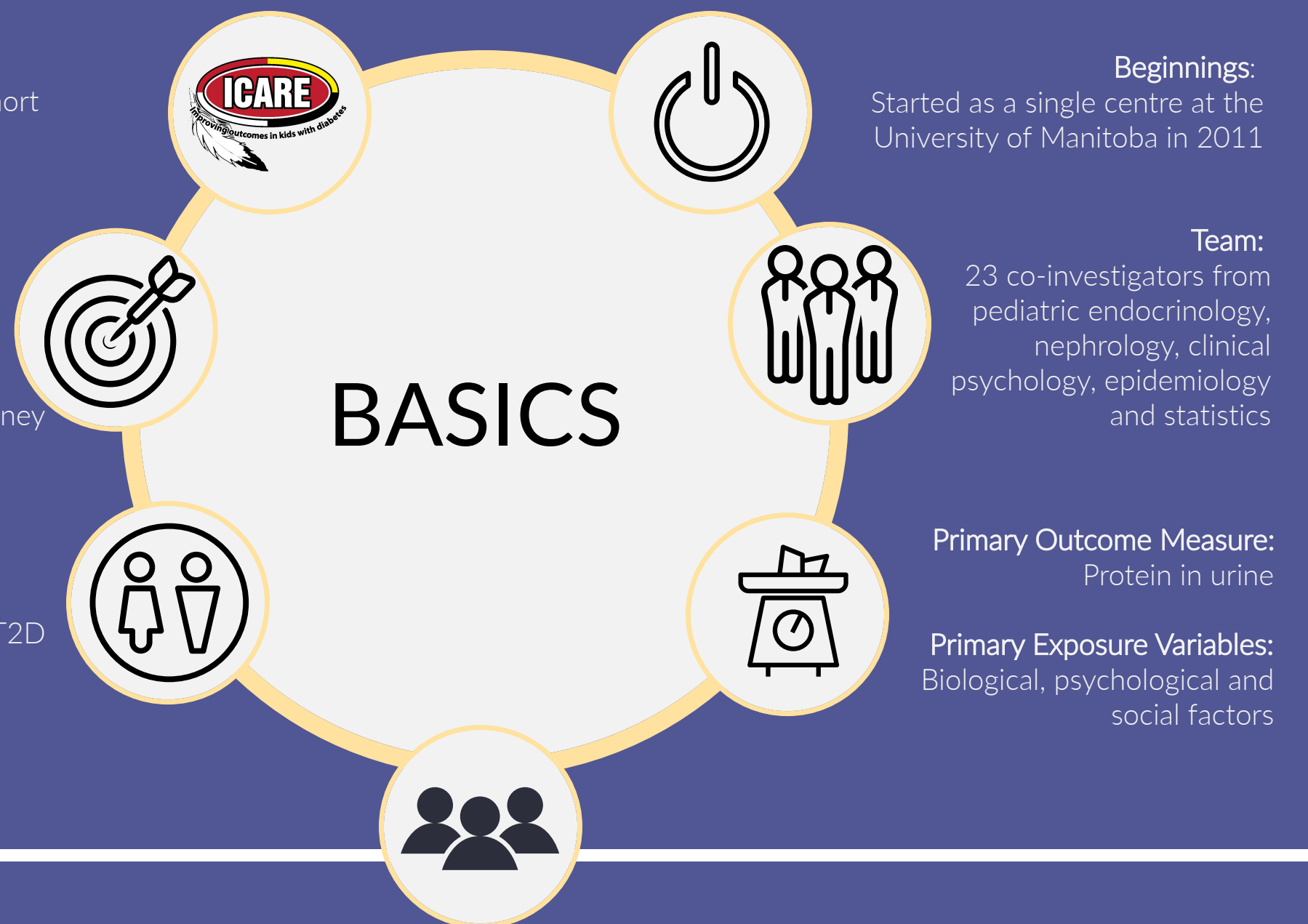


WHAT

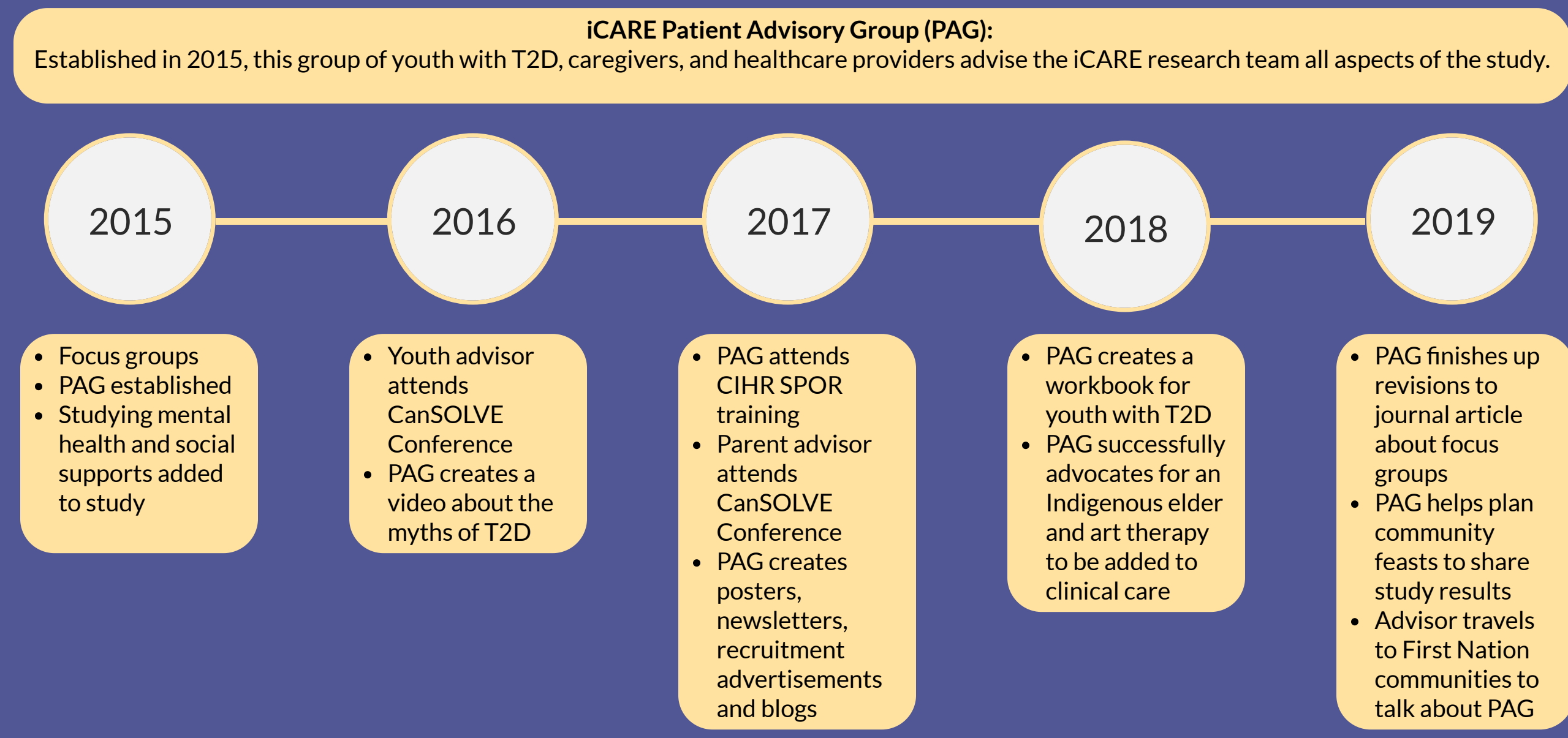
iCARE:
A prospective cohort study

Goal:
Understand risk factors and mechanisms of kidney injury

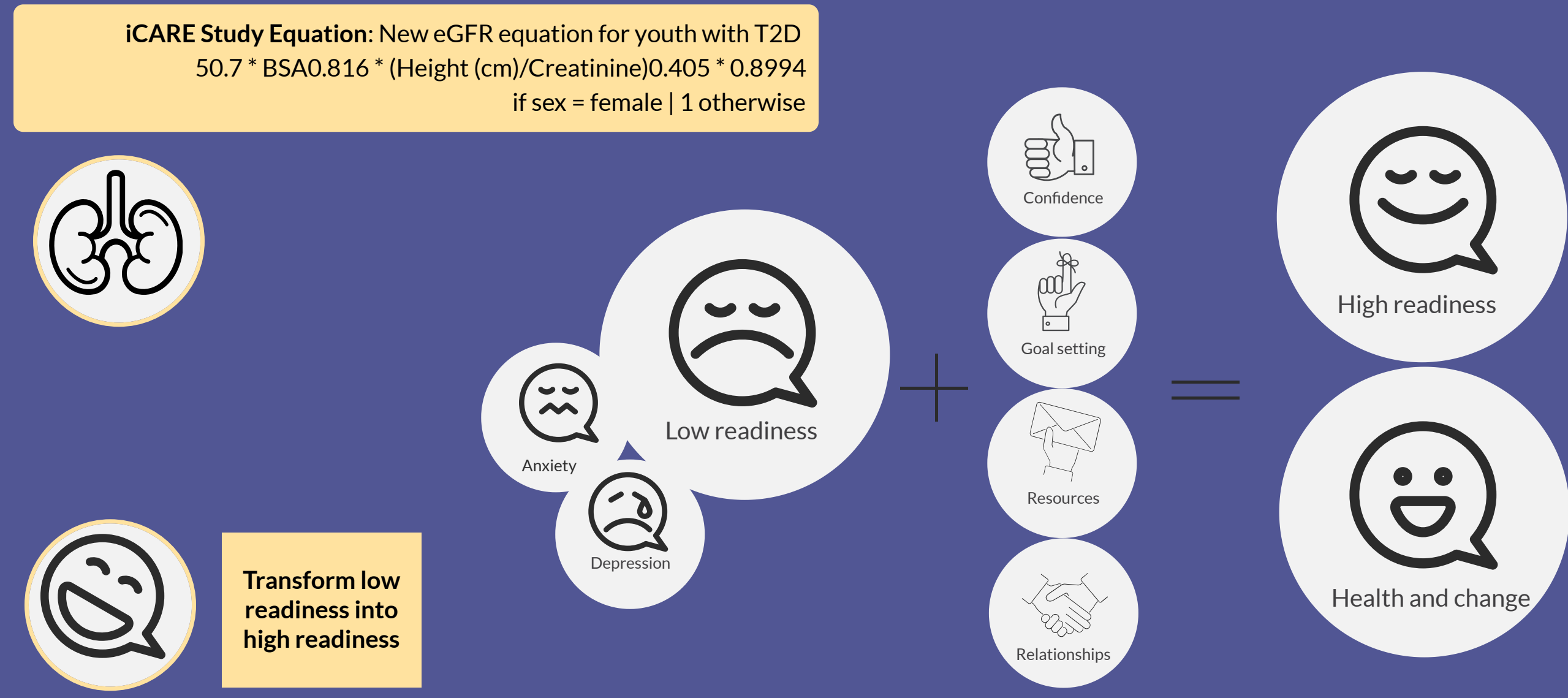
Study population:
10-18 years with T2D



HOW



LESSONS LEARNED

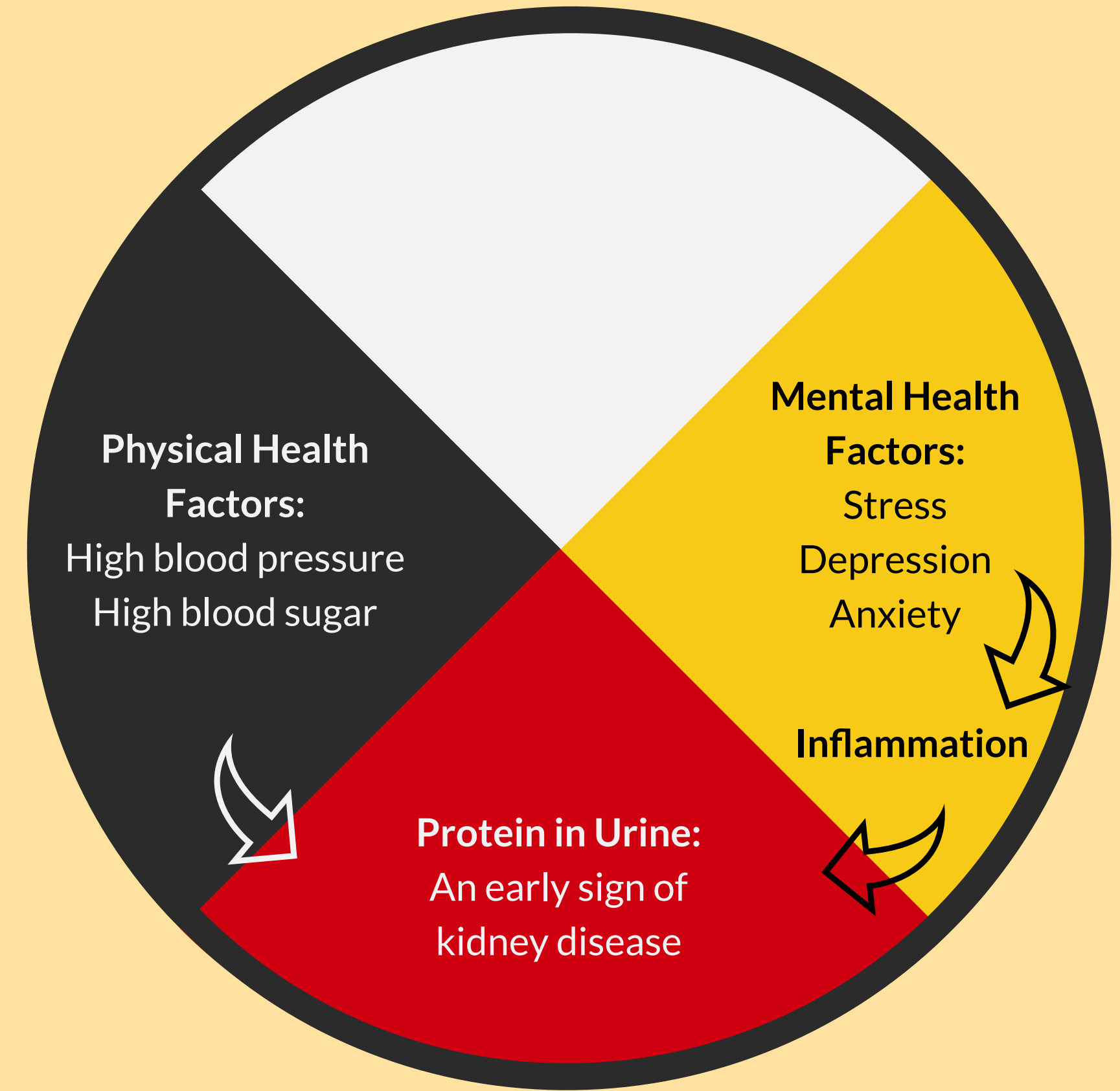


Structural Equation Modeling (SEM) Approach:
Includes underlying unobservable phenomena like psychological health. Below: an adapted SEM summary by the iCARE PAG

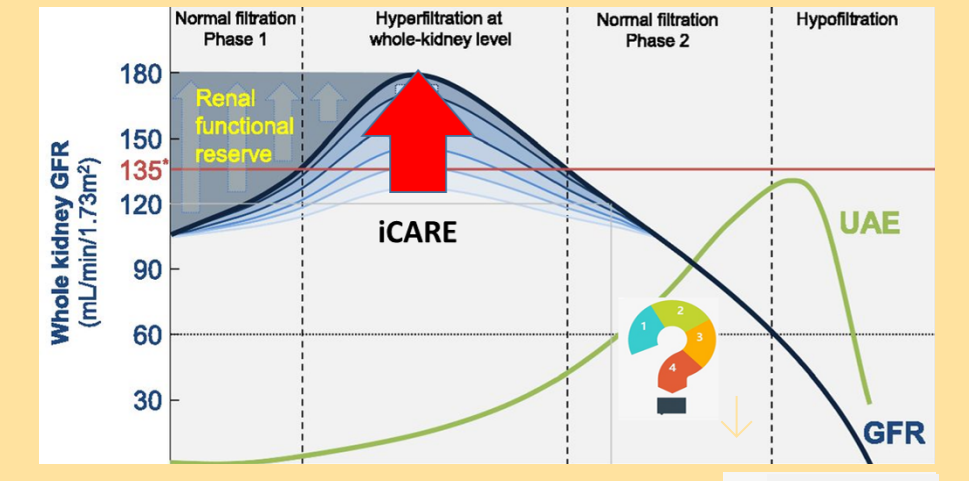
FACT:
3 out of 10 youth living with T2D show early signs of kidney disease

iCARE is trying to understand the risk factors of youth on-set diabetes.

Physical & mental health play important roles in kidney health.

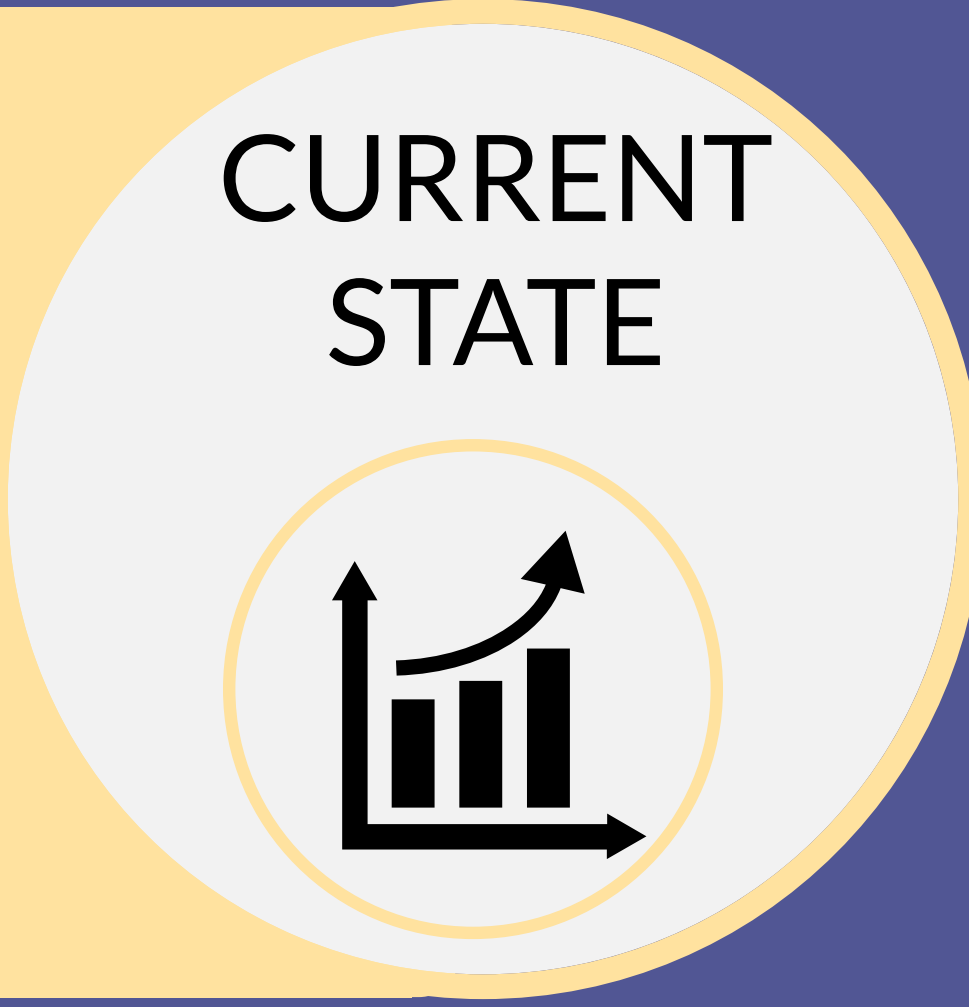


What we know so far:
Teens living with T2D have high rates of kidney disease. Mental health may indirectly increase inflammation, which hurts kidney health.



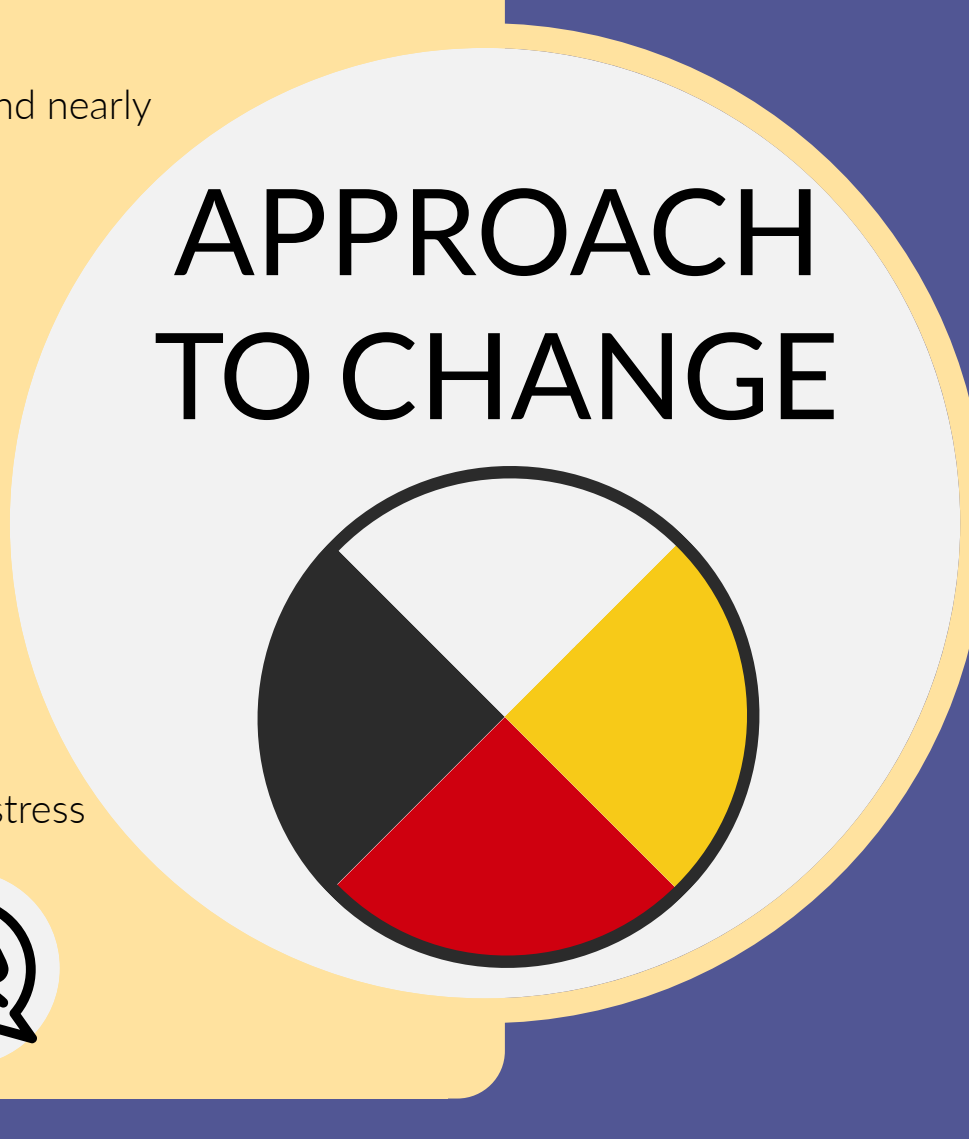
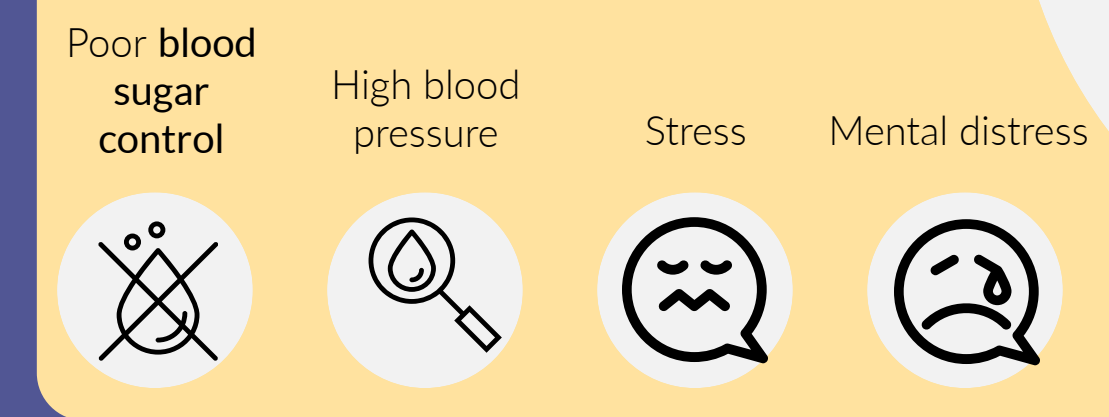
iCARE has partnered with AdDIT, (a CanSolve CKD T1D project) to better understand the mechanisms of kidney function and injury by looking at biomarkers.

- Biological markers
- Poverty
- Depression
- Inflammation



iCARE uses a bio-psycho-social model:

1. Biological & psychological factors are independent and nearly equivalent predictors of renal complications
2. "A purely biomedical model is inadequate for the management of chronic illness". (Engel GL. The need for a new medical model: A challenge for biomedicine. Science.1977;196(4286):129-136.)
3. Resiliency and other positive psychological factors may be protective against renal complications.
4. These factors independently predicted renal complications:



iCARE will inform holistic kidney injury prevention and treatment of T2D, specifically:

- How to use individual, family, and community strengths when treating youth with T2D
- Understand better ways to help youth with T2D manage their blood sugar
- Engage patient partners to develop an interventional trial to assess new ways of improving care for youth with T2D

