For this project, we were tasked to choose an existing interface and redesign it. I chose to work with the page for Hypertension and Nephrology, a medical practice that I worked with over the summer. Keeping elements such as usability and responsiveness in mind, my goal was to create a page where users could minimize their time spent on the website, and find what they are looking for quickly and efficiently. I created wireframes and hi-fi mockups of the site, culminating in an HTML/CSS representation of the website.

Listed below are six of the criteria used to measure an interface's usability. I analyzed both the old interface and my recreated one, trying to determine which areas to improve upon, and how I would improve on those things.

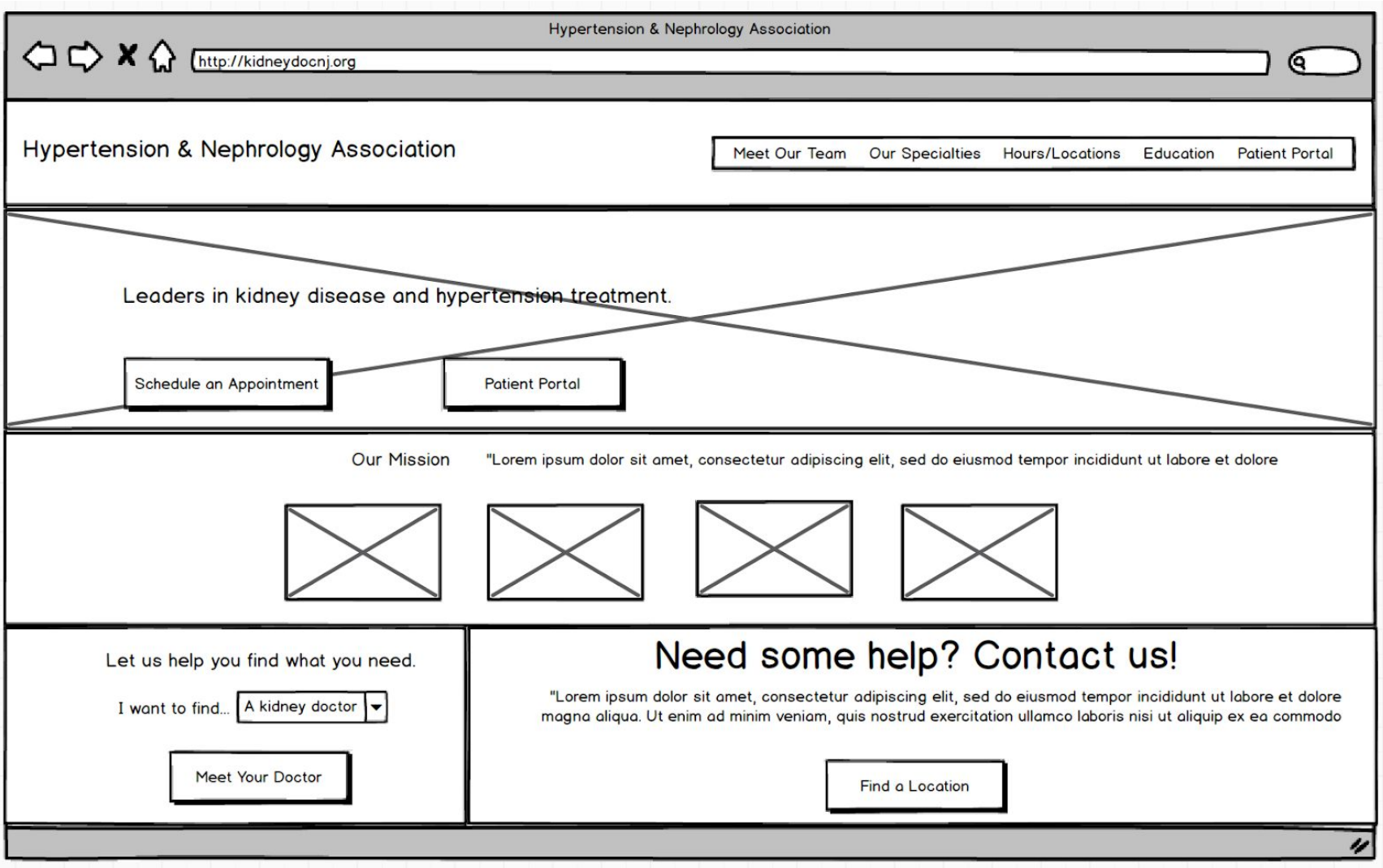
	Original Interface	Redesigned Interface
Intuitive Design	Patient education search bar on home page is confusing - you're not really sure of what to type, and the search button doesn't seem to be clickable. The "Request an Appointment" button doesn't bring you to a page that can do that, but instead just to the Locations page. Clicking on the top area, "Hypertension & Nephrology" doesn't bring you to home page, like it typically does on other pages.	Changed the search bar, which seemed vague, to a drop-down menu where you can select a topic (finding kidney doctors, cardiologists, etc..) Header is clickable, bringing you to the home page. Made the "Schedule an Appointment" button not go to locations page, but to possibly another not yet created page through which you might fill out a form to book a slot.
Ease of Learning	Website itself does not have overly complicated user interaction, so most people should be able to navigate it well already. Implementation of the navigation bar is common in other websites, so low learning curve. All the links are titled appropriately. However, it is possible that the user won't know what terms like "Hypertension" and "Dialysis" mean, especially if they're first time patients. Just having those terms as links does not offer any clue to the content of the page - do those pages contain descriptions of the disease? Treatments?	To clear up the ambiguity of some terms, and to make the website more friendly to first-time patients, I changed the wording to things like "Our Specialties" (which contains the subsections on Hypertension and Dialysis) and "Meet Our Team", to use familiar language.
Efficiency of Use	There are a lot of choices in the navigation bar, which can be overwhelming to the patient and cause them to stumble when deciding on what to look for. However, the current nav bar does do an efficient job, as every page can be accessed through the navigation bar. Having the phone number in the top right corner, which is one of the main reasons that people go to a medical practice's website, is highly efficient.	I felt that the most important tasks were scheduling an appointment, contact info, and patient portal access, so I moved all of those to the home page for ease of access. I also retained the main nav bar through which all pages can be accessed. Additionally, I decided to simplify the amount of choices in the nav bar so that the patient could easily decide on an area to click on. Although this may increase the number of clicks that the person would have to perform to access, for example, the Dialysis page, through a combination of reducing the number of choices and using clearer terminology, the user would be able to process the choices faster and decide which to click..
Memorability	Ambiguity between the "Contact" and "Locations" page, as in this website, they essentially provide the same information. Banner image of each page is constant, which does not offer additional distinction between pages. Furthermore, the search bar on the home page as well as the subtitles for all of the other pages share the same shape/font, so those functions become very easy to confuse.	To items on the home page as well as on the specialties page, I added icons in order to increase memorability. With removal of the free search bar on the home page, the confusion of search bar vs. title is cleared up. Tried to create distinctly different looking pages for each section, as opposed to the general template layout of each page.
Error Frequency and	Frequency of errors is potentially high, especially if users	Tried to reduce error frequency by

Severity	do not know the definition of the terms they want to click on, or get confused between Contact/Locations. Severity of errors is low, as with the current implementation of the page, there is no form submission/enter button, simply link navigation. Easy to recover if you click on the wrong page, as the navigation bar encompasses every page.	making navigation bar terms less ambiguous, as well as including the most important items on the front page to reduce the amount of unnecessary navigation.
Subjective Satisfaction	Although much of the interface of each page is clickable, there was not much done in the way of making each press satisfying. The longer patients spend on the website, the more frustrating of an experience they have, as they want to easily find an answer to their illnesses.	Implemented buttons in appropriate areas, which are more satisfying to press than regular hyperlinks. As this is a medical website, my goal was to *minimize* the amount of time patients have to spend on the website. Thus, adding the most important things (scheduling an appointment, contact info, patient portal) on the home page allows the user to have a pleasant, fast experience.

After creating my wireframes following the usability principles mentioned above, I had to give my ideas more substance. Using Adobe XD, I took the general layout of the wireframe of the home page and created a high fidelity mockup. The first action for my redesign was to make use of a consistent color palette. Using the Adobe color palette tool, I created a color wheel using the color of the “Hypertension and Nephrology” logo. From here, I used the “analogous” palette to choose the colors of the buttons, titles, and backgrounds. Especially in the bottom sections, the bright buttons contrast with the white background and draw the attention of the user. In terms of layout, I employed a grid-like format, where each box in the grid contains information that the patient would need. Keeping in mind the fact that users tend to keep their eyes in the top left area of the page, I placed the two most important buttons right in their focal area. Additionally, I wanted to add a bit of modern “texture” to the website, so I had the bottom two areas overlap the middle banner. Finally, I felt that the original website used a font that could be too light at times, so I utilized a heavier font, and bolded the titles of sections to draw the user’s attention.

Though I’d given much thought to the visuals of my design, one of the most important aspects of redesigning a medical website is its responsiveness - patients will be viewing my website using all different kinds of devices, and making sure that my site looks good on all screens is key to the user experience. In tablet and desktop/4K mode, the layout of the website will be nearly identical to the regular desktop version. Elements will stretch and shrink in order to take up a certain fixed percentage of the page. In tablet screens specifically, the navigation menu will collapse into a hamburger menu which would theoretically open up a vertical navigation bar on the right edge of the page. In tablets and small phones, the accuracy needed to press small links without a hamburger menu is not ideal - I believe it would be easier to find your choice vertically using a pop-out menu than horizontally using a smaller navigation bar. In contrast with desktop versions, where my redesign can take advantage of horizontal real estate, on cellphones we must shift the website for more vertical usage. On the top section, the hamburger menu will also be present, but the buttons will go from being offset to the left to being centered. Since there’s not much horizontal screen real estate to work with on cell phones, the visuals and ease of usage would be bettered if the buttons were centered on the screen. Going along with the vertical theme of the mobile model, for the bottom two modules, it is unlikely that the user will have the precision to use the drop down menu or click on each button if they were both located in the same row. Thus, the decision to move each module into its own row will allow the user to read the text and interact with the buttons more easily. It

would also make for a more intuitive experience for the user, as on a smartphone, the user would rather scroll vertically than move their thumb horizontally to access the different modules.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http://kidneydocnj.org
Hypertension & Nephrology Association
Meet Our Team
Our Specialties
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Education
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Leaders in kidney disease and hypertension treatment.
Schedule an Appointment
Patient Portal
Our Mission
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Find a Location

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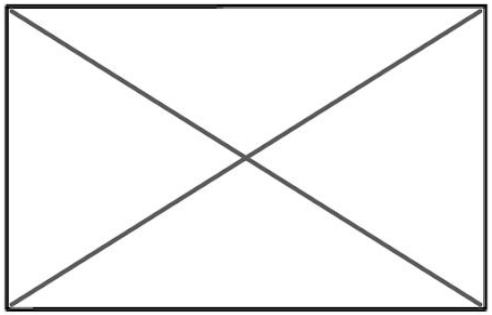
Meet Our Team | Our Specialties | Hours/Locations | Education | Patient Portal

Education



American Association of Kidney Patients

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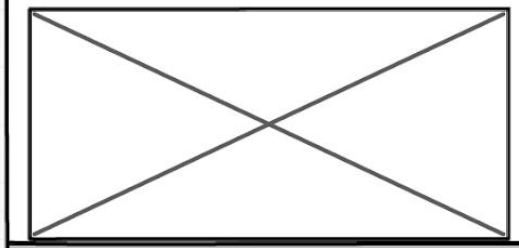
Learn More



American Society of Nephrology

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Learn More

Hypertension & Nephrology Association

http://kidneydocnj.org

Hypertension & Nephrology Association

Meet Our Team | Our Specialties | Hours/Locations | Education | Patient Portal

Where To Find Us

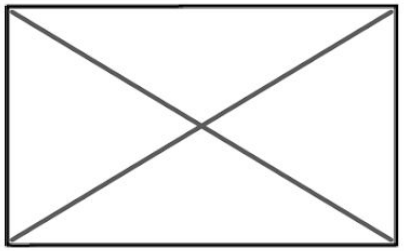
Main Practice (Eatontown, NJ)

M-F: 9:00AM - 6:00 PM
Sat: 10:00AM - 6:00 PM
Sun: CLOSED

732-460-1200

6 Industrial Way W
Eatontown, NJ 07724

Get Directions



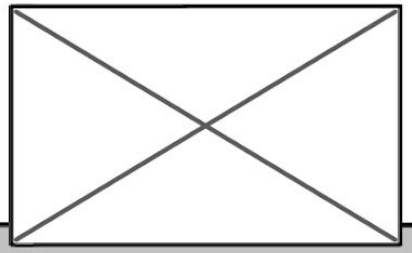
Dialysis Center (Matawan, NJ)

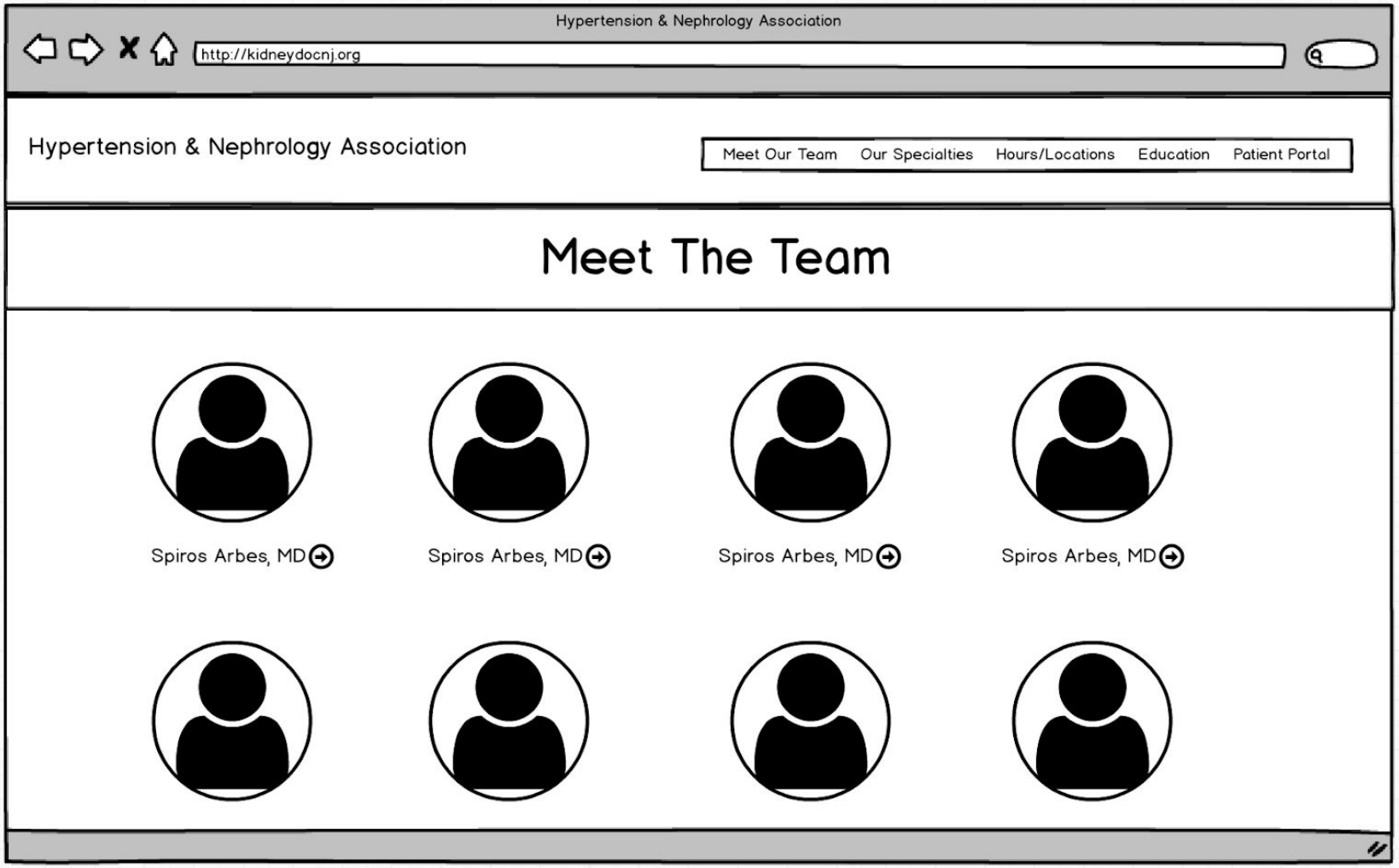
M-F: 9:00AM - 6:00 PM
Sat: 10:00AM - 6:00 PM
Sun: CLOSED

732-460-1200

6 Industrial Way W
Eatontown, NJ 07724

Get Directions

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Meet Our Team
Our Specialties
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Meet The Team
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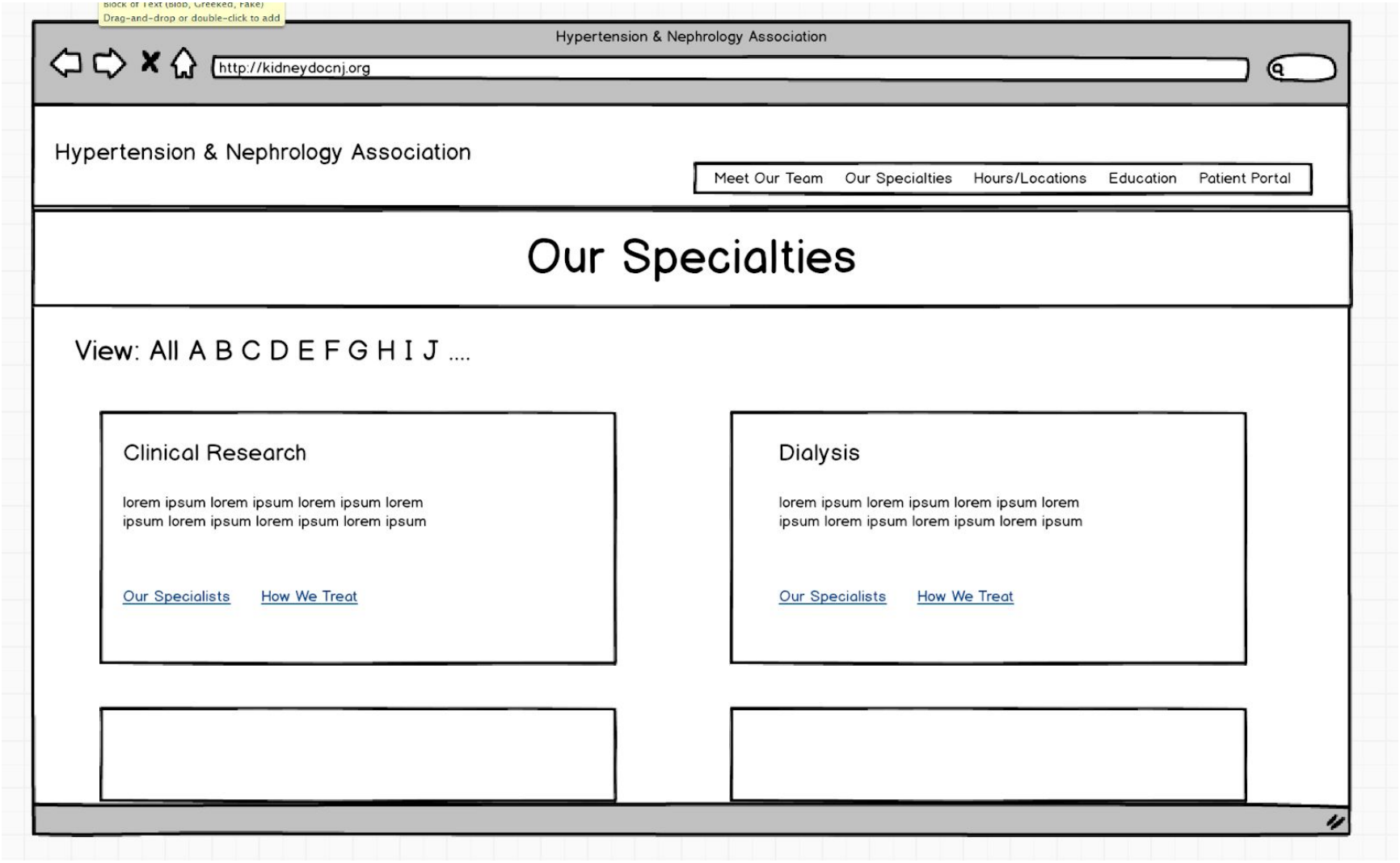
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Hypertension & Nephrology Association
http://kidneydocnj.org
Hypertension & Nephrology Association
Meet Our Team
Our Specialties
Hours/Locations
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View: All A B C D E F G H I J ....
Clinical Research
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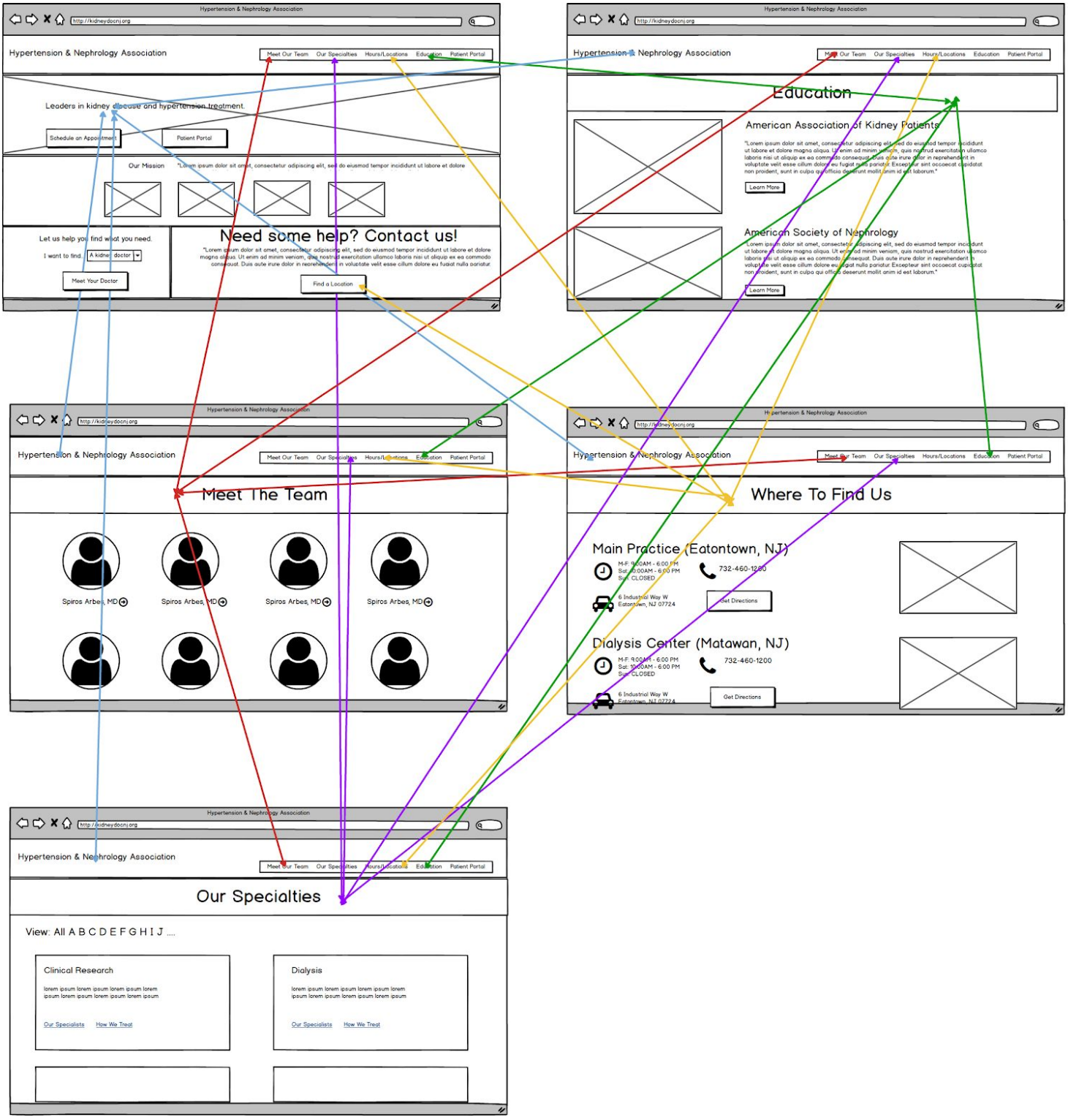
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Leaders in kidney disease and hypertension treatment.
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Our Mission
Let us help you find what you need.
I want to find: A kidney doctor
Meet Your Doctor
Need some help? Contact us!
Find a Location
Education
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Learn More
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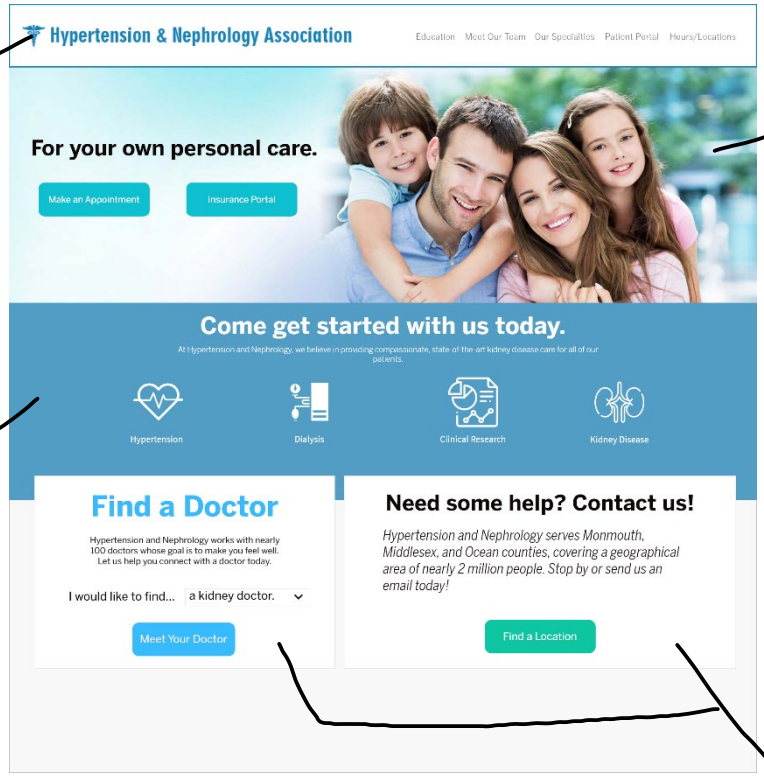
Our Specialties
View: All A B C D E F G H I J ....
Clinical Research
Dialysis
Our Specialists
How We Treat

The top section, containing the logo and navigation bar, will be present in all versions of the site.

On widescreen monitors, the logo will be anchored to the top left corner, and the nav bar will be anchored to the top right. Size of the logo and nav bar will increase with increasing screen size, keeping a fixed percentage of space in between the two.

On phone screens and tablets, a small hamburger menu will replace the navigation links. When pressed, a vertical navigation menu will appear on the right edge of the page, listing the different navigation options.



This area, in all screens, will remain below the banner + nav bar and above the specialties section. The width of the section will always fill the width of the screen, and the height will change in order to keep the same proportion of height:width.

On tablet and widescreen monitors, the banner image with the caption and two buttons will be laid out the same as it is in the traditional desktop version. Image will fill the width of the screen, keeping its ratio. Buttons and caption will also scale their size based on the screen width.

On phones, a different image will be shown, that is less wide. Instead of the buttons and captions being offset to the left, they will be in the center of the photo.

This “specialties” area will fill the width of the screen in all monitors. In tablet view, this section will look almost identical to the desktop view.

In 4K, the icons and text will remain in the same positions relative to each other. As the screen gets larger, the size of the icons and text will stay the same, but the banner will enlarge, and there will just be empty blue space filling the left and right sides.

On phone screens, the title and subtitle of the banner will stay at the top of the section. However, the icons and their captions will change from a 1 row, 4 column layout to a 2 row, 2 column layout.

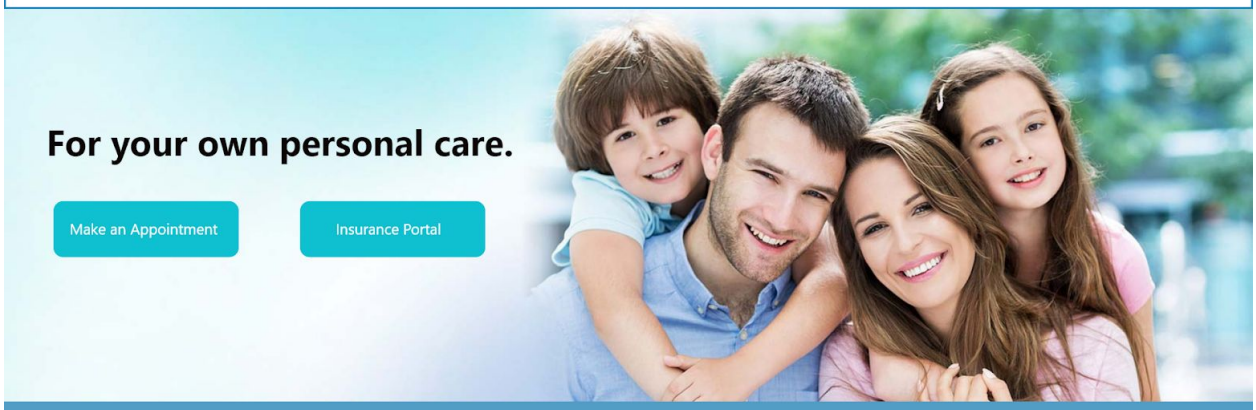
On 4K and tablet screens, the layout of the Find a Doctor and Contact Us panels will remain the same: they will be located on the same row, beneath the Specialties panel.

On larger screens, these panels will expand, preserving the height:width ratio as well as the size ratio between the two. The text and buttons will also change size but maintain their centered placement within each box. Both the padding to the sides of each box as well as the gap between the two will remain as some fixed percentage of the page.

On mobile screens, instead of both modules being on the same row, the Contact Us module will move below the Find a Doctor module into its own row. Each module will then fill the width of the page, but the text and buttons will remain centered.

Hypertension & Nephrology Association

Education Meet Our Team Our Specialties Patient Portal Hours/Locations



Come get started with us today.

At Hypertension and Nephrology, we believe in providing compassionate, state-of-the-art kidney disease care for all of our patients.

Hypertension

Dialysis

Clinical Research

Kidney Disease

Find a Doctor

Hypertension and Nephrology works with nearly 100 doctors whose goal is to make you feel well. Let us help you connect with a doctor today.

I would like to find... a kidney doctor.

Meet Your Doctor

Need some help? Contact us!

Hypertension and Nephrology serves Monmouth, Middlesex, and Ocean counties, covering a geographical area of nearly 2 million people. Stop by or send us an email today!

Find a Location