**Appendix 1.** Research Categories and levels in PCORI-CHAT

Category	Definition	Level 1	Level 2	Level 3
Causes of Disease	Patient-centered research to find out the root cause of diseases and what makes them more or less likely. This may include:  • Where you live  • Family history  • Life experiences  • Public policies	PCOR is done on causes and risks for diseases that affect many people or are very severe.	Research for level 1 plus additional research on causes and risks for diseases that affect fewer people and/or are less severe	In-depth research on causes of diseases that provides a detailed understanding of a wide variety of diseases.
New Approaches	Research about new ways to find, diagnose, treat, and manage illness	Little funding for patient-centered research on new ways to detect, diagnose, treat and manage illness	Some funding for research on new ways to detect, diagnose, treat and manage illness.	Increased funding for finding new and better ways to detect, diagnose, treat, and manage illness.
Promote Health	Research to find out how to prevent illness and promote health. For example:  Better lifestyle choices Better workplace environment Healthier communities	Patient-centered research on basic health promotion and prevention for the general population. This includes research on  • On helping people make healthy choices,  • Disease prevention  • Simple ways to make jobs and neighborhoods healthier	Patient-centered research includes studying  • More complicated ways to make communities, jobs, and other places healthy and safe,  • Ways to promote emotional and mental health 10  • Promoting physical wellbeing.	In-depth research related to promoting health and disease prevention that includes • Research on effective policies • Implementation of best practices in communities

Compare Approaches	Research to compare ways to find, diagnose, treat and manage illness to see what works best.	Some research compares different ways to detect, diagnose, treat and manage illness to see what works best.	More research compares different ways to detect, diagnose, treat and manage illness to see what works best.	In-depth research comparing different ways to detect, diagnose, treat and manage illness to see what works best
Patient-Doctor	Research into improving the relationship between doctors, health care workers, and patients. This includes improving communication for: • self-management techniques • at-home decisions • ways to make managing disease easier This also includes: • improving trust • increasing respect • cultural sensitivity	Some research on improving patient understanding and communication, including ways to help patients make better decisions about healthcare, and to manage their own health	More research to improve patient-doctor relationships and communication with patients. More funding for research to improve the cultural awareness and sensitivities of doctors and the medical system and to increase trust between patients and doctors.	Funding for larger scale studies on patient-centered approaches to improve communication between patients and health systems (not just doctors)
Quality of Life	Research to understand patient needs and wishes and how to improve their quality of life.	Some patient-centered research to better understand how individuals define quality of life and what they need or prefer in healthcare to have better life quality.	More patient- centered research to better understand how individuals define quality of life and what they need or prefer in healthcare to have better life quality including	In-depth patient-centered research to better understand how individuals define quality of life and what they need or prefer in healthcare to have better life quality including

Multiple Conditions	Research to look at better ways to treat patients with two or more health problems.	How to treat and manage multiple health problems that are often found together.	how much it differs from patient to patient.  Research studies how to treat and manage multiple health problems less often found together.	how much it differs from patient to patient and how to measure it better.  Increased research on improving care for those patients with multiple conditions.
Special Needs	Research about how to improve the well-being of people with mental, emotional, or physical problems across their lifespan such as • children with development disorders • adults with mental illness such as depression or bipolar disorder • adult and adolescent substance abuse	Research into some of the basics for individuals of all ages with mental, emotional, or physical problems. This addresses only the most common issues and populations.	Patient-centered research for individuals of all ages with mental, emotional, or physical problems that includes some research focused on specific populations and ages.	Patient-centered research for individuals of all ages with mental, emotional, or physical problems that includes studying uncommon conditions
Families/Caregivers	Research on:  Caregivers, families and communities  How illness affects those who aren't the patient.  How family, friends and	Some research on how family, friends, neighbors, communities, and social support networks affect patient-centered outcomes.	More research on how family, friends, neighbors, communities, and social support networks affect patient-centered outcomes. Also	Increased funding for research on how caregivers, families, and communities affect patient- centered outcomes and ways to limit the

	communities and social supports affect patient centered outcomes.		includes how illness affects those who are not the patient.	amount of time and stress a caregiver finds themselves when caring for the patient.
Access	Studying how to improve availability and accessibility of care, including research on Policies Transportation Cost Telemedicine Care delivery Referrals	Research examines how governmental policies, cost, healthcare workforce and tele-medicine affect the availability and convenience of healthcare and patient-centered outcomes.	Research studies also examine how transportation, location of healthcare, and new ways to deliver care affect access and health.	Research studies on pilot projects that improve access to care are performed in order to look for solutions that can help many people.
Improve Research	Studying how to make patient-centered outcomes research better. This includes: • Studying methods of including community and patient views and input • Improving trust in research • Training researchers to be more inclusive • Better ways to communicate research results • How to practice more ethical research.	A few people are trained in patient-centered research. Some research aims to improve scientific methods. Some research studies how to include patient and public views in research and how to communicate results. Some research on how to make research fairer, less harmful, and how to improve trust.	Research is done to support training people to be the next generation of patient-centered outcomes researchers and support for more community-based research. Researchers 51 study how to improve the experience of research for patients, families, and communities and how to improve research ethics.	Research studies on pilot projects that improve research are performed in order to implement solutions broadly.
Health Inequity	Some people	Patient-centered	Patient-centered	A great deal of

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	may have worse	research to	research to	research focuses
	health for non-	understand	understand	on reducing
	medical reasons,	health	health	health
	for example,	differences	differences	differences
	where they live,	related to	related to	related to
	money, race, or	disadvantage or	disadvantage or	disadvantage or
	religion. This	discrimination	discrimination	discrimination
	research tries to	focuses on the	includes	
	understand and	most dramatic	differences for	
	reduce those	differences, and	smaller	
	differences	the largest	disadvantaged	
		disadvantaged	groups and	
		groups.	subgroups, and	
			some less	
			dramatic	
			differences.	
Rare Diseases	Research on how	Patient-centered	Patient-centered	Patient-centered
	to treat and	research in other	research in other	research focuses
	prevent rare	categories	categories	on questions that
	diseases and how	sometimes	sometimes	relate to rare
	to help families	includes or	includes or	diseases.
	deal with rare	focuses on rare	focuses on rare	
	disease. Research	diseases. Some	diseases. Some	
	on rare diseases	patient-centered	patient-centered	
	sometimes takes	research for	research for	
	longer and costs	questions unique	questions unique	
	more than	for those with	for those with	
	research on more	special needs.	rare diseases.	
	common			
	conditions.			