

Attachment 1: Judging Criteria

Phase I and Phase II entries will be judged by an expert panel comprised of NCI program staff and external members of the health information technology community in compliance with the requirements of the America COMPETES Act. Judges may be named after commencement of the challenge. The judging panel will make selections based upon the following criteria:

1. **Use of cancer-related data:** Each entry must use at least one dataset or data service relevant to cancer prevention and control, as described in the section on judging criterion #2. When appropriate to the app, the use of additional datasets from other sources is also encouraged.
2. **Impact on the continuum of cancer prevention and control:** Each entry will be rated on the strength of its potential to help consumers, clinicians, and/or researchers address challenges related to the continuum of cancer prevention and control. Suggested targets comprise behavior risk reduction for prevention/survivorship (e.g., nutrition, physical activity, smoking cessation), early detection and screening, informed decision-making, and adherence to treatment regimens. Examples include, but are not limited to, apps that provide new ways of visualizing and communicating complex health information for risk communication; consumer decision support incorporating multiple sources of data to reduce the burden of cancer and enhance outcomes following diagnosis and treatment; and decision aides for cancer screening (e.g., PSA, breast, and cervical cancer). A detailed framework describing the continuum and related resources is available at the NCI DCCPS website: <http://cancercontrol.cancer.gov/od/continuum.html>. Also see:
 - a. Zapka JG, Taplin SH, Solberg LI, Manos MM. A framework for improving the quality of cancer care: the case of breast and cervical cancer screening. *Cancer Epidemiol Biomarkers Prev.* 2003 Jan; 12(1):4-13).
 - b. Taplin SH, Clauser S, Rodgers AB, Breslau E, Rayson D. Interfaces across the cancer continuum offer opportunities to improve the process of care. *J Natl Cancer Inst Monogr* 2010;2010(40):104-10.
 - c. Hesse BW, Hanna C, Massett HA, Hesse NK. Outside the box: will information technology be a viable intervention to improve the quality of cancer care? *J Natl Cancer Inst Monogr* 2010;2010(40):81-9.
3. **Integration:** Each entry will be rated on its potential for, or actual integration with existing electronic health record (EHR; recommended standards can be found at http://healthit.hhs.gov/portal/server.pt/community/standards_and_certification/1153/home/15755), personal health record (PHR), mobile, web, and/or other emerging health information technology platforms.
4. **Innovation:** Each entry will be rated for the degree of new thinking it brings to applications targeting the continuum of cancer prevention and control, and the creativity shown in designing for impact.
5. **Usability:** Each entry will be rated on its user-friendliness and interactive capabilities. Preference will be given to applications that are easily accessible to a range of users, including those with disabilities.