

HealthSync

Phase 1 Report – User and Task Analysis

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Project's idea description

The vision for the *HealthSync* app is to empower young individuals to proactively manage their health with mindfulness and organization. Our goal is to create a platform where they can effortlessly maintain and monitor crucial medical data, such as tracking medical appointments, connecting with healthcare specialists, reviewing vaccination records, managing medications, accessing exam results and certificates, and more.

To realize this vision, we intend on delivering an experience tailored specifically to this demographic. We aim to go beyond the more conventional health apps by integrating elements like gamification, interactive features, and a thriving community. By infusing these aspects into our app, we aim to make the process of health management not only more engaging but also deeply rewarding for young users.

Related apps / services / systems

The Portuguese national health service app, also known as SNS24, is our project's main inspiration. This app has access to multiple documents like COVID-19 digital certificate, prescribed exams, medical prescriptions, vaccine card, video consultation, etc.



Questionnaire – Highlights

Sample Size and Demographics:

- ☐ Sample size: 22 participants
- ☐ Predominant age group: 18-25
- ☐ Predominant gender: male

Preferred Device:

- ☐ 59.1% of the participants prefer to use smartphones.
- ☐ 36.4% of the participants prefer to use computers.

Healthcare App Usage:

- ☐ 18.2% have never used them.
- ☐ 89.4% found the app easy to navigate through.

Patient Data Importance:

- ☐ 90.9% of the participants find useful to have all their medical data in just one app.

Notification and custom notes:

- ☐ 90.9% of the participants found helpful to have notifications to remind them to take medication on time.
- ☐ 68.2% participants think that sometimes it would be useful to be able to take custom notes about medical appointments in the app.

Communication:

- ☐ 40.9% of the participants prefer to meet with healthcare professionals in person, while 31.8% prefer to text chat with them.
- ☐ 31.8% of participants find it useless to be capable to communicating with each other through the app while other 31.8% consider this feature to be of small importance.

Engagement:

- ☐ 40.9% of participants agree there is a lack of “fun factor” in this kind of apps.

PACT Analysis

People:

- **Learners/End Users:**
 - Young individuals (target demographic).
 - Different levels of technological proficiency.
 - Some may have limited health knowledge.
 - Others might be health conscious.
 - Varying levels of motivation and engagement.
- **Healthcare Specialists:**
 - Doctors, nurses, specialists, and other healthcare professionals.
 - Involved in providing medical care and support to app users.
 - Need to adapt to using the app for communication and appointment management.
- **App Development Team:**
 - Designers, developers, testers, and project managers.
 - Responsible for creating and maintaining the app.
 - Need to understand the needs and preferences of the target demographic.

Activities:

- **End Users:**
 - Creating and maintaining a digital vaccine card.
 - Scheduling medical appointments.
 - Managing medications and reminders.
 - Interacting with gamification elements.
 - Participating in the community and competition groups.
 - Tracking daily health habits.
 - Engaging with daily health tips and questionnaires.
 - Maintaining a health journal.
- **Healthcare Specialists:**
 - Communicating with patients through the app.
 - Accessing patient records and appointment details.
 - Providing guidance and support through the platform.
- **App Development Team:**
 - Designing and developing app features.
 - Conducting user testing and feedback collection.
 - Maintaining the app's functionality and security.

Context:

- **Usage Environment:**
 - Users will access the app via smartphones.

- App should work seamlessly at home, school, and clinics.
- **Working Culture:**
 - The app development team should prioritize user needs.
 - Healthcare organizations should promote app adoption among staff.
- **Resource Availability:**
 - Adequate funding for app development, maintenance, and marketing.
 - Access to healthcare data for integration.
 - Sufficient human resources for app development and support.
- **Constraints:**
 - Compliance with healthcare regulations.
 - Competition from similar health apps.
 - Ongoing technological advancements necessitating app updates.

Technologies:

- **Development Tools:**
 - Use iOS and Android development tools.
 - Ensure data security and privacy measures.
 - Integrate with healthcare databases and systems.
 - Employ continuous improvement practices.
- **User Interface and Experience:**
 - Design an intuitive and engaging user interface.
 - Implement gamification features.
 - Prioritize data security and privacy.

Personas

Sarah Johnson

Age: 32

Education Level: BBA (Bachelor of Business Administration)

Occupation: Marketing Manager

Family: Single, No children

Location: London, UK

Preferred devices: Mobile Phone

Lifestyle

Sarah is a busy working professional who values her health and well-being. She's well-educated and tech-savvy, always looking for convenient solutions to manage her health and medical-related tasks efficiently. She lives in a bustling city and has a hectic work schedule, often making it challenging to keep track of her medical appointments, prescriptions, and vaccination records.

Needs

- Sarah wants a centralized platform to store and manage her health records, including vaccination cards, test results, and prescription details.
- She needs a feature that sends her reminders for upcoming medical appointments and allows her to schedule appointments conveniently through the app.
- Easy access to her COVID-19 vaccination certificate is essential for travel and attending events. She wants to store this digitally within the app.
- Integration with her calendar app will help her see her medical appointments and health-related tasks alongside her work and personal commitments.

Pain Points

- Sarah frequently visits various healthcare providers, leading to a pile of paperwork that's hard to organize. She often struggles to locate her vaccination card, test results, and prescription information when needed.
- With her busy life, Sarah often forgets to schedule medical appointments in advance. She needs a reminder system to keep her appointments in check.
- Sarah has a few prescription medications she takes regularly. She often forgets to refill them and sometimes misses doses due to her hectic schedule.
- With the ongoing COVID-19 pandemic, Sarah needs easy access to her vaccination records and COVID-19 certificates for travel and access to certain venues.

Richard Anderson

Age: 65

Occupation: Retired

Family: Married, 2 children

Location: Birmingham, UK

Preferred devices: Computer

Lifestyle

Richard is a retired individual who has spent most of his life working in the construction industry. He lives in a suburban neighborhood and is enjoying his retirement by pursuing hobbies like gardening, woodworking, and spending time with his grandchildren. Richard grew up in a time before smartphones and modern technology became widespread, so he may not be as tech-savvy as younger generations.

Needs

- Richard needs a straightforward and user-friendly app that helps him manage his medical appointments, prescriptions, and health records without being overly complicated.
- He wants an app that sends reminders for taking medications and refilling prescriptions to ensure he stays on top of his health.
- An option to track and manage the healthcare needs of his family members would be valuable.
- The app should be easy to use, with clear instructions and support for users like Richard, who may not be tech-savvy.

Pain Points

- As he's getting older, Richard must manage various health-related appointments, medications, and regular check-ups. Keeping track of all these can be overwhelming.
- Richard is not as comfortable with smartphones and computers as younger generations. He often finds it challenging to use apps and digital tools.
- He's also concerned about the health of his family members, including his spouse and children, and wants to keep track of their medical records and appointments.

Activity Scenarios

Activity Scenario 1

Sarah Johnson has been planning a trip to visit her family in another country. Before traveling, she needs to access her COVID-19 vaccination certificate, which can be found in the *HealthSync* app.

Sarah takes out her iPhone and opens the app to access her vaccination records.

Sarah sees her COVID-19 vaccination certificate listed. She opens it to view the certificate.

Sarah decides to save a digital copy of the certificate to her phone's gallery for easy access while traveling. She also shares a screenshot of the certificate with her airline's app as it's required for her flight.

While in the app, Sarah notices that her COVID-19 certificate will expire soon. She goes to the app's calendar and adds a reminder for herself to schedule the booster shot appointment when she gets back home.

With her COVID-19 certificate saved and a reminder set for her booster shot, Sarah feels well-prepared for her upcoming trip. She appreciates the convenience of having all her health-related information in one place with the *HealthSync* app.

Activity Scenario 2

One morning, Richard Anderson is sipping his coffee and looking at his handwritten calendar, where he's noted down upcoming medical appointments for himself. He realizes that he needs a more efficient way to manage these appointments and receive timely reminders.

Richard picks up his smartphone, opens the *HealthSync* app and enters the details of his next doctor's appointment. He adds the date, time, location, and purpose of said appointment.

Richard sets reminders to be sent to his smartphone. He chooses to receive a reminder one day before, two hours before, and 30 minutes before each appointment, ensuring he doesn't forget.

After adding the appointments, he sees a calendar view that displays all the appointments in a clear and organized manner.

Richard notices that he made a mistake in the location of his appointment. He taps on the appointment, edits the location, and saves the changes.

Over the next few days, Richard receives reminders on his smartphone about the upcoming appointments. He appreciates the convenience and peace of mind that the app provides.

On the day of the appointment, Richard arrives at the respective healthcare facilities on time, thanks to the timely reminders from *HealthSync*.

After the appointment, Richard updates the app with any relevant information provided by the healthcare providers, such as prescription details or next appointment dates.

Richard feels relieved that he no longer needs to rely on handwritten notes and can easily manage his family's medical appointments with *HealthSync*. He's pleased with how user-friendly and reliable the app has been in simplifying this aspect of his life.

Functionalities and tasks

Health Management

- ❑ **Digital Vaccine Card:** A secure digital repository for vaccine records.
- ❑ **Digital Certificates:** Easily accessible digital certificates for medical events.
- ❑ **Medical Appointment Scheduling:** A streamlined system to schedule medical appointments.
- ❑ **Digital Exam Results:** Instant access to exam results through the app.
- ❑ **Healthcare Specialist Contact:** Seamless communication with healthcare specialists and family doctors.
- ❑ **Medication Tracking:** Easily check prescribed medication details.
- ❑ **Medication Reminders:** Set personalized medication reminders and receive notifications to ensure timely doses.
- ❑ **Custom Reminders:** Create custom reminders for essential daily activities such as sleep, exercise, hydration, and screen time management.
- ❑ **Daily Health Habits Checklist:** Offer a simple checklist of daily health habits for users to plan and organize their day, potentially linked to the badge system. Users can choose from a predefined set of activities (e.g., 8 hours of sleep, 30 minutes of exercise, dental hygiene, etc.).

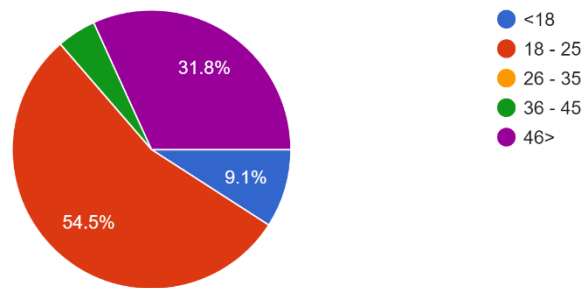
Engagement and motivation

- ❑ **Gamification System:** Implement a badge and reward system throughout the app to motivate young users to be more organized and responsible with their health, fostering greater engagement.
- ❑ **Comprehensive Calendar:** A feature-rich calendar to track past and upcoming appointments, serving as both a visual checklist and contributing to the badge system.
- ❑ **Appointment Details Card:** Access detailed information about appointments, including the associated medical specialty and contact details for the attending doctor.
- ❑ **Appointment Notes:** Attach personal notes to specific appointments within the calendar.
- ❑ **Daily Health Tips:** Deliver informative and engaging daily health tips or facts, which can also contribute to the badge system.
- ❑ **Daily Mini Questionnaire:** Provide a brief daily questionnaire, possibly related to the daily health tip, allowing users to accumulate points and maintain streaks of correct answers, contributing to the badge system.
- ❑ **Health Journal:** Enable users to maintain a daily health journal, where they can write down thoughts and reflections on their health journey. This journaling activity can also be integrated into the badge system.

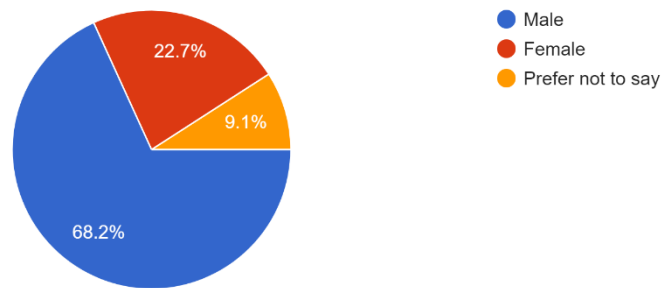
Community Engagement: Foster a sense of community by creating competition groups, like Apple's activity rings, where users can compete based on their daily questionnaire points over a specified period. Encourage users to share badges, accomplishments, thoughts, journal entries, and engage in messaging and chats with other users.

Annexes

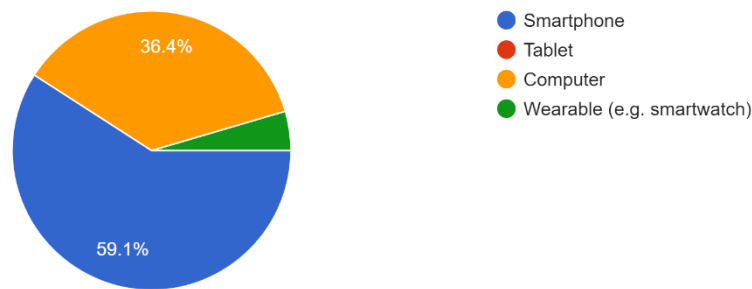
How old are you?
22 responses



Gender
22 responses

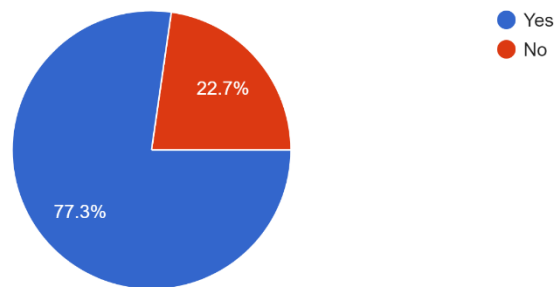


Which, out of the following devices, do you use the most ?
22 responses



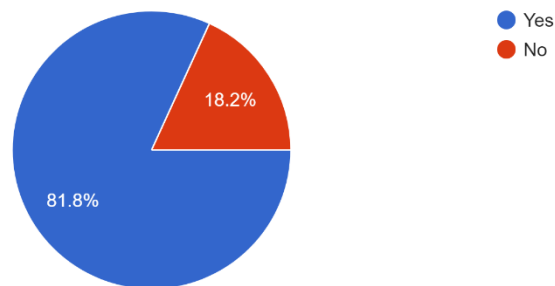
Have you ever used any healthcare/medically related apps ?

22 responses



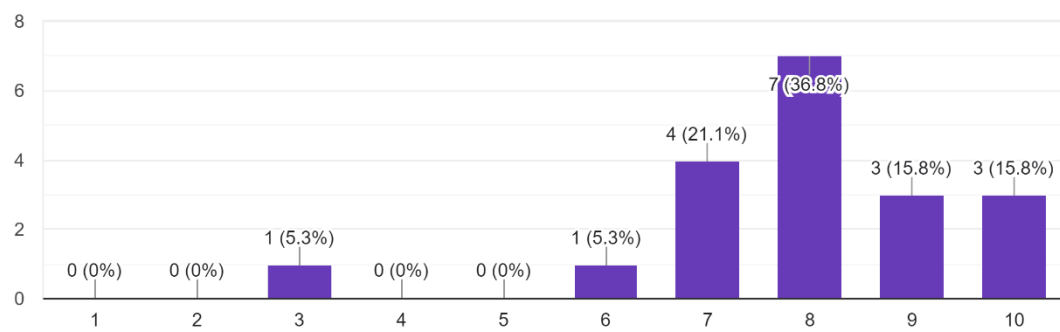
Have you ever used any app specifically for consulting medical records/info, organize appointments e.t.c (e.g. App SNS24) ?

22 responses



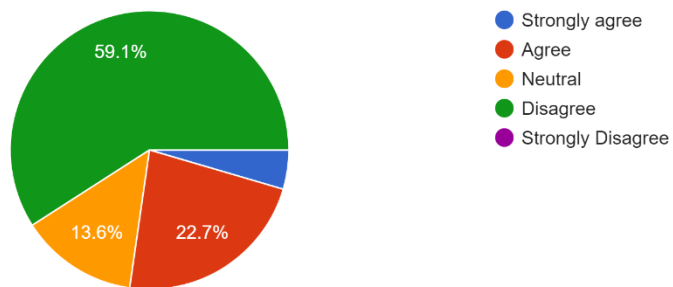
On a scale of 1 to 10 how easy it was for you to learn/use that app's interface ?

19 responses



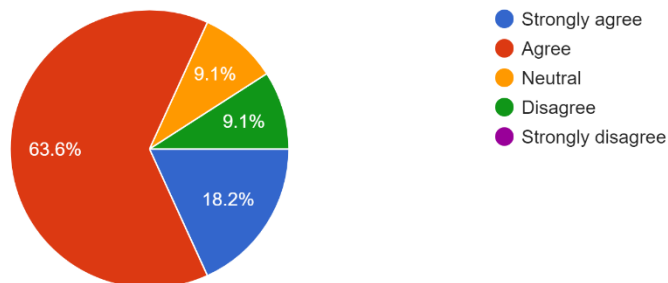
"Young people care more about their health than older people."

22 responses



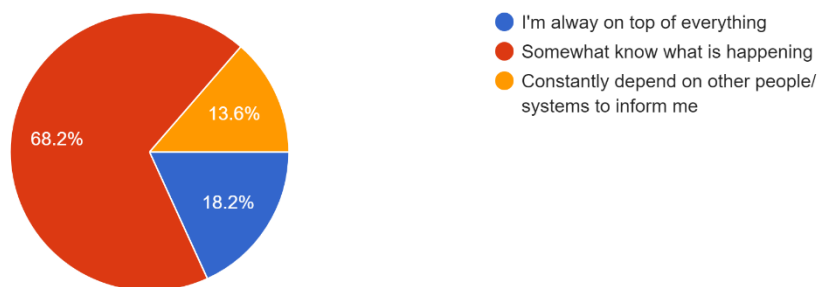
"Young people should be more mindful and organized regarding their medical life, than they are."

22 responses



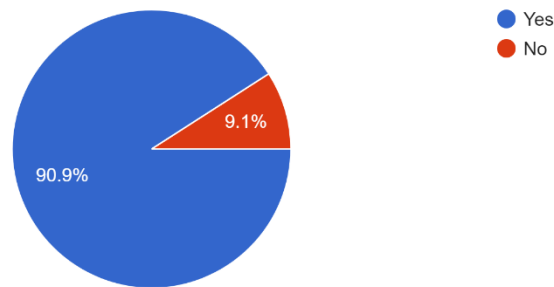
How independent/responsible are you regarding your medical life ?

22 responses



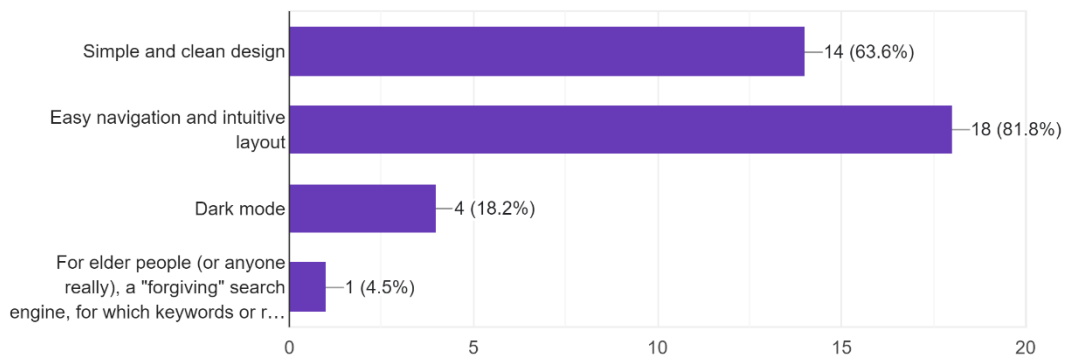
Do you think that having your medical information organized into one place, would genuinely increase your awareness/knowledge of your medical life.

22 responses



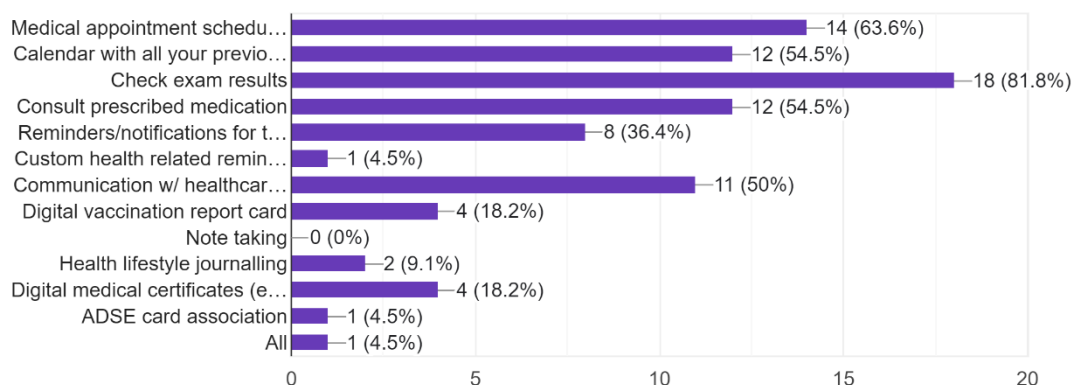
Which of these principals do you think are valuable for the user experience ?

22 responses



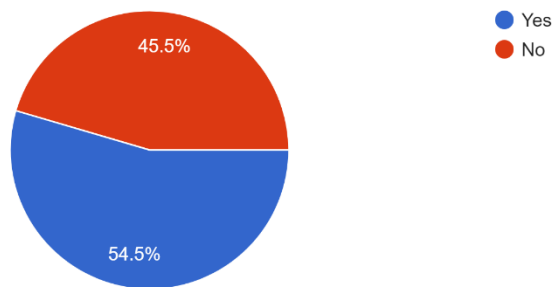
Select out of the following features, the 4 you believe to be the most important for a healthcare organization/planner type app ?

22 responses



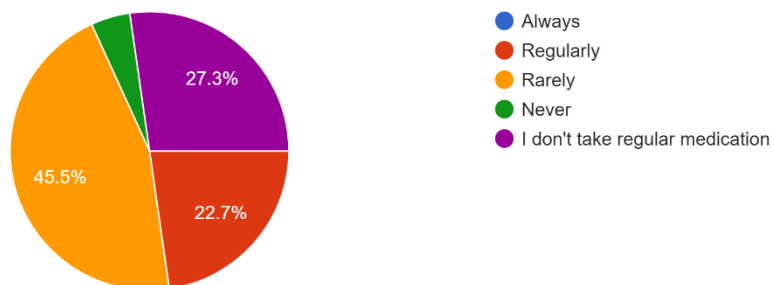
Do you take any medication regularly ?

22 responses



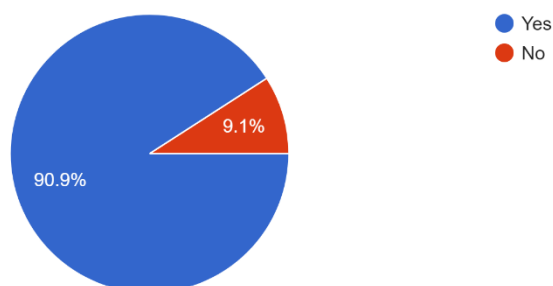
How often do you forget to take it on time ?

22 responses



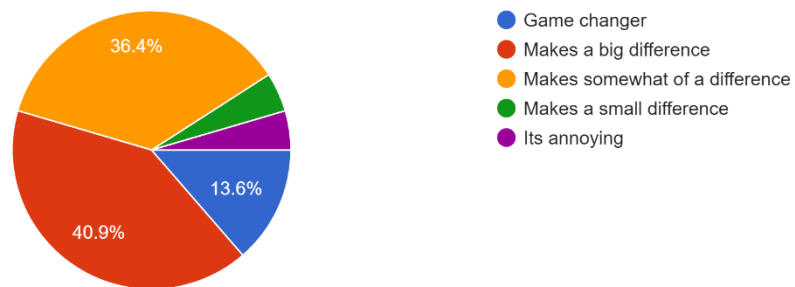
Do you think that receiving a notification from your phone could be helpful for that particular issue (even if you are not apart of that group) ?

22 responses



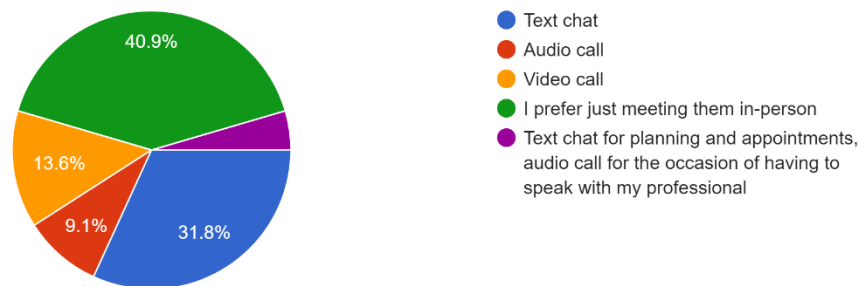
What is your opinion on using reminders/notification as a way of establishing good habits ?

22 responses



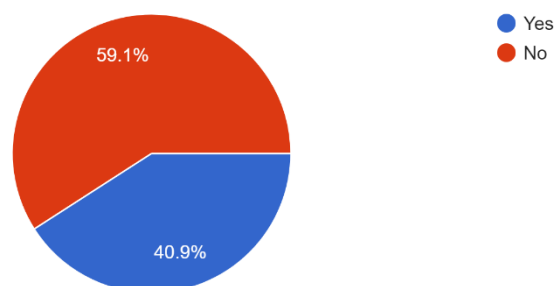
What would your preferred way of communicating with healthcare professionals through the app be ?

22 responses



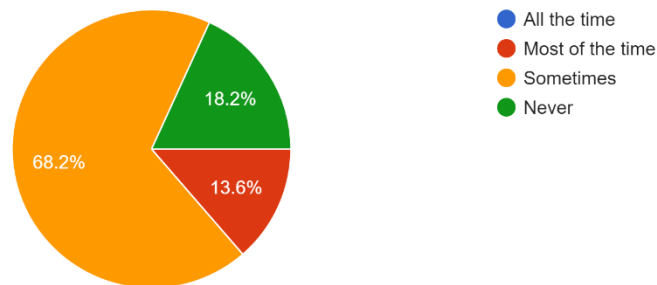
Do you use checklists as a way to plan and organize your life ?

22 responses



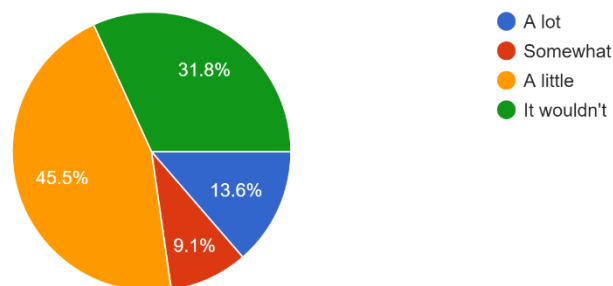
How often do you think you would make use of the ability to take notes regarding a specific medic appointment (e.g. "the doctor said it shouldn't take long before I'm fully recovered 😊") ?

22 responses



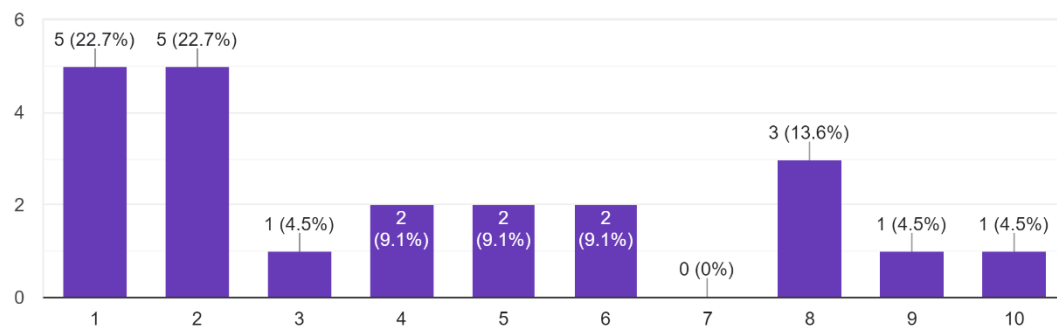
How much would you say activities like mini health quizzes or fun facts could contribute to you using the app more regularly ?

22 responses



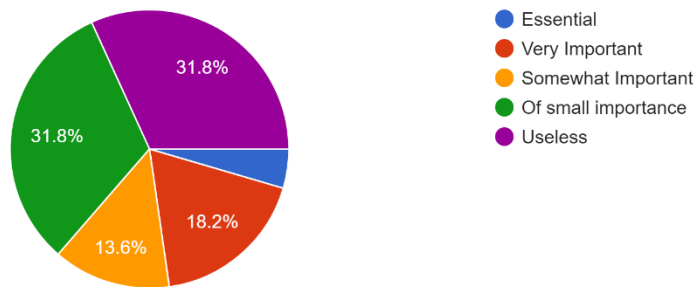
On a scale of 1 to 10 how much do you see a reward/medal system motivating you to use/interact more with the app and its features ?

22 responses



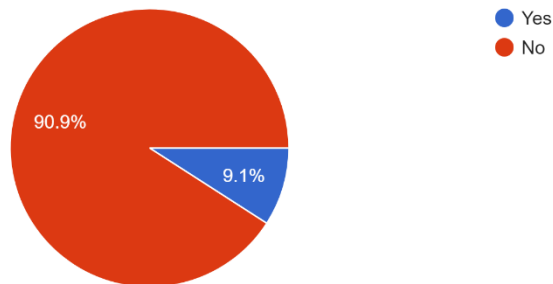
How important do you consider the ability of interacting with other users (e.g. chatting, sharing accomplishments, competing) ?

22 responses



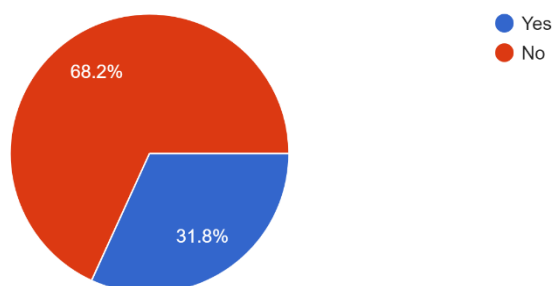
Have you ever thought about daily journaling your health/medical life, specifically ?

22 responses



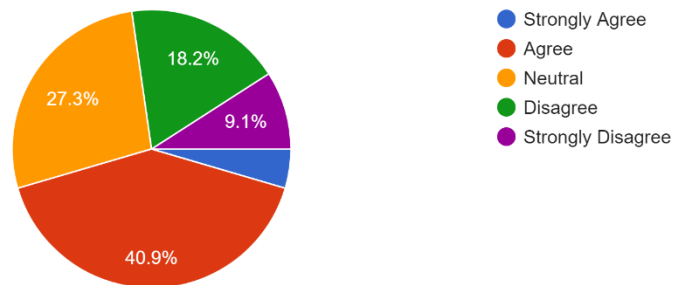
Does it sound like a cool idea ?

22 responses



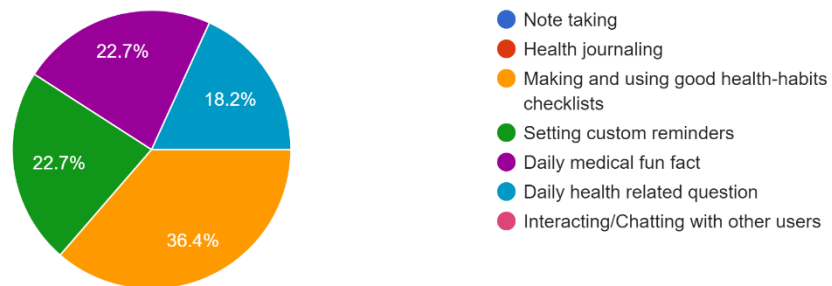
What do you think of the following statement “There is a lack of “fun factor” in general in these kinds of apps, that keeps young people, especially, from interacting with them in meaningful ways” ?

22 responses



If you had to pick one, which out of these features, do you think would contribute more positively for that aspect ?

22 responses



From what you can gather, how interesting does this project seem to you ?

22 responses

