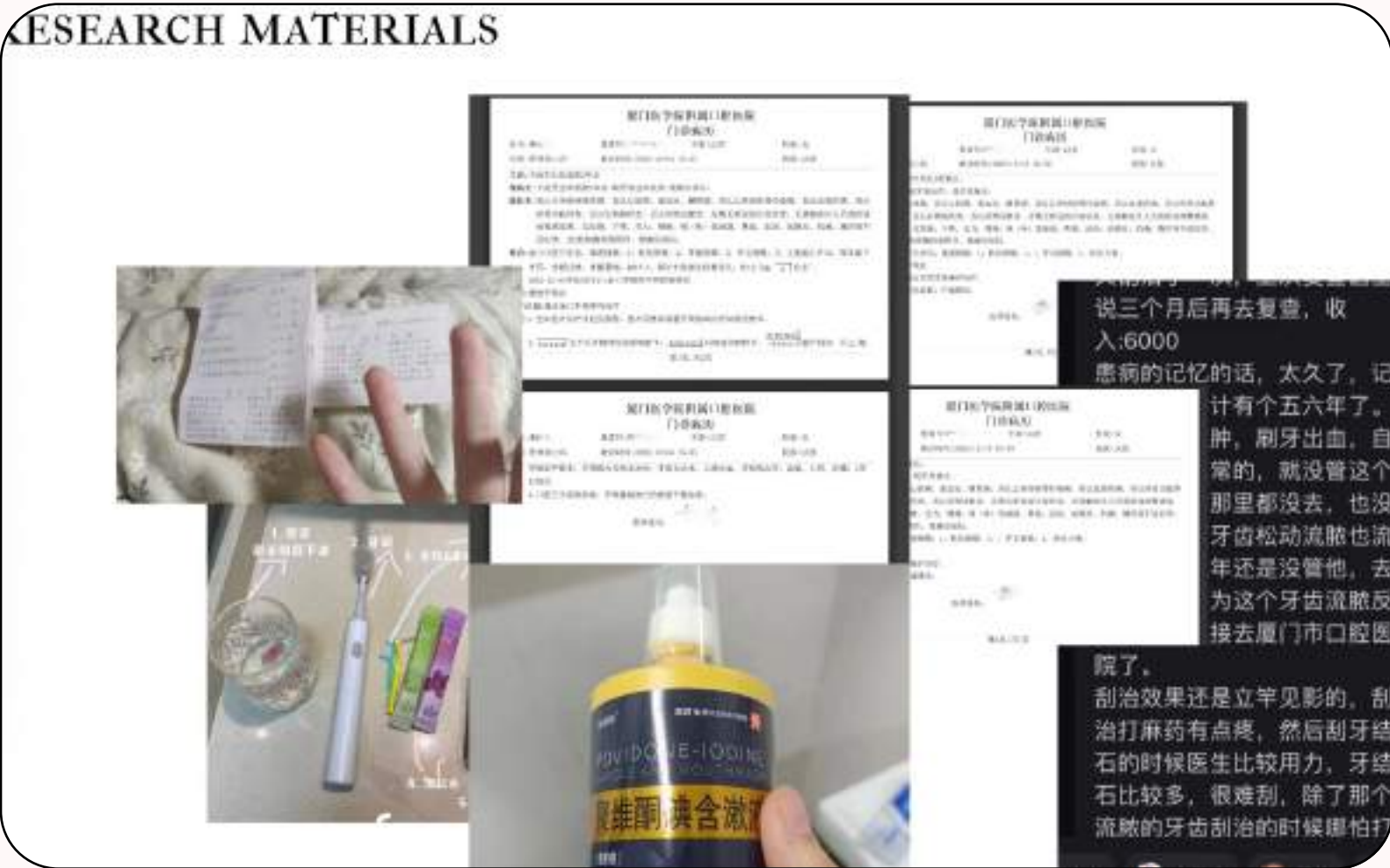


STEP2 RESEARCH PLAN

Question	Ideal best channel	participant	Time	Place/platform	material needs	Remark
Question 1	Interview with two public hospital doctors	2 doctors and 1 user researcher	March 10, 2023	Jiangxi Renmin hospital (request anonymization)	Doctor interview outline	Shuting Xiao
Question 2	Interview with a private hospital doctor	1 doctor(owner) and 1 user researcher	March 22, 2023	Beijing hospital(request anonymization)	Doctor interview outline	Shiyi Xie
Question 3	Four User Interviews	4 users and 2 user researcher	March 23-25, 2023	wechat	User interview outline	shuting Xiao and Shiyi Xie
Question 4	Female User Platform	2 user researcher and 30 users	March 27, 2023	Xiaohongshu	python	Shuting Xiao

NOTE : THE MAIN POINTS IN THE INTERVIEW HAVE BEEN MODIFIED BY MEDICAL PROFESSIONALS, ADDING ECONOMIC INCOME

STEP 4 RESEARCH MATERIALS



1 你们是怎么发现患者患有该疾病的？患者来的时候症状明显吗？

牙结石+牙出血症状+洗牙 牙齿松动 顺带发现口臭 牙周引起的牙髓疼痛（并附上图片展示）大部分都很明显上医院来查看 多是有别的症状才过来就诊的患者，如：牙结石，牙出血，洗牙要求，牙齿松动，顺带发现口臭或是牙周引起的牙髓疼痛

2 你们做的随访服务的方式是什么？

女年轻医生：矫正 种牙有 打电话通知他们过来（展示一些纸质表格）目前对牙周炎的随访没有

3 分享一下最印象深刻的故事—故事中有怎样的一后来发展如何

女年轻医生：患者年纪较轻 患有 侵蚀性牙周炎 与遗传有关 来的时候因为下门牙松动出血 被诊断为牙周炎

阿姨？female

科诊所 管理者

周炎→牙龈，牙周膜

要治疗手段：牙龈刮治（去掉牙结石）

龄范围广 → 年轻化趋势

注意饮食

护理

- 早晚刷牙
- 定期口腔检查（没年）
- 饭后漱口（健康牙龈清水即可）
- 牙齿发育是否整齐（不整齐的牙齿容易引起咬合关系紊乱/刷不干净）

措施

日常护理

- 早晚刷牙（定期刷牙，时间够 5 分钟，方法正确）
<https://zhuanlan.zhihu.com/p/50915149>
- 饭后漱口（不要马上，5-10 分钟后）

无牙周疾病不建议使用漱口水（含氯 时间长会导致味觉丧失）

健康牙龈用清水

- 牙线 → × 虫牙，× 结石

定期看牙医

1-2 次洗牙/年（牙缝+牙龈边缘残留物）

周炎一个月康复 十来天/次 治疗

周专业

BACKGROUND KNOWLEDGE

PERIODONTITIS (PAPER / MERCK / CDC)

3 DOCTORS INTERVIEW

PUBLIC HOSPITAL/DENTAL CLINIC

4 PATIENTS INTERVIEW

POINTS FROM INTERVIEWS MODIFIED BY MEDICAL PROFESSIONALS

WEB DISCUSSION DATA

XIAOHONGSHU (30) , WHICH IS DOMINATED BY FEMALE USERS





BRAINSTORM

Participant #1患者的自我教育

相信医生的专业性，不需要过度治疗（私下购买漱口水）

在相对可靠的渠道，和有资质的医生处获得建议

学习正确的牙值清洁方式，使用牙线，请满足够的时间，清洁彻底，一天至少两次

关注口腔健康，牙龈出血的症状要上心

不要忌讳就医（针管治疗留下的不好印象）

对于慢性病的管理意识，定期复查和刷牙

不要因为焦虑而铺天盖地宣传（买oil牙膏）

形成更为健康的生活方式（远离烟酒）

Participant #2 医院方面的就诊

定期回访机制

牙龈刮治，洗牙前对患者的疼痛度解说，增加疼痛度量表

安排医生科普解说提纲（牙周病的发病，如何护理等）

设置安抚玩具、音乐

重症患者进行心理疏导联诊

加强沟通与解释，根据不同病情制定个性化的治疗方案

感受到医院对应的人文关怀，服务态度、耐心细致。

对于技术设备和医生医疗水平的提高

Participant #2 希望达成的目标

对牙周炎疾病了解程度加深

通过具体的措施缓解患者的焦虑心情，回答患者的问题

相应的优惠和医疗保险覆盖

有一对一的所需时间问诊，回答患者在回家后的护理问题

对于药品服用、挑选的使用指南

对于疼痛度的详细说明，可以添加安抚玩具

医学指南的普及（手册、视频）

对全民牙龈健康知识普及，现有医疗文献表明牙周炎与心血管健康关系密切，逐渐作为牙周病的天然高发人群

Participant #3 能够改变的

使大众意识到牙周炎的早期症状不等于上火

添加必要的心理干预，心理医生的加入

政府和社会保障机构对于医保的覆盖率 and 报销金额的提高

有视频问诊、图片问诊和护理问题的解答

从专业医生获得处方权和用药指南

增加疼痛度量表（0-10）进行说明，借鉴一些医美机构会用的安抚兔子的玩具

制作相应的视频解说，并获得专业人士的背书和宣传

社区宣传、社交媒体宣传、专业机构宣传、和科普活动，进行多层次的宣传覆盖面。

Participant #3 牙周炎的管理

早期进行矫正

刷牙清除牙菌斑，定期检查洗牙

（女性）割假前后容易炎症提示

饮食和生活方式的改善

掌握疾病的新进程，新药和新的治疗方法

遗传概率和增加意识

早期的诊断

进行精神上的鼓励和支持，鼓励口腔卫生好习惯的培养

Participant #1 牙周炎患者的问题

#1 就诊服务前

对于牙周炎疾病的不了解（分为刚开始的不了解，到后来在社交平台逐渐了解和久病成疾）

对牙周问题的疏忽（从肿到疼到发慌）

把牙周炎归结为上火的症状

到需要种牙，松动确诊牙周炎

Alice Wu

#2 就诊服务中

患者有限的预算（公立医院洗牙费用和重症的种牙费用）

需要长期疾病管理的焦虑心情（牙槽骨萎缩对正畸影响、重症需种牙）

公立医院医生苦于没有时间，和患者进行进一步深入的沟通和交流

对于牙龈刮治环节的害怕（对需要麻醉和多次就诊而言）

#3 就诊服务后

对于牙龈刮治环节的害怕（对需要麻醉和多次就诊而言）

对如何清洁牙齿感到迷茫

牙周炎带来的选购药品的焦虑（医院没开处方药），会在社交平台被铺天盖地广告误导

需要长期疾病管理的焦虑心情（牙槽骨萎缩对正畸影响、重症需种牙）

SEVERE PATIENT



“我对医院这个事情比较忌讳，所以是不到万不得已不会去看，而且牙也不危及生命” ---2级牙周炎

Goals

- Prone to anxiety and depression
- Professional guidance on teeth cleaning

Frustrations

- Prone to anxiety and depression
- Periodontal health has improved after scaling, but I am confused about how to clean my teeth
- Severely receding gums may require membrane gingival surgery

Actions

- At the beginning, the teeth were red and swollen, and the bleeding was not relieved. Later, the teeth became loose, pus, and repeated low-grade fever, so I went to Xiamen Stomatological Hospital. The Department of Endodontics did not register, so I went to the Department of Periodontology

Li

Severe patient requires long-term strict monitoring of oral hygiene, teeth cleaning and regular visits to the dentist



Age/Identifying Gender
24/Female



Location
Xiamen



Occupation
commercial assistant



college

Bio

She had tooth issue before 6 years. She moved to the Xiamen after college and has been working as a commercial assistant for a media company. And she doesn't like to share items on her social media. She likes to research knowledge at home on her phone and buy relative products. No smoking and drinking habits, but parents have bad teeth

Motivations
(For healthcare)

See Degree of Physical Discomfort

Get the Best Price

Check Professional Skill

Check Brand Reputation/Recognition

Apps
(% of Use When Researching knowledge, service and product)



小红书
80%

Likes using Xiaohongshu for researching knowledge.



微信公众号
20%

Using the hospital's WeChat public account to make an appointment

MILD PATIENT



“现在医生说啥我听啥，对于挑选药品我比较谨慎，就怕牙槽骨太薄影响正畸” ---1级b期牙周炎

Goals

- Needs to control the illness avoiding to affect the orthodontic treatment
- Desires a hospital with considerate service and professional skill.

Frustrations

- The doctor in the hospital is too busy to explain the healthcare to you in detail.
- Desires neat teeth but periodontitis will affect orthodontics treatment in the future

Actions

- The first time I found gum bleeding, I found a discount on Meituan for teeth cleaning service. Later, when it became serious, I went to the hospital to register for an expert account. After that, I planned to have my teeth cleaned in a private hospital, and at the same time see a doctor in a public hospital.

Zhang

Mild periodontitis needs to maintain good oral hygiene, regular teeth cleaning and visiting dentist.



Age/Identifying Gender
23/Female



Location
Buzhou



Occupation
Childcare Specialist



University

Bio

She's just out of university and loves to try new things. She has tried different service experiences in dental clinics, public hospitals and private hospitals. She loves social media for periodontitis knowledge and buying some electric toothbrushes, water flossers. No smoking and drinking habits, parents have good teeth

Motivations
(For Healthcare)

See Degree of Physical Discomfort

Get the Best Price

Check Professional Skill

Check Brand Reputation/Recognition

Apps
(% of Use When Researching knowledge, service and product)



小红书
50%

Using Xiaohongshu before and after going to the hospital.



美团
30%

Using Meituan to check teeth cleaning discounts

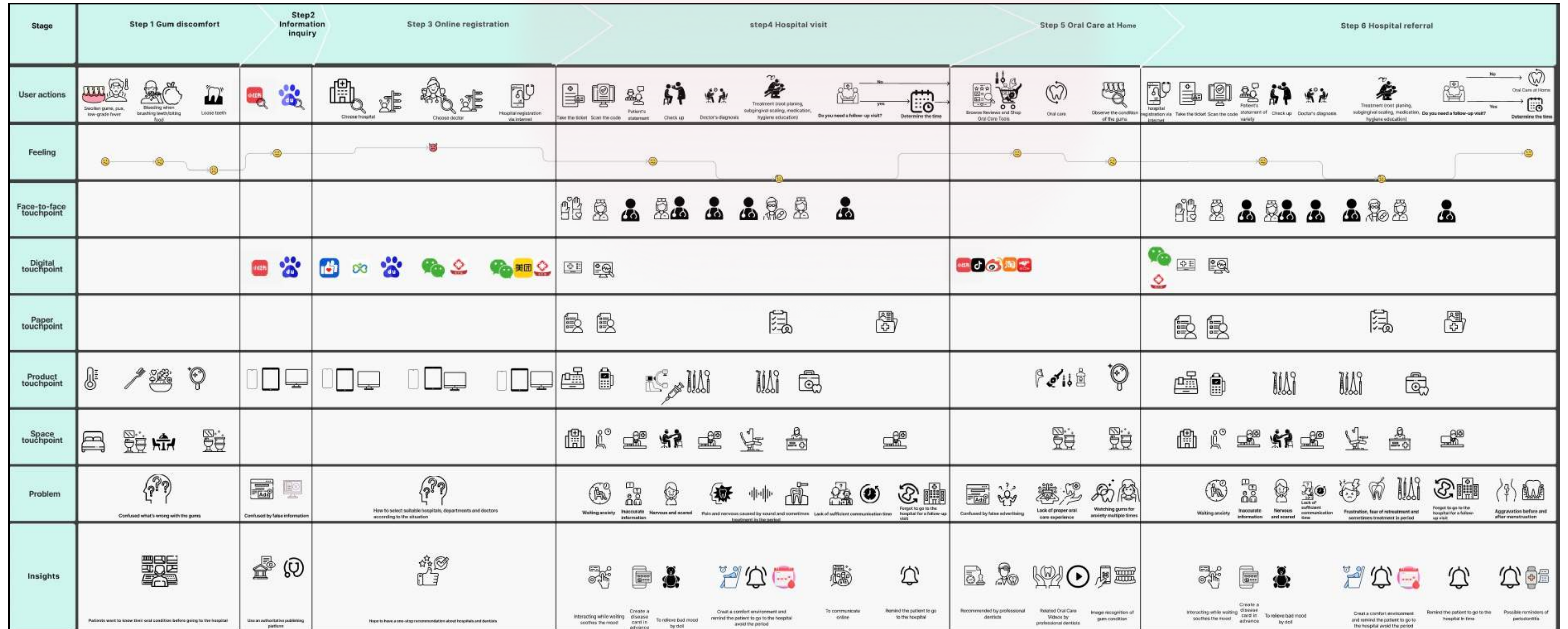


微信公众号
20%

Using the hospital's WeChat public account to make an appointment and acquire knowledge

PERSONA

User JOURNEY MAP



H M W

HMW...

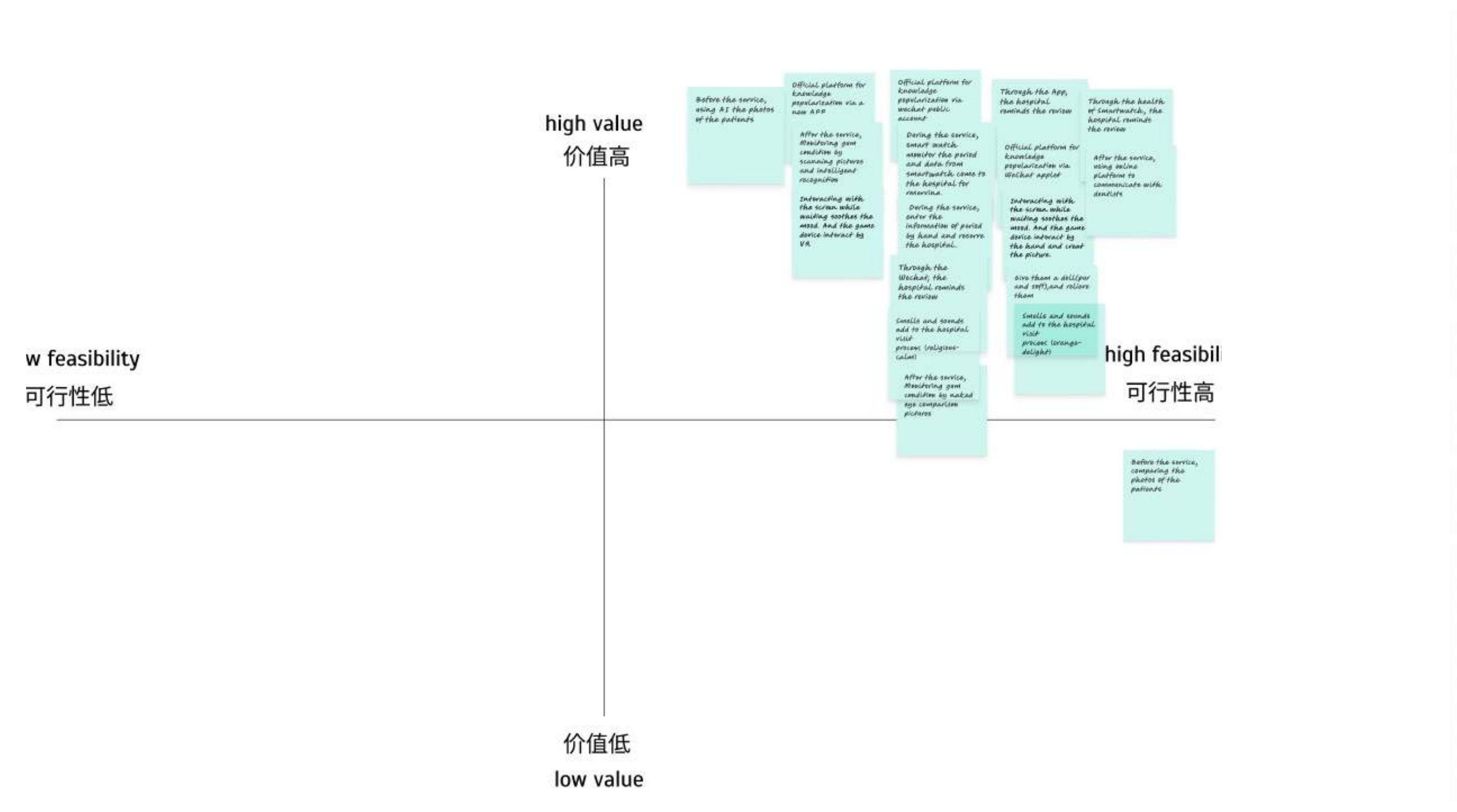
To design a more humanized
periodontitis management
system for young women

HMW...

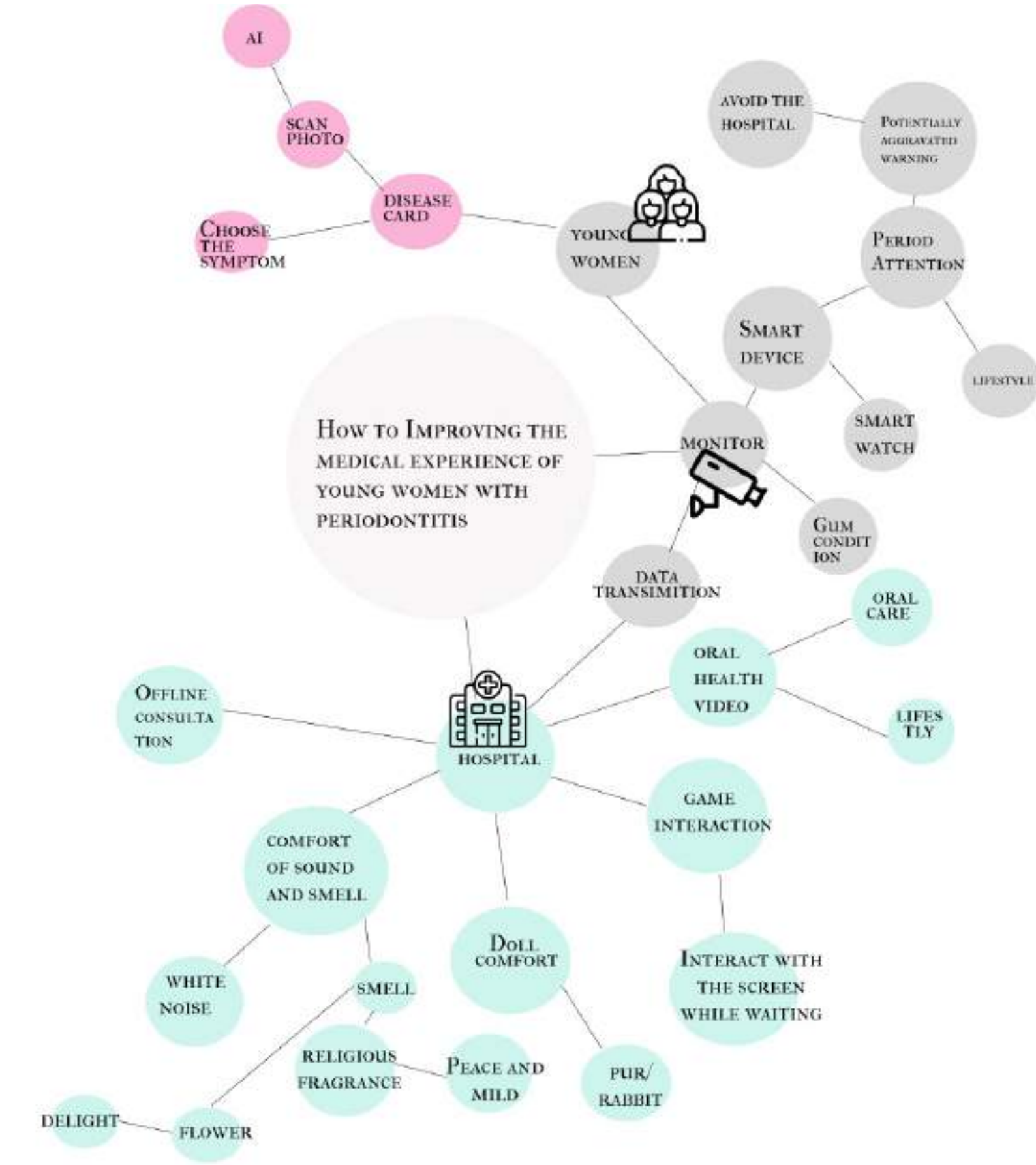
To design a management
system to better help young
female patients with
periodontitis get a better
medical experience before,
during and after the visit

To provide more effective
care and effective
communication with female
periodontitis patients
according to female
hormonal fluctuations
(period) during and after the
hospital.

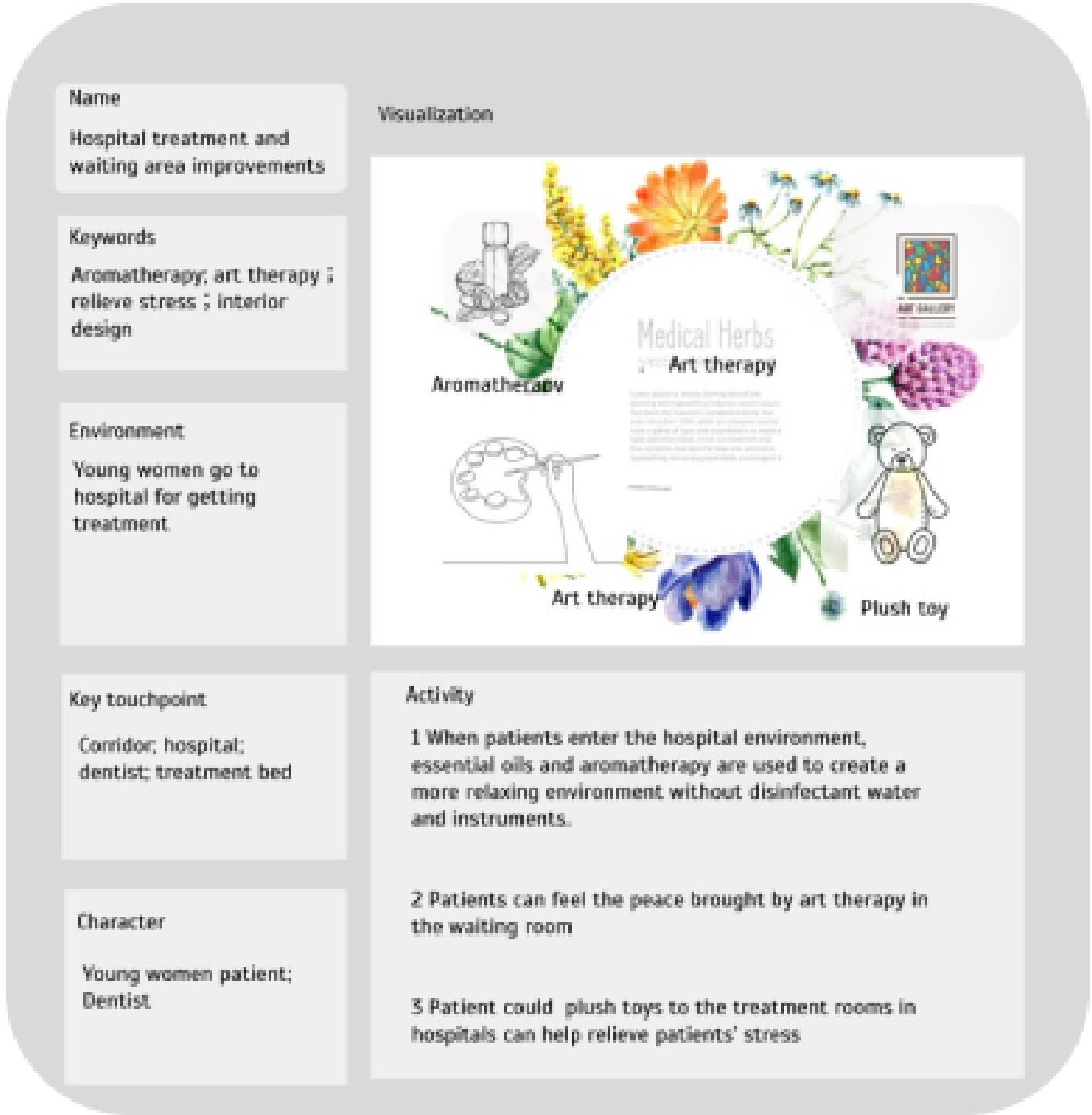
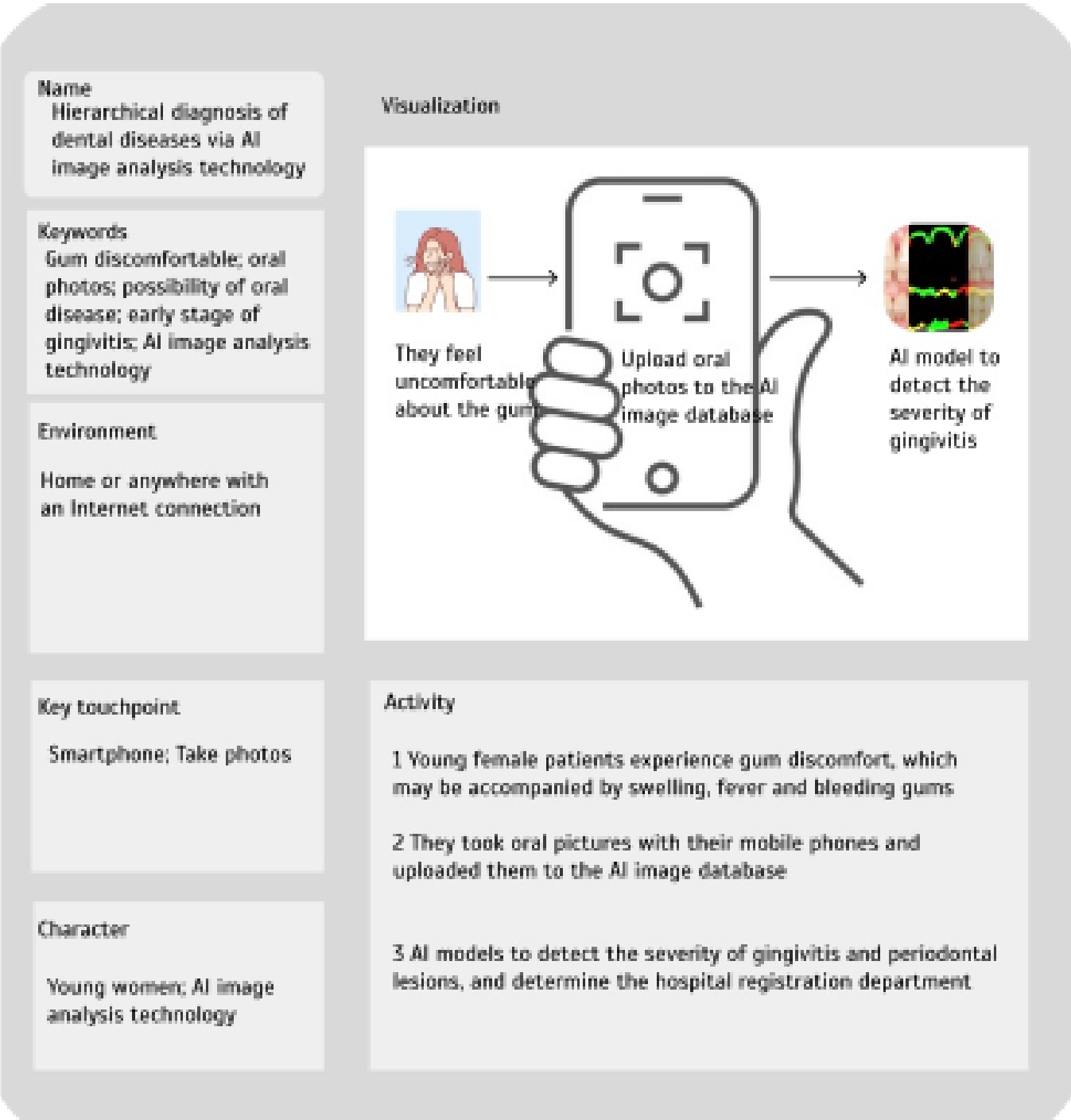
opportunity map



Mind map



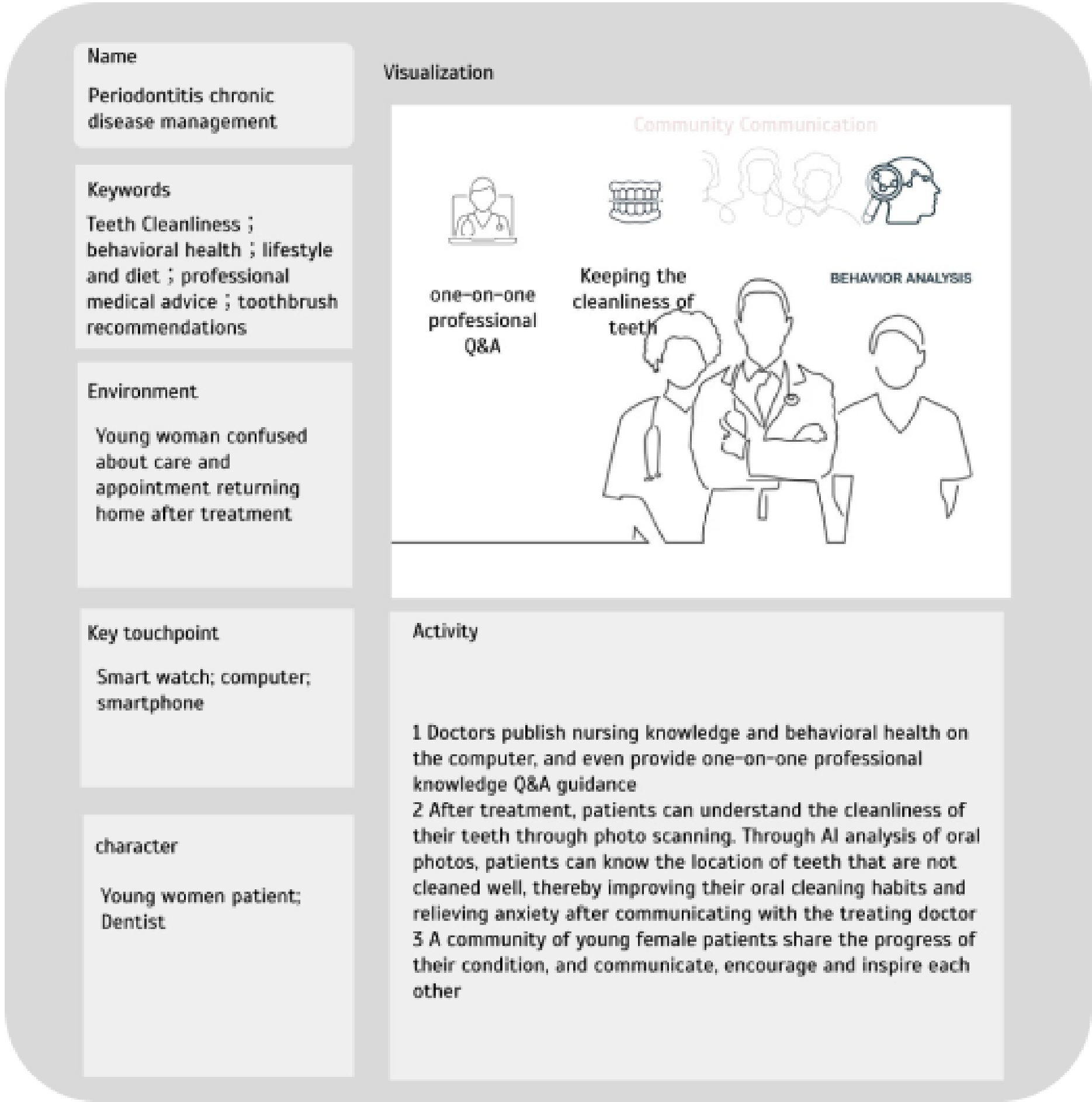
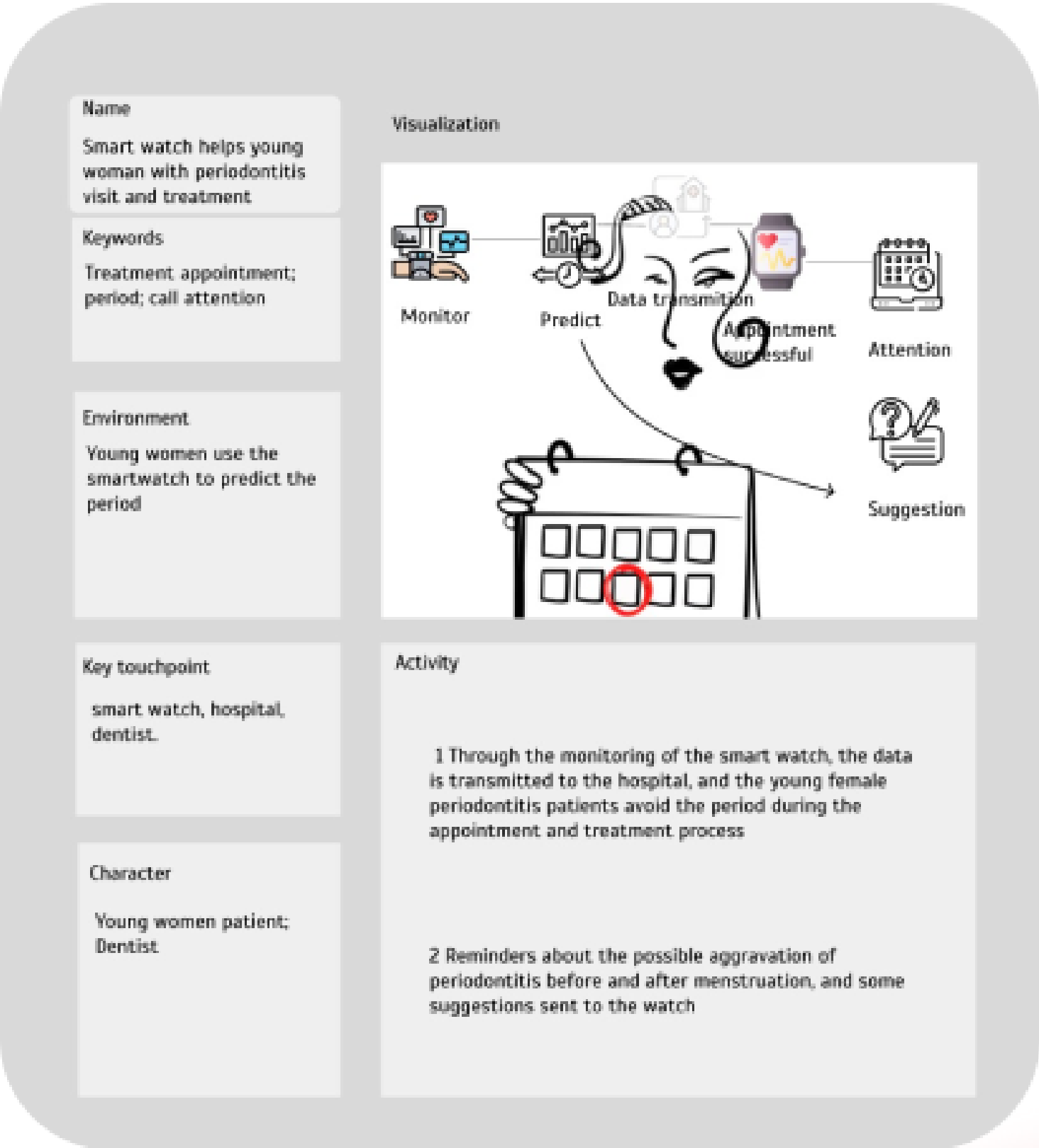
BEFORE SERVICE : SCAN ORAL PHOTOS TO DETECT DISEASES USING AI BIG MODELS



IN SERVICE: ART THERAPY

CONCEPT PLAN

AFTER SERVICE : AVOID YOUR PERIOD
WITH A SMARTWATCH TO SCHEDULE
FOLLOW-UP TREATMENTS



AFTER SERVICE: PERIODONTITIS
CHRONIC DISEASE MANAGEMENT

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3. [HTTPS://WWW.CDC.GOV/ORALHEALTH/CONDITIONS/PERIODONTAL-DISEASE.HTML](https://www.cdc.gov/oralhealth/conditions/periodontal-disease.html)
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