



Guide for Executive and Legislative Transition Teams

Welcome to the National Cancer Institute's Center for Biomedical Informatics and Information Technology. This website (cabig.cancer.gov) provides information about caBIG[®], its mission, and its role in connecting the cancer community.

At a time of critical change and unprecedented opportunity in life sciences and healthcare, caBIG[®] has the potential to become a platform for 21st century biomedicine.

Healthcare is in transition to a 21st century model

- U.S. healthcare delivery and research (“biomedicine”) faces a crisis in the next decade comparable to that currently being experienced in the financial sector.
- [21st century biomedicine](#) will connect individuals, organizations, institutions and their concomitant information in a cycle of discovery, development and clinical care (i.e., a “rapid learning system”), transforming the sector into a model that is [personalized](#), preventive, pre-emptive, and patient-participatory.
- This new model of biomedicine is predicated on the deployment of modern information technology synergistically [blending research and care](#). Today's research becomes tomorrow's care: that is, cutting edge technology and applications are cost-effectively explored in a research setting for future deployment in a care setting.

caBIG[®]: a pioneering effort building a 21st century platform for biomedicine

- Over the past [5 years](#), the National Cancer Institute (NCI) has prototyped [caBIG[®]](#) (“ca” for cancer and “BIG” for the Biomedical Informatics Grid) within the cancer community. caBIG[®] has created a 21st century electronic infrastructure to link the entire cancer community.
- BIG uses current internet and web services technology and deploys existing information standards. It flexibly connects local data and applications with [software, data, and infrastructure](#) services offered through the internet “cloud”.
- caBIG[®] and the American Society of Clinical Oncology (ASCO) have partnered to develop and deploy Electronic Health Records (EHRs) to small practices within the cancer community.
- caBIG[®] has mastered the administrative and management processes necessary to execute complex development and deployment projects through the government.



Immediate Opportunities to Leverage caBIG[®]

- **Use “BIG” as a national biomedical IT platform.** caBIG[®] technology has been demonstrated to connect Electronic Health Records and research infrastructure, enabling integration of molecular information and clinical decisions based on genetic types. *Potential benefits: clinical outcomes lead to faster discoveries, and discoveries advance rapidly to the bedside; cost-savings accrue from pre-emptive interventions and avoidance of inappropriate/unnecessary medication.*
- **Use caBIG[®] for other diseases.** caBIG[®] technology and capabilities are applicable to almost any therapeutic area and to any organization -- public or private, academic or commercial. *Potential benefits: Avoid re-inventing information technology for other diseases and other NIH institutes; enable commercial companies to build on the government-laid foundation.*
- **Use caBIG[®] to drive U.S. biomedical leadership.** caBIG[®] technology is already being adopted in the UK, China, India and elsewhere, enabling global biomedical research collaborations. *Potential benefits: accelerated discoveries; avoidance of duplicative investment; commercial development of U.S. biomedical advances.*

For further information about caBIG[®], please visit:

- [caBIG[®] Pilot Phase Report 2003 - 2007](#)
- [The Biomedical Informatics Grid \(BIG\): A Platform for 21st Century Biomedicine](#)

To receive a caBIG[®] background kit or to talk to caBIG[®] leadership, please send inquiries to BIGquestions@cancer.gov.

For technical information about caBIG[®] tools, infrastructure and how to get connected or get support, please visit <https://cabig.nci.nih.gov>.