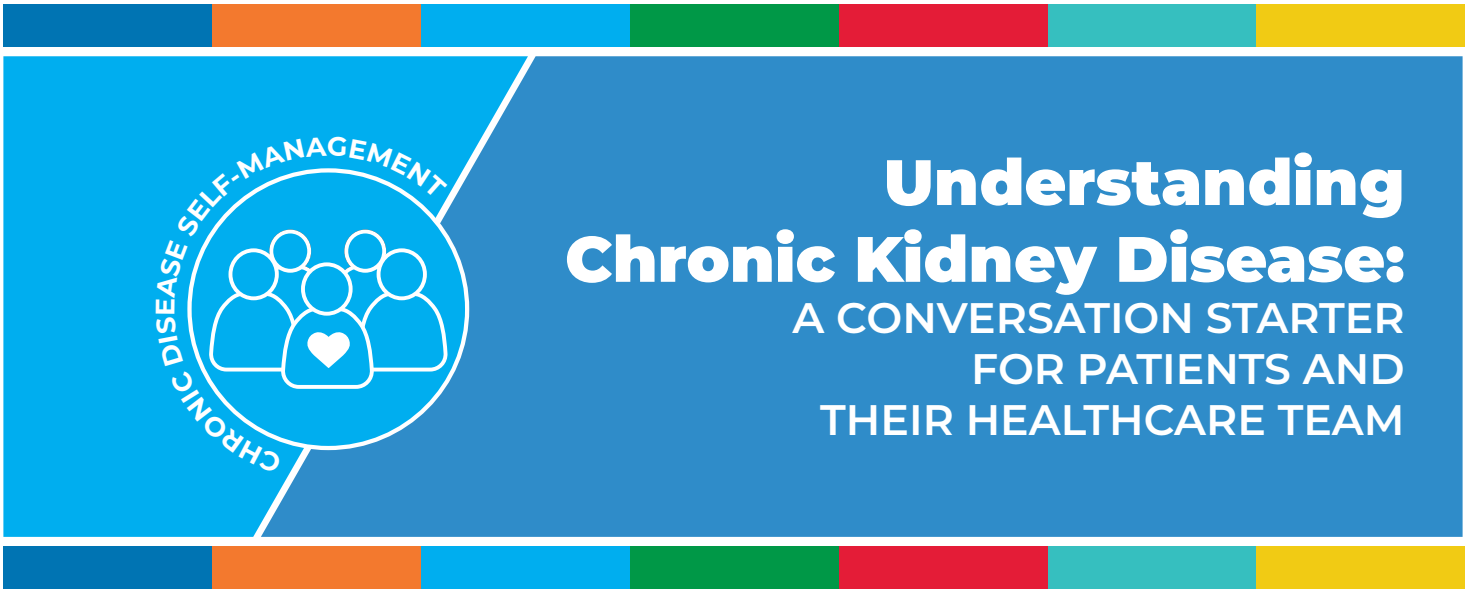

Understanding Chronic Kidney Disease:

A CONVERSATION STARTER FOR PATIENTS AND THEIR HEALTHCARE TEAM

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STAGES OF CHRONIC KIDNEY DISEASE

	STAGE 1 Normal Kidney Function	STAGE 2 Mild Loss of Kidney Function	STAGE 3A Mild to Moderate Loss of Kidney Function	STAGE 3B Moderate to Severe Loss of Kidney Function	STAGE 4 Severe Loss of Kidney Function	STAGE 5 Kidney Failure
Kidney Damage	**0–10% Damage** 	**11–40% Damage** 	**41–55% Damage** 	**60–70% Damage** 	**71–85% Damage** 	**More than 85% Damage** 
Glomerular Filtration Rate (GFR) Blood Test	**90 or Higher**	**89 to 60**	**59 to 45**	**44 to 30**	**29 to 15**	**Less than 15**
Albumin to Creatinine Ratio (ACR) Urine Test	Normal to Mildly Increased Amounts of **Protein in Urine** - ACR: < 30 mg/g	Moderately Increased Amounts of **Protein in Urine** - ACR: 30–300 mg/g		Severely Increased Amounts of **Protein in Urine** - ACR: > 300 mg/g		
ACR Range	**Normal Range** →	**Moderate Range** →		**Severe Range** →		
Self-Management Tip	**Work with a Nephrologist and Registered Dietitian Nutritionist (RDN) to support your kidney health**					
Symptoms	**STAGE 1** Your symptoms may or may not be related to chronic kidney disease. **You won't know unless you receive results from the GFR and ACR tests.**	**STAGE 2** Your symptom have may or may not be related to chronic kidney disease. **You won't know unless you receive results from the GFR and ACR tests.**	**STAGE 3A** • **Changes in urination** • **Blood in urine** • **Protein in urine** • **Swelling of hands, face, feet, ankles** • **Fatigue** • **Sleeping problems**	**STAGE 3B** • **Changes in urination** • **Blood in urine** • **Protein in urine** • **Swelling of hands, face, feet, ankles** • **Fatigue** • **Sleeping problems**	**STAGE 4** **SAME AS STAGES 3A AND 3B, PLUS...** • **Unpleasant breath** • **Nausea/vomiting** • **Changes in appetite** • **Poor concentration** • **Nerve problems**	**STAGE 5** **SAME AS STAGE 4, PLUS...** • **Headaches** • **Changes in skin** • **Chronic Itching**
Complications	**STAGE 1** Complications may or may not be related to chronic kidney disease. **You won't know unless you receive results from the GFR and ACR tests.**	**STAGE 2** Complications may or may not be related to chronic kidney disease. **You won't know unless you receive results from the GFR and ACR tests.**	**STAGES 3A, 3B, 4, 5** **ANEMIA** • Kidneys don't make enough blood cells to supply enough oxygen to the body. **HIGH POTASSIUM (Hyperkalemia)** • Kidneys can't keep the right amount of minerals, like potassium, in the body. • Kidneys can't remove wastes, like extra potassium, from the blood. **HIGH PHOSPHORUS & BONE DISEASE (Hyperphosphatemia)** • Kidneys can't keep the right amount of minerals in the body. • Kidneys can't activate vitamin D. • Kidneys can't keep the amount of calcium and phosphorus balanced; therefore, bones can get weak. **HEART DISEASE** • Damage to kidney blood vessels makes it hard for the kidneys to get enough blood and oxygen. • CKD makes it hard for the kidneys to release hormones that regulate blood pressure. • The heart must work harder to pump enough blood for the kidneys and body. **FLUID ACCUMULATION** • Kidneys can't keep the right amount of water in the body. Feet, ankles, hands and face may swell. • Too much fluid can lead to heart and breathing problems. More blood volume can increase blood pressure.			

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