The concept I'm developing is a urology focused app for youth and teens. The app will help users track their habits and be mindful of their health. The main features of the app include tracking daily fluid volume input and output, a reminders/ calendar section, and chart export options. They will be able to learn facts about their condition and have educational resources right at their fingertips.

The purpose of this concept is to have patients feeling better about their habits and being confident that their results have been recorded properly and regularly. To discover what competitors are already doing, I conducted a comparative analysis of: Bladder Pal, Youth Health and UiFlow to get a better idea of what the market for this kind of app is like.

The first app I looked into was called **Bladder Pal** which can be found on the App Store (here: <a href="https://apps.apple.com/us/app/bladder-pal-2/id771198956">https://apps.apple.com/us/app/bladder-pal-2/id771198956</a>). This adult app that tracks fluid input and output. Output is measured by a hat (accessible at a pharmacy). It also provides American Urological Association Symptom score. It tracks common symptoms or health problems of the patient. Wordy but simply put format (somewhat outdated).

The developers have designed this for ios users only. Keeping a bladder diary of the user's habits, fluid intake and calculating their overall habits is the goal of this product. The problem it solves is the need for a patient to monitor their urinary habits and share them with a health care provider. The target user would be anyone with an already existent urinary condition or who's had guidance from their doctor to track their habits. The tracking and numeric features of the app are complex so it's recommended for those 17+ including seniors. As for the voice of the project, it speaks mainly to health care practitioners and urology patients who understand urology terms. The simple layout and colours of the app allow for a wide range of users to be able to use the app for the specific purpose of tracking the needed data. The project does not create a reasonable amount of revenue because it does not display advertisements and has minimal marketing presence. It stands as the result of urology experts creating a unique platform for patient use.

This app lists minimal terms and conditions that are publicly accessible. It does however, allow for sharing/ family sharing with healthcare providers. Privacy conditions and requirements are yet to be seen for this project.

Bladder Pal is available internationally in english only. The app caters to ios users up until ipad format.

Bladder Pal has gained its popularity by recommendations from health specialists and internet mention (Urology Times, n.d.). Urology times and Myhealth apps have both promoted this app along with many other internet sources such as YouTube creators and other writers. BladderPal has minimal social media presence and is mainly promoted by its US. creators: Dr. Ronald L. Yap and funding partners. Their selling point is simply that their project works in a simple way and is free. The project was designed by people who work in the urology field and they brought their practitioner needs to life. The tone of the project is simplistic and straightforward but somewhat outdated; published in 2013. The format uses bold lettering much like older software and app designs. Even after downloading and searching for various other trackers like this one, no advertising for this app appears within a user's social feeds.

Although Bladder Pal doesn't show its download tally publicly online, a new update has yet to be accessible to the public eye. The project has yet to be updated to user requirements. It has yet to see new formatting and/or styling. There are also minimal efforts to market and raise awareness about the project other than relying on the health officials behind it and their recommendations. As far as solving the main problem, it seems to be effective but lacks an edge compared to other competing apps.

Youth Health is another app within the market that could be a contender (found here: Youth Health – Apps on Google Play ). It follows the format of a dashboard display health tracker and is available on both ios and android. It aims to help youth monitor their exercise, diet habits and more. It connects to a smart watch to monitor heart rate, sleep patterns, steps, blood pressure and more. It's goal is to track the health features of youth to help them be mindful.

The voice of this project is personal, because it presents health information that the user will need to reflect upon regularly. Youth Health has a more modern looking format which brings a familiar tone to its presentation and functionality. It's visuals and layout appeal more to a younger user which is inevitably their target user. Their target market is youth who own a compatible bluetooth smartwatch, who are also hoping to be more mindful of their physical health.

As for revenue, this project doesn't seem to create much either. It doesn't include any premium features and is free to users. The developer however, a chinese company called JCG, designs and sells its own smartwatches and products for revenue. This free app is a piece of software that they provide to smartwatch owners for free.

You can find most of Youth Health's privacy policy here:

http://fundoshouhu.szkct.cn/privacy/privacy.html
The app has less legal terms protecting the right behind this software they've designed. In terms of app permissions it includes access to a number of different aspects including app history, GPS and app location, network access, phone access, identity and account access as well as calendar permissions. All of these details can be found under app permissions when downloading the app and through the app itself when it's first installed.

Youth Health is offered in English, Arabic, Czech, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Chinese, Slovak, Spanish, Thai and Turkish. Of course with various offered languages it is internationally accessible and available.

Minimal promotion and advertising have been done for this project as well. Most of its popularity has been gained from instructions that are available with the company's smartwatch packaging. The app has some internet presence, but not much english marketing has been done for the project. Because the software is made by a Chinese company (JCG, n.d., #), it could very well advertise its products individually to a mainly chinese market. The voice of their website and smartwatch sales pages is very futuristic and modern. It reaches out to the users and activates curiosity. When comparing this app itself to their main website, the product does a better job catering to a younger audience with simpler design and brighter colours. After searching for the app and downloading it, it still doesn't appear within social feeds like other activity tracking marketing.

Opportunities for the project include any updates to the existing app along with their regular production line of smartwatches. The app could really take off if a new approach is taken and implemented with good marketing and user research. Something that the app doesn't do obviously is cater to those with specific health concerns and people who need to track their urinary and drinking habits. Although the right age-range of person is targeted here, the kind of health condition they're in might be different. Taking advantage of being able to track more features than just sleep and activity will be essential in making something to compete with Youth Health.

Last but not least is an app called **iUFlow**, **Bladder Diary**. This is another strong competitor with the potential concept for a number of reasons. It aims to help adults & youth track their fluid input and output. The problem it solves is people needing to be more observant of their urinary and gastro outputs as well as how much they drink. The app works best with the company's \$100 iUflow manufactured bluetooth hat which measures the physical flow of the user (*iUflow product page*, n.d., #). Otherwise, the app still works with a regular disposable hat for inputting measurements. iUflow as an app may require help from a parent or caretaker if used for youth patients. It Includes in-app tutorials as well as a diary that shows what's been tracked. It does require an account/ sign in and this is where it collects your personal information/ data.

One of the first legalities that the user is presented with is Clinic authorization/ doctor's permission to chart confidentiality. This makes users aware of whether or not they confirm the sharing of their information with a health practitioner. The user is also presented with the privacy policy (found here: <a href="https://iuflow.com/privacy-policy/">https://iuflow.com/privacy-policy/</a>) and terms of use (found here: <a href="https://iuflow.com/terms-of-use/">https://iuflow.com/terms-of-use/</a>) while creating an account or getting set up. The app and account will have any access to the information you submit as well as the data you record with the app once you start tracking. Some outstanding features within these are that the app is not responsible for giving medical advice for the data or medical statistics that have been inputted. So if a user is noticing an abnormality, they'll have to consult their doctor if they have any concern. It also mentions that there is a warranty for the hat product they sell for tracking, but not for the app should something malfunction or not work for the user.

iUflow is offered in English primarily, app stores do not show any other evidence of it being offered in other languages. The app is internationally available to any users who speak english and can understand the uroflow volume measurements. The checkout process for their device is quite simple and can be shipped to international users.

As far as promotions and the project's brand, this app has received a lot of online praise as well. It has over 4 stars via the app store and has worked well for users. The project also has a facebook page which puts it above the other competitors mentioned (*iUflow via Facebook*, n.d., #). Here, posts are made about the subject of urology, tutorials, articles and more. Marketing efforts have also been tried on instagram with little success (2 posts and 8 followers <a href="https://www.instagram.com/iuflow/?hl=en">https://www.instagram.com/iuflow/?hl=en</a>). The developers and team have kept a simplistic and calming approach to all of their marketing, tutorials and website design. Their unique idea/ hat product is their selling point for users to download their app. Their product has features that a regular hat from the pharmacy does not and this is what makes using the two products unique. Although users can use the app without the bluetooth feature, those who might not want to buy the hat might not feel inclined to use the app.

What the app doesn't do is cater to children and youth specifically. It actually mentions requiring extra help from parents or guardians especially with the bluetooth hat. The app doesn't let you track many stool features either, it just allows users to track based on the pre-made opinions.

## **Summary**

What makes the proposed concept different from these competitors is a unique target user: something made for youth and not just adults. The problem this concept solves is the need for youth to track their urinary habits especially if recommended by an expert. There have been multiple health apps designed for young users but not many specified toward urology patients. The selling point here is that nothing else like this has been made yet but also that keeping track of your health shouldn't be hard. There are options for urology patients to download, but when the user feels like the product is made just for them they might be more inclined to download it. This is exactly why apps that are compatible with their own bluetooth devices are a lot more popular; they create a personalized experience for the user. Hopefully, this concept will also create a customized experience for the user that prompts them to keep using it.

As far as a revenue model for this project, there are three potential options. Sponsorships, Donations/ crowdfunding and/ or Sponsored content could all work in this circumstance. Because this kind of project is specifically made for hospital patients, children's hospitals and healthcare organizations could express interest in investing toward the idea if it benefits patient care. Some of the competing apps above used these revenue models to complete their project. Bladder Pal was a result of a Sponsorship/ Donation mix because a hospital helped fund development but the donator's logo wasn't displayed in an obvious manner. These kinds of revenue models are appropriately paired with professional health care apps because the user isn't asked for money at any point in their experience. They're also not going to be bombarded with ads while they try to export a chart to their doctor.

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