



Birth Control Decision

White Space Design Challenge 2019
Category: Health

Problem Statement

Users struggle to effectively navigate through the process of choosing a birth control method.

Research Methods

In-depth interviews:

8 birth control users

Expert interview:

Women's health nurse

Immersion experience:

Informative birth control doctor
appointment

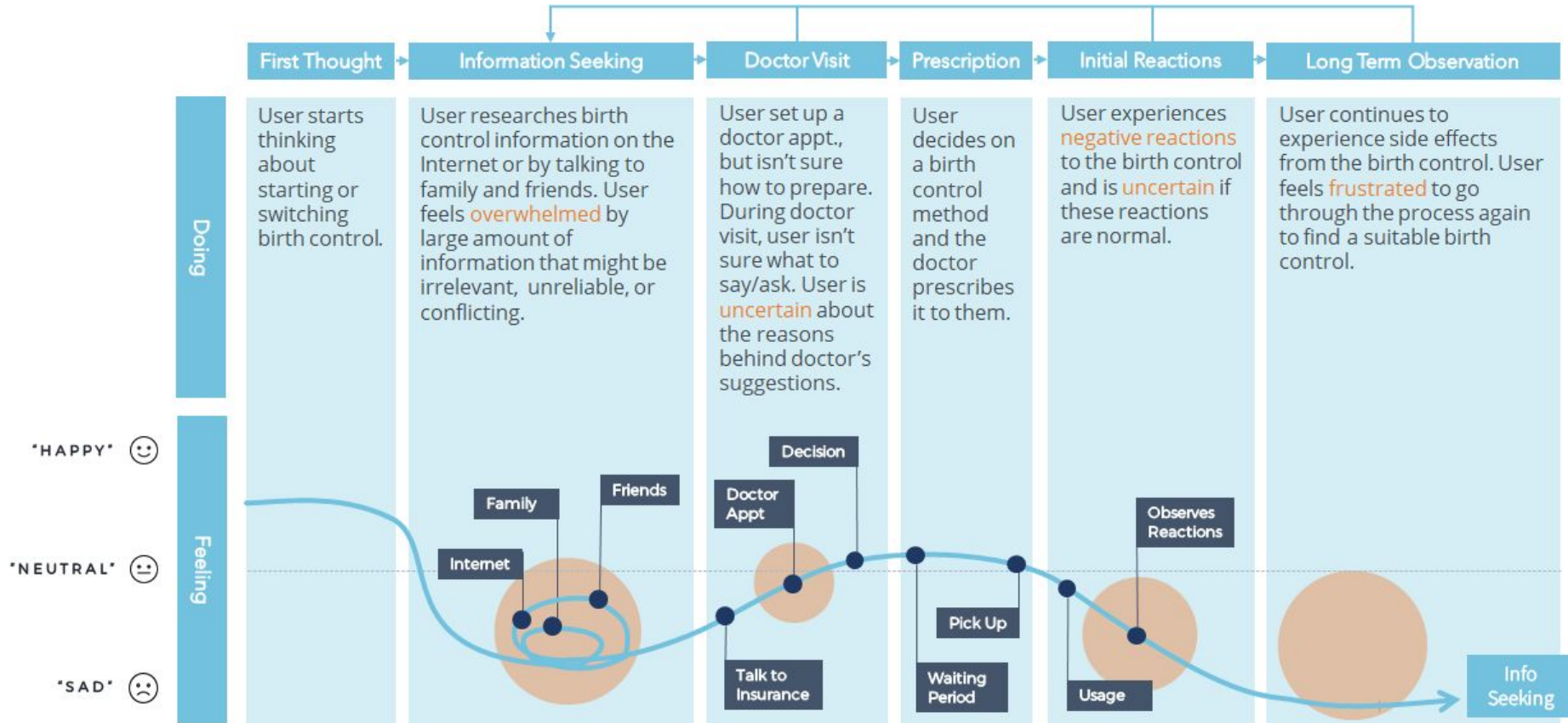
Secondary research:

Review of qualitative and
quantitative studies on birth
control decision process

Target User Characteristics

- Looking to choose a birth control method
 - Starting birth control for the first time, or is unsatisfied with current birth control method (side effects, convenience, cost)
- Gathering information from a range of sources
 - Wants to make an informed decision, so consults online resources, friends, and family for guidance
- Multiple factors influencing decision
 - Has a number of personal constraints and preferences affecting the decision

Journey Map



Themes	Insights and Observations	Evidence
<p>Feeling overwhelmed by potentially irrelevant information</p>	<p>People feel overwhelmed when researching birth control methods because they do not know which information is relevant to them.</p>	<p>"I felt overwhelmed by all the information on the internet...There's information out there but I couldn't sift through it." - birth control user</p> <p>"I try to do a lot of research but it can get confusing because everyone is different. The trial and error process is difficult." - birth control user</p>
<p>Reliability of information</p>	<p>Throughout the process of gathering knowledge, people encounter conflicting information and struggle to determine which sources are most reliable.</p>	<p>"Patients typically initiated contraceptive discussions seeking clarification of something they heard from their peer group." - Linton, A. & Hammond, C.</p>
<p>Uncertainty in the doctor-patient experience</p>	<p>People want their doctor to give them a personalized recommendation, but are uncertain about the reasons behind their doctors' suggestions.</p>	<p>"I thought [the doctor] was going have some sort of testing to see, [for] my hormones, what pill would be best, but I think she just gave me a more generic one." - birth control user</p>
<p>Social taboos and cultural influence</p>	<p>People rely on the personal stories of strangers on the internet because of social taboos around the topic of birth control. Additionally, family and cultural influences may limit the resources and information available to some.</p>	<p>"The gynecologist actually had to ask me 'are you comfortable with me putting on this form that you're having painful menstrual cramps? I can't say that I'm giving you birth control for contraceptive reasons.'" - birth control user</p> <p>"You would think that it's not taboo, after so many years, but, it's still so taboo..." - birth control user</p>

Root Cause Analysis

Problem: Users struggle to effectively navigate through the process of choosing a birth control method.

Users have a lot of uncertainty about how each method will work for them, in terms of side effects, efficacy, or other impacts on their life.

★ When researching birth control methods, users struggle to find information that is relevant to their personal situation.

When researching birth control methods, users struggle to assess the reliability of different sources.

Users feel uncertain about the outcomes of contraception consultations with their doctor.

Users have limited access to resources about birth control methods.

Sources present conflicting information

★ Knowledge about birth control comes from a range of sources with differing levels of legitimacy.

★ Users have a hard time communicating their needs and concerns to their doctor.

Doctors perform a less rigorous assessment of health conditions than patients expect in order to make a recommendation.

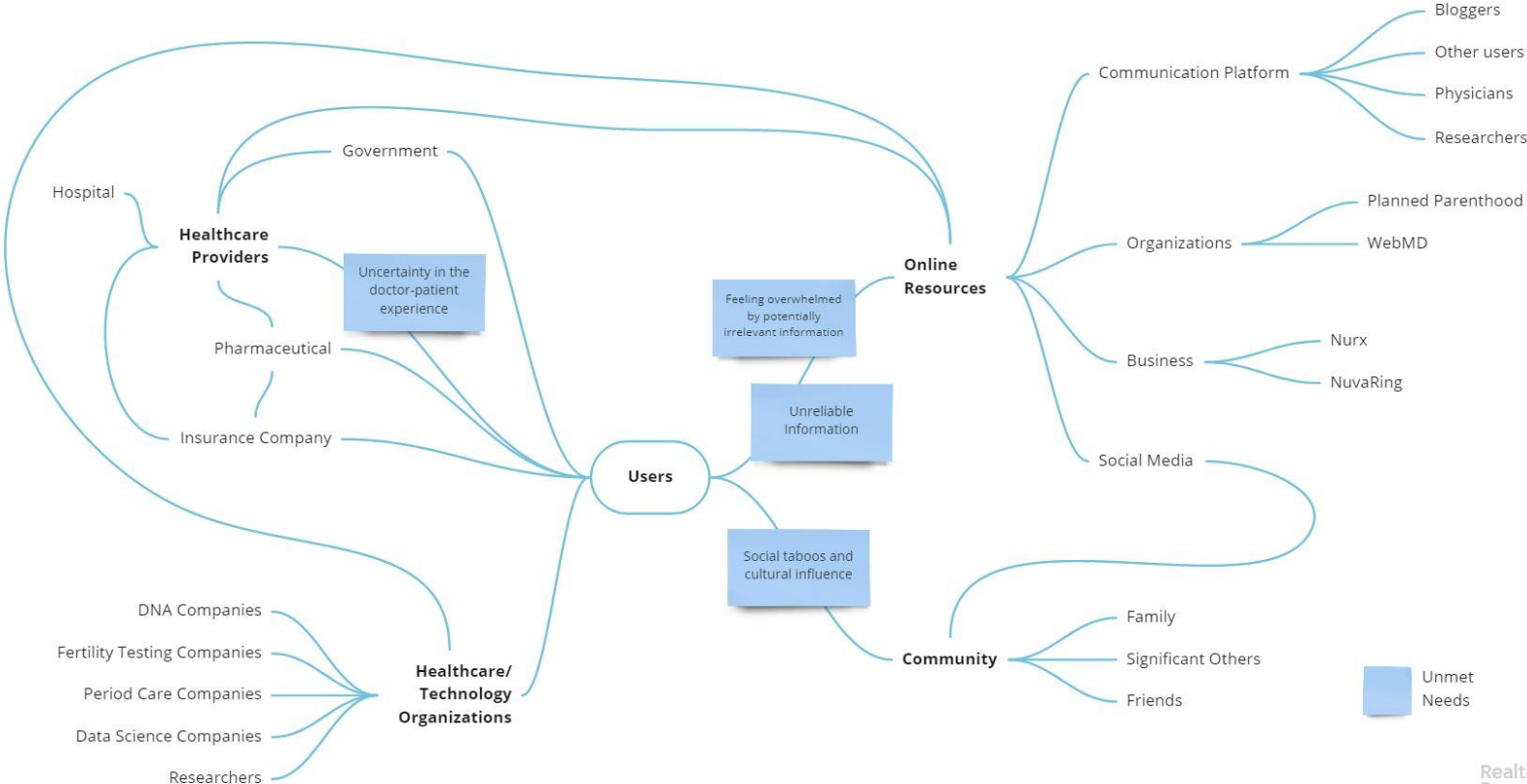
★ Women don't feel comfortable directly asking people in their social circles or family about their experiences with birth control because the topic is taboo.

Root Cause

People take birth control for a variety of reasons. There are often unwanted outcomes associated with different birth control methods. There is currently very limited medical ability to predict these outcomes.

★ Key Tensions

Unmet Needs in Stakeholder Map



User Needs

When a user is choosing a birth control method, there are 4 major needs in their journey:

1. **Personalization:**

User experiences vary, so **personalized birth control information is necessary**, but currently users have to navigate through an **overwhelming** amount of information from different resources to find what might be relevant to them.

2. **Reliability:**

Users need to feel confident the information they are receiving is reliable but it is hard to sort through all the **biases, misinformation and conflicting information** they might see online or hear in person.

3. **Clarity in Reasons for Recommendation:**

Users want to understand and be confident about their choices but they are **uncertain** why options are recommended to them and how the information they provide to online resources or their doctor factors into these recommendations.

4. **Comfort in Discussion:**

Users need personal channels to discuss their birth control options but it is a **taboo** topic in some social circles, families, or cultures.

Competitive Landscape

	Healthcare Providers	Planned Parenthood		Nurx	Facebook Birth Control Group
		Website/App	Appointment		
Personalization	Moderate	Bad	Moderate	Moderate	Bad
Reliability	Good	Good	Good	Good	Moderate
Clear Reasoning for Recommendation	Bad	Bad	Bad	Bad	Good
Comfort in Discussion	Moderate	Bad	Good	Moderate	Good

 Good

 Moderate

 Bad

White Space

Addressing unmet needs to create a competitive advantage

1. **Personalized:** *How might we provide personalized content that filters out irrelevant information?*
2. **Reliable:** *How might we filter out unreliable and misleading information so the user is getting the best content to make their decision?*
3. **Confidence in Decisions:** *How might we help users understand the reasoning behind the information and recommendations they are receiving from others to feel confident in their birth control decisions?*
4. **Comfortable Conversations:** *How might we provide channels for users to have personal and relevant conversation about their birth control options free of social stigma or discomfort due to taboos?*

*How might we provide a **personalized** solution that provides **reliable** birth control information, a channel for **personal conversations**, and preparation to **confidently discuss** options with a doctor?*

Knowledge Gap

Limited capability to predict birth control outcomes

Different people react differently to a birth control. Currently, there is a lack of understanding about the patterns and relationships between side effects of a birth control method and the biological factors of a user. Therefore, there is no way for doctors to accurately predict how a user will react to a birth control method.

How might we utilize technology and science to understand the patterns and relationships between side effects and different user groups?

Our Solution: BC Choice

A digital platform to help women navigate the process of choosing and starting birth control by providing reliable, personalized information and a comfortable and supportive community.

User Need	Product Features & Characteristics
Information about birth control options that is relevant to the user's personal needs and constraints	<ul style="list-style-type: none">• Content filtered for users' individual health conditions, preferences, and other constraints.• A tracking tool to collect data to improve personalization over time.
Confidence that the information presented is reliable	<ul style="list-style-type: none">• All content is verified by moderators who are medical experts.
Preparation to confidently discuss their birth control decision with their doctor	<ul style="list-style-type: none">• Doctor discussion guide that includes summary of user's history and talking points for consultation.
Access to content about birth control free of social stigma or cultural taboos	<ul style="list-style-type: none">• Anonymous community stories and chat forums.

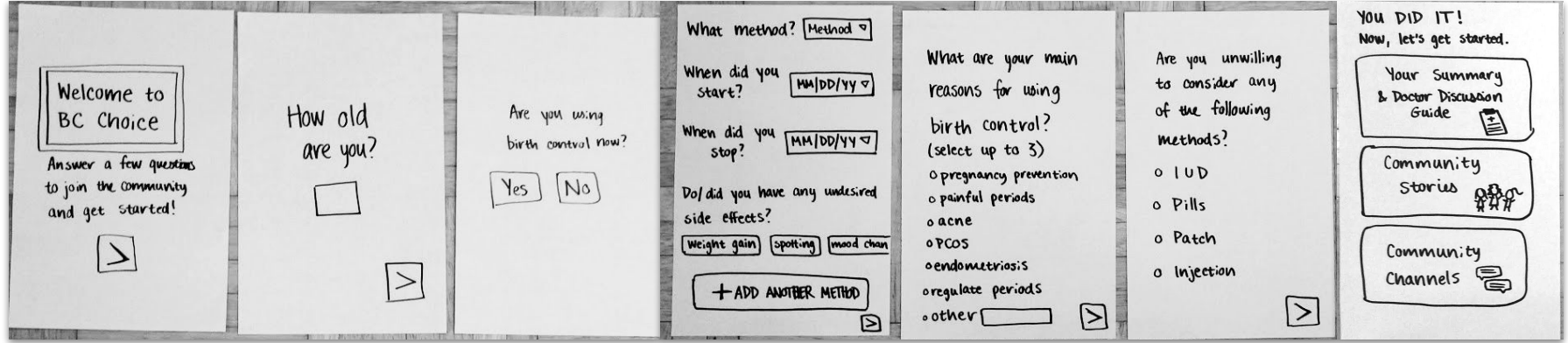
Value Creation:
Filling the Knowledge Gap

Apply data science to advance capability to recommend birth control methods and predict outcomes.

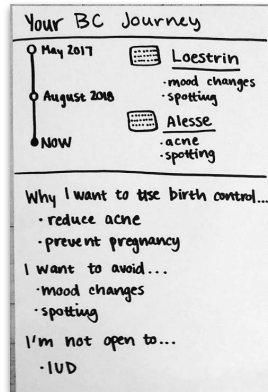
As the user community grows, a robust data set will develop, and this data can be applied to algorithmically predict and recommend based on individual user needs.

Proof of Concept: Low-fidelity app prototype

First time user: birth control history and preferences quiz



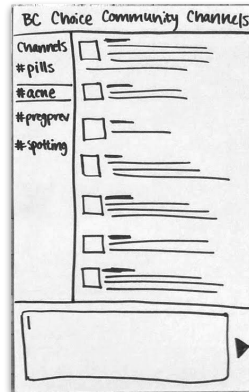
Doctor discussion guide



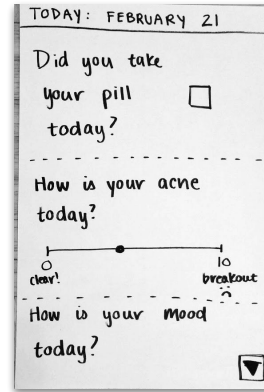
User stories



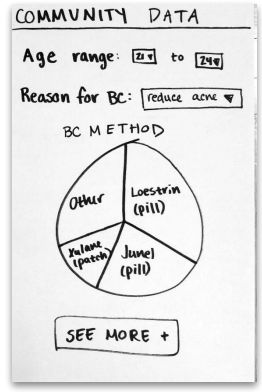
Community chat forums



Tracking tool



Community analytics



Competitive Advantage

The concept addresses **4 major unmet user needs** and **1 knowledge gap**. This concept leverages data science to make using an unfamiliar birth control more predictable. By having users to log their birth control experience anonymously, the app aims to organize and visualize experiences based on biological information.

The concept also recognizes the most prominent whitespace in the competitive landscape: it combines **reliable information** and **personalization** with the **comfort of personal conversation** and **shared experiences**.

	Healthcare Providers	Planned Parenthood		Nurx	Facebook BC	BC Choice Whitespace Solution
		Website	Appointment			
Personalization						✓
Reliability						✓
Clear Reasoning						✓
Comfort in Discussion						✓

References

- <https://www.plannedparenthood.org/learn/birth-control>
- <https://www.plannedparenthood.org/get-care/spot-on-period-tracker>
- <https://www.nurx.com/>
- <https://obgyn.coloradowomenshealth.com/health-info/birth-control/medical-conditions-birth-control/diabetes>
- <http://teenhealthsource.com/blog/what-to-expect-getting-birth-control-prescriptions/>
- <https://www.lemonaidhealth.com/services/birth-control-pills>
- <https://www.naturalcycles.com/en>
- <https://www.heydoctor.co/>
- <https://www.facebook.com/groups/birthcontrolquestions/>
- <https://towardsdatascience.com/using-data-science-to-help-women-make-contraceptive-choices-8673eb9cdbfd>
- Linton, A. & Hammond, C. (2016). Contraception Counseling in the Digital Age. *Seminars in Reproductive Medicine 2016*.