Proposal No: 98-16
Topic: Insurance

Lead CCSS Investigator: Karen Emmons
Collaborators: Liu, Li, Mertens, Robison

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Priority Rating: 1.5
1. **Title:** Insurance and Insurability in the CCSS cohort

2. **Investigators:** Karen Emmons

3. **Background and Rationale:** In the U.S., access to health insurance is not equal. Obstacles to access exist for economically disadvantaged groups and those with serious pre-existing medical conditions such as childhood cancer. However, empirical data are scanty for childhood cancer survivors, in part because they comprise a tiny fraction of the general population. In addition, nearly all childhood cancer survivors are covered by their parents' health plan until they reach adulthood (≥ 18 years of age). Thereafter, these patients become widely dispersed and receive their care from diverse providers. Fortunately, the CCSS has collected data on health and life insurance from more than 18,000 childhood cancer survivors. Of these, the large majority are ages 18 years and over. Additionally, medical, socio-demographic, educational, occupational, income and other data have been collected. These variables can be analyzed as possible determinants of being uninsured or uninsurable. The results would represent a first step to identifying the magnitude of the problem, and developing intervention strategies to increase access for these patients at high risk of future medical problems.

4. **Specific Goals:**
   1. Among the CCSS cohort, determine frequency of not having health insurance and/or being refused health insurance among those ages 18 and over. In secondary analysis, the same analysis will be performed for not having and/or being refused life insurance.
   2. **Aim 2.** Seek and identify characteristics of CCSS cohort members that are associated with (and probably causally related to) not having or being refused health insurance, and secondarily, life insurance.
   3. **Aim 3.** Examine current health-related behavior, including use of medical surveillance and care, in relation to health insurance status.

5. **Analysis Framework:**
   A. **Subjects:** Survivors over age 18 years at completion of questionnaire, stratified by age, sex and diagnosis (A1, 2)
   B. **Study Design—Case control study:** Cases have no health insurance and/or had difficulty getting health insurance (Q1, 2). For each case, 3 controls are identified from the cohort after matching for age (within 5 years), sex, and broad diagnostic categories (leukemia, lymphomas, brain, other)
   C. **Aim 1.** Frequency of not having/being denied health and life insurance:
      Questions Q1-Q6.
   **Aim 2.** Characteristics of those not having health, and separately, life insurance.
   **Insurance Status (Q1/2 and Q4/5) correlated with the following factors:**
   - A 1, 2, 4 (race, age sex)
   - L 1-3 (marital status)
   - N 1-3 (personal habits)
   - O 1, 5 (employment, education)
   - K 1, 2, 4 (second cancer)
   - R 1-6 (worries)

   **Aim 3.** Current health behaviors. Effects of insurance status (Q1/2 and Q4/5) on B-17 (use of medical services) and N 15-17 and N 20-22 (health practices)

6. **Special considerations:** None needed.