

EARLY DETECTION OF CHRONIC DISEASES

Define CS, fit into CC

1. CUSTOMER SEGMENTS

CS

In our project the people who affected by ckd is customer Chronic kidney disease affects 47 million people in the United States and is associated with significant health care costs, morbidity, and mortality. Because this disease can silently progress to advanced stages, early detection is critical for initiating timely interventions.

6. CUSTOMER CONSTRAINTS

CC

High blood pressure medications can initially decrease kidney function and change electrolyte levels, so you might need frequent blood tests to monitor your condition. But not every people have money to frequently take test
Dialysis artificially removes waste products and extra fluid from your blood when your kidneys can no longer do this. In hemodialysis, a machine filters waste and excess fluids from your blood. But more amount require to dialysis

Transplanted kidneys can come from deceased or living donors. After a transplant, you'll need to take medications for the rest of your life to keep your body from rejecting the new organ and this treatment is cost effective so its not suitable for poor peoples

5. AVAILABLE SOLUTIONS

AS

You might experience a period of grief, similar to losing someone special, your previous lifestyle or independence, or a change in work or leisure activities. If you feel this way, you may find that you gain more control and feel less sad by learning more about CKD
You might feel guilty about having a long-term condition and its impact on others. Many patients feel like this at different times over the course of their treatment. This is normal, and feelings of guilt may be addressed by seeking assistance from a counsellor or psychologist. Emotional resilience is an important ability in dealing with the feelings associated with chronic kidney disease. Kidney Care UK and The Renal Association produced this guide to help you develop your emotional resilience.
You might feel angry about having CKD and how it affects your lifestyle, perhaps because you feel you have no control of the situation. By reading this booklet you are taking control and learning more about your condition. Feelings of anger may reduce as you gain more control over your health and the treatment.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Test for CKD regularly in patient(customer) who have diabetes, high blood pressure, or other risk factors for CKD. People with CKD may not feel ill or notice any symptoms until CKD is advanced.

The only way to find out if patient(customer) have CKD is through simple blood and urine tests. The blood test checks for the level of creatinine, a waste product produced by muscles, to see how well the kidneys work. The urine test checks for protein, which may indicate kidney damage.

We check their symptoms to find out in early stage

Most people may not have any severe symptoms until their kidney disease is advanced. The patient feel more tired and have less energy and have trouble concentrating, poor appetite, have trouble sleeping, have muscle cramping at night, have swollen feet and ankles, have puffiness around patient eyes, especially in the morning, have dry, itchy skin, need to urinate more often, especially at night

9. PROBLEM ROOT CAUSE

RC

Chronic kidney disease occurs when a disease or condition impairs kidney function, causing kidney damage to worsen over several months or years. Factors that can increase the risk of chronic kidney disease include: Diabetes, High blood pressure, Heart (cardiovascular) disease, Smoking. Chronic Kidney Disease prediction is one of the most important issues in healthcare analytics. The most interesting and challenging tasks in day-to-day life is prediction in medical field. 10% of the population worldwide is affected by chronic kidney disease (CKD), and millions die each year because they do not have access to affordable treatment. Chronic kidney disease can be cured, if treated in the early stages.

7. BEHAVIOUR

BE

There's no cure for chronic kidney disease (CKD), but treatment can help relieve the symptoms and stop it getting worse. Your treatment will depend on the stage of your CKD. The main treatments are: to solve their problem

lifestyle changes – to help you stay as healthy as possible

medicine – to control associated problems, such as [high blood pressure](#) and [high cholesterol](#)

[dialysis](#) – treatment to replicate some of the kidney's functions, which may be necessary in advanced (stage 5) CKD

[kidney transplant](#) – this may also be necessary in advanced (stage 5) CKD

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS

TR

most of the people not aware of ckd, because CKD usually has no symptoms at early stages. some people may be they hear from their relatives or friends about ckd.
or may be they goes with the kidney patient for their treatments, that time they hear doctors guidance.
some people have knowledge about ckd disease and they taking action when they feel the following symptoms:
Urinating more or less,

4. EMOTIONS: BEFORE / AFTER

EM

Financial burden of Treatment
Time commitment for dialysis
Feeling like a burden to others
Fearing that Treatment may cause pain
Unable to have restful sleep
Changes in employment
Eating restrictions
Worring about dialysis impacting your family, work, social and love life.

10. YOUR SOLUTION

SL

early prediction and proper treatments can possibly stop or slow the progression of this disease to end stage. Usually, people are not aware that medical tests we take for different purposes could contain valuable information concerning kidney diseases. Consequently, attributes of various medical tests are investigated to distinguish which attributes may contain helpful information about the disease. The information says that it helps us to measure the severity of the problem and we make use of such information to build a machine learning model that predicts Chronic

Kidney Disease

The main aim of this project is to predict whether the patient have chronic kidney disease or not, in more accurate and faster way based on certain diagnostic measurements like Blood Pressure (Bp), Albumin (Al).

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

In online they offer highest quality, personalized, specialized care that is cost effective and evidence based and they provide individualized care to maintain continuity and visit patients in hospitals and other healthcare places at times patient will need them most.

Ex: kidney diseases consultancies

8.2 OFFLINE

They follow the doctor's prescription

Ex: Control your blood pressure, Meet your blood glucose goal if you have diabetes, Work with your health care team to monitor your kidney health, Take medicines as prescribed, Work with a dietitian to develop a meal plan, Make physical activity part of your routine, Aim for a healthy weight, Get enough sleep, Stop smoking, Find healthy ways to cope with stress and depression

Extract online & offline CH of BE