Mission of the Cross-Cohort Collaboration Consortium (CCC)

The CCC is an effort to develop infrastructure, policies, and procedures which promote transparent and seamless scientific collaboration across multiple cohort studies. Participation in the CCC indicates enthusiasm for this general principle but does not guarantee participation in every project or preclude the pursuit of projects within any individual cohort.

Goals. The CCC has several major goals.

1. The over-arching goal of the CCC is to leverage decades of experience, knowledge, and resources of the participating cohorts to address scientific questions that can be better answered by using our combined data than by using data from an individual study.
2. Harmonization of data elements across cohorts and establishment of an archived dataset will be a major goal.
3. The scientific focus is on addressing chronic disease generally, although many of the cohorts involved have focused on aging, cardiometabolic and cardiovascular diseases.

Impact. We recognize a unique scientific space where the CCC will be expected to make a large impact.

1. Replication of findings in epidemiology is critical, and the CCC will play a unique role. In this setting, studies will be planned from the outset both to test hypotheses and to replicate findings.
2. While studies of common risk factors or common conditions might be studied in individual cohorts with sufficient power, the CCC will enable the study of rare phenotypes, rare outcomes, or both. For example, familial hypercholesterolemia is rare in individual cohorts, but among the combined cohorts, the number of affected is large. Similarly, hemorrhagic stroke and serious adverse drug reactions are rare outcomes that cannot be studied adequately in individual cohorts. Rare clinical presentations may also be studied, such as myocardial infarctions before the age of 50 or myocardial infarction with no obstructive coronary artery disease (MINOCA).
3. The CCC will greatly facilitate examination of epidemiological associations over the entire life course, given the wide age range of its constituent cohorts spanning most decades of life.
4. The diversity of cohorts within the CCC also allows the enrichment of less common demographics, such as elderly African-American women, who are under-represented in clinical practice guidelines, and facilitates assessment of effect modification by these factors in an efficient manner.
5. The availability of electronic health data such as that found in Medicare claims files provides a unique opportunity for the constituent cohorts to collaborate and harmonize research strategies leveraging these critical data sources.
6. The CCC will allow the formal study of both temporal trends and cohort effects, as the representative cohorts span well over 35 years.