

Women's Healthcare

Urinary Tract Infection

Let's Get Started!

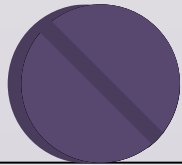


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Hi, we are the Wacky Ideators

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Topic:

Renal Care for Women's Good Health



An illustration of a person standing in front of a large screen. The person's torso is transparent, revealing a diagram of the urinary tract, including the kidneys, ureters, and bladder. The background features stylized clouds and a large purple shape.

01

About The Disease

What is Urinary Tract Infection

ABOUT THE DISEASE



A urinary tract infection (UTI) is an infection in any part of the urinary system. The urinary system includes the kidneys, ureters, bladder and urethra. Most infections involve the lower urinary tract — the bladder and the urethra.



Women are at greater risk of developing a UTI than are men. If an infection is limited to the bladder, it can be painful and annoying. But serious health problems can result if a UTI spreads to the kidneys.



ABOUT THE DISEASE

Kidney Damage

The bacteria that causes UTIs can travel up the urinary tract and infect the kidneys, leading to a condition called **pyelonephritis**.

Chronic Kidney Disease

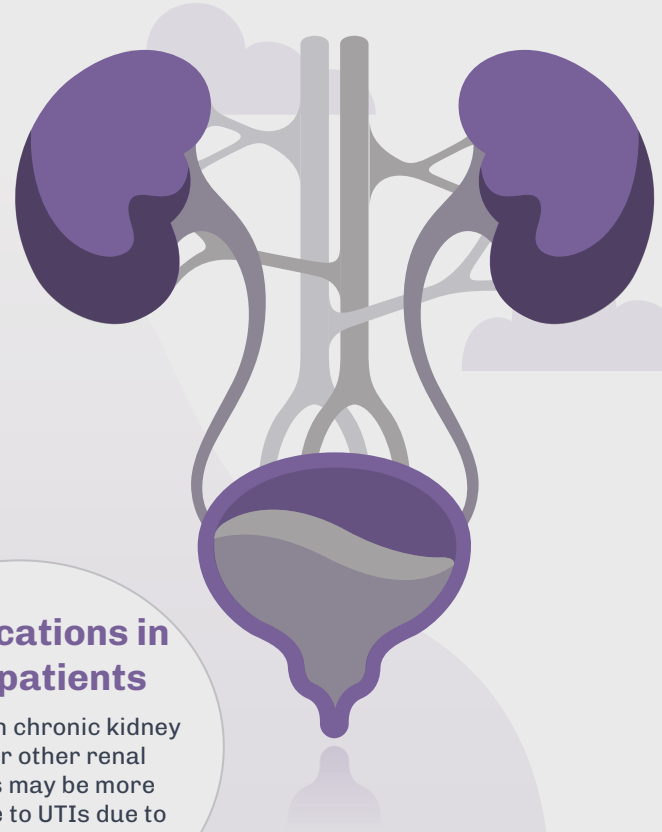
People with recurrent UTIs may be at a higher risk of developing chronic kidney disease.

Urinary Retention

Urinary retention can cause a build up of urine in the bladder, which can increase the risk of urinary tract infections and potentially damage the kidneys.

Complications in renal patients

Patients with chronic kidney disease or other renal conditions may be more susceptible to UTIs due to their weakened immune system and other factors.





02

An illustration of a white silhouette of a person standing in front of a large purple square. Overlaid on the person's torso is a diagram of the human urinary system, showing the kidneys, ureters, and bladder. The person is standing on a light gray surface with a reflection. In the background, there are stylized purple clouds and a large purple mountain-like shape. To the left of the person is a purple plant-like object, and to the right is a purple leaf-like object.

Purpose Of the Project

Why UTIs?

Purpose of the Project

Lack of AI-ML Projects

There aren't many detection & prediction models for UTIs

Lack of Relevant Datasets

According to our research, most public datasets don't contain technical attributes

Spread Awareness about UTIs

To normalize UTI detection & provide relief

Provide Clean Datasets

To build a strong dataset to support future UTIs detection projects



An illustration of a person standing in front of a large screen. The person's torso is transparent, revealing a diagram of the human urinary system, including the kidneys, ureters, and bladder. The background features stylized clouds and a large purple shape.

03

Diagnosis Of UTIs

What could be the symptoms?

Diagnosis of UTIs

A large number of technical and not so technical attributes have been considered to get accurate diagnosis of the disease.

Here are some symptoms we've taken as attributes but not restricted to...

| | | | | | | | | | |
|---------------------|------------------|----------------------------|------------------|----------------|---|----------|----------|-------------------|----------------------|
| Urine Culture (UCx) | Urinalysis (UCA) | Costovertebral Angle (CVA) | Abdominal Traits | Vaginal Traits | Spontaneous Bacterial Peritonitis (SBP) | Diabetes | Dementia | Genital Disorders | Pancreatic Disorders |
|---------------------|------------------|----------------------------|------------------|----------------|---|----------|----------|-------------------|----------------------|



04

Dataset Relevance

What are we working with?

Dataset Relevance



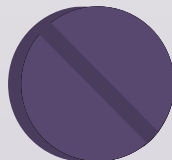
Source of Dataset: FigShare

A national teaching repository that supports open research, open access to datasets & citations, and disseminating knowledge for scientific advancement.



Quality of Attributes

There are 220 attributes consisting of technical and non-technical aspects of detecting UTIs



Quality of Instances

There are 80,000 instances covering various permutations of occurrences of symptoms

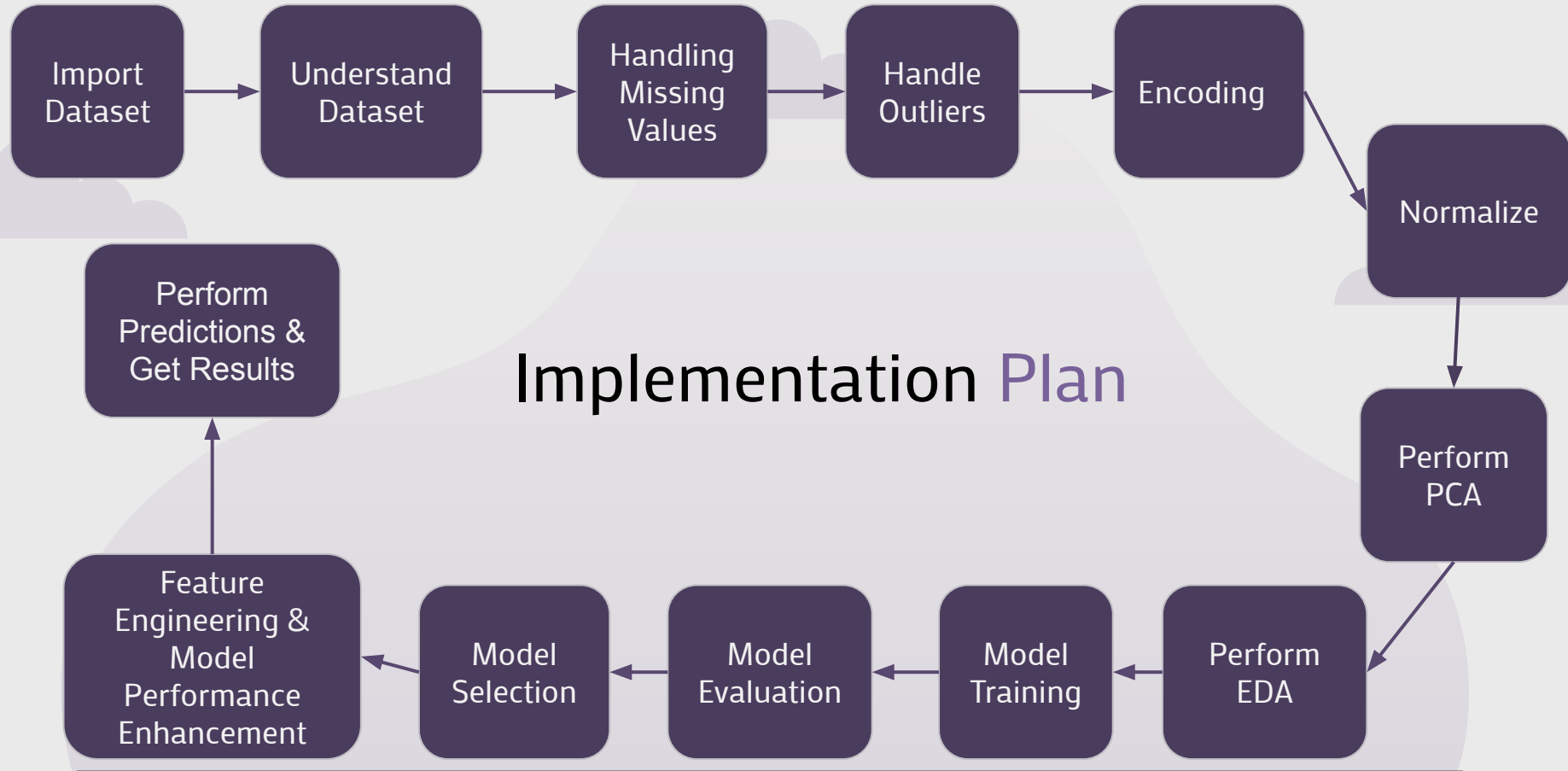


05

Implementation Plan

Because planning is important!

Implementation Plan



An illustration of a person with a white silhouette and a transparent torso revealing internal organs, including two kidneys and a bladder. The person is standing on a reflective surface next to a large, stylized purple number '06'. The background features soft, light purple clouds and a large, light purple mountain-like shape. A purple rectangular box containing the text 'What can you expect from us?' is positioned below the number. The overall style is clean and modern with a purple and white color palette.

06

Conclusion

What can you expect from us?

CONCLUSION

- Urinary tract infections (UTIs) can have significant impacts on renal care in women. Women are more likely than men to experience UTIs due to anatomical differences, such as having a shorter urethra, and hormonal changes that can affect the urinary tract.
- UTIs can lead to complications that affect kidney function, including kidney damage, chronic kidney disease, and urinary retention. Women who are pregnant or have pre existing kidney conditions may be at a higher risk of developing UTIs and should be particularly vigilant in preventing and treating them.
- Proper diagnosis and treatment of UTIs, including antibiotics and pain management, are essential in preventing complications and protecting kidney health.
- Women with recurrent UTIs may need additional evaluation and treatment to prevent further damage to the urinary tract and kidneys. It is important for women to maintain good hygiene practices, stay hydrated, and seek prompt medical attention if they experience symptoms of a UTI.



The background is a solid dark purple. There are four stylized, rounded cloud shapes in a slightly lighter shade of purple, positioned in the upper corners. A large, light purple, rounded shape is centered in the lower half of the image. The text "THANK YOU!" is written in a bold, white, sans-serif font, centered within the light purple shape.

**THANK
YOU!**
