



Moffitt Cancer Center and caBIG[®]: A Data Sharing Partnership

William Dalton, M.D., Ph.D.
CEO and Director
Moffitt Cancer Center

A Cancer Patient's Life Journey



TCC protocol:

1. Can we follow you throughout your lifetime?
2. Can we study your tumor using molecular technology?
3. Can we recontact you?



Total Cancer Care Today

- State of the art data warehouse in place
- Partnership with Merck for data generation and warehouse construction
- Over 36,912 patients prospectively consented
- 11,996 tissues collected since 2006
- 7,191 specimen profiles completed; 10K scheduled by end of 2009
- 18 participating sites contributing 80% of tumors
 - ◆ 10 in Florida (including Moffitt)
 - ◆ 8 other states (NC, SC, NE, LA, IN, KY, CT MI)
- Several international sites identified
- Access to clinical data and gene expression data



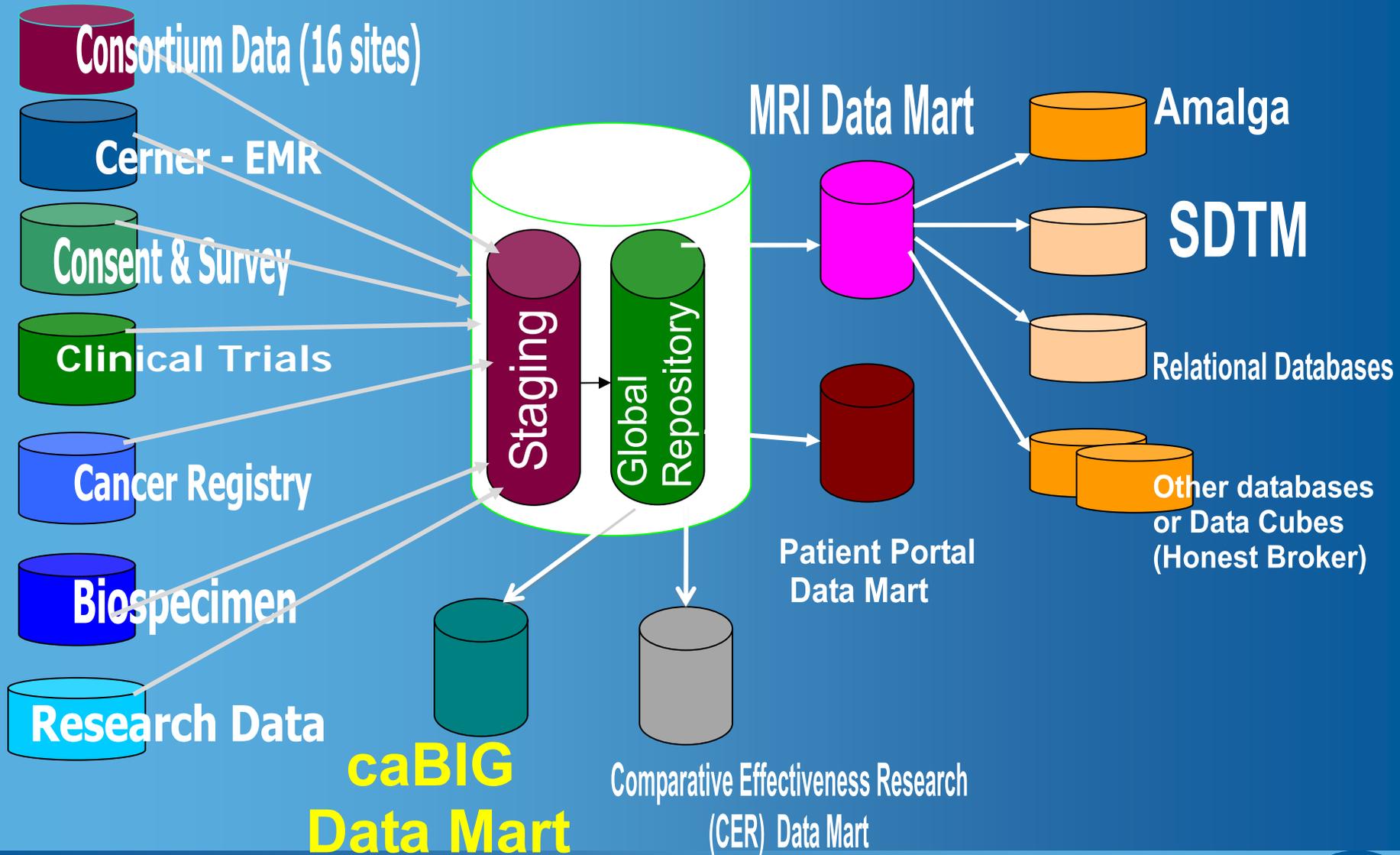
TCC Data Collection



TOTAL CANCER CARE™



TCC Data Integration



TCC Integration with caBIG

Moffitt Commercial Software

Microarray Data
Resolver[®]

Clinical Trials Data
Oncore[®]

Biospecimen Data
LabVantage BioBanking

Image Data
Emageon[®]

SNP Data
caGWAS[™]/Custom



**caBIG
Data Mart**

caBIG Software

Microarray Data
caArray[™]

Clinical Trials Data
caAERS[™], CTODS[™]

Biospecimen Data
caTISSUE[™]

Image Data
caIMAGE[™]

SNP Data
caGWAS[™]



Three Portals To TCC

Researcher View (Existing)

Molecular Profiling

Drug Discovery

Biomarkers

CRO

Patient View (Under Development)

View My Medical History Online

Recommendations Based
On Personal Data

Clinician View (3-5 Years)

Decision Tool:
Evidence-based Guidelines

TCC
Multi-
Dimensional
Data
Warehouse

The diagram features a central blue circular area with a dotted pattern, labeled 'TCC Multi-Dimensional Data Warehouse'. Three colored beams (green, grey, and brown) originate from this central area and point towards three separate boxes on the left and bottom. The green beam points to the 'Researcher View (Existing)' box, the grey beam points to the 'Patient View (Under Development)' box, and the brown beam points to the 'Clinician View (3-5 Years)' box. Each box contains a list of features or services associated with that view.

caBIG Implementation at MCC

- 2007-2008 (Year 1) – Assessment, Goals and Implementation Plan Completed
- 2008-2009 (Year 2) – caGrid, caArray, caGWAS, caTISSUE Suite and geWorkbench deployed; Ponce School of Medicine: caTISSUE Suite implementation
- 2009-2010 (Year 3) – caIMAGE, caAERS and CTODS to be deployed; Ponce School of Medicine: Active caGrid implementation using caTISSUE



Facilitating Research with caBIG Infrastructure

- MCC researchers sharing and consuming data via caGrid network using deployed tools
- MCC Data Sharing Plans
 - ◆ Colon 400 – 400 Affymetrix chips from MCC colorectal cancer study (release w/publication)
 - ◆ Ovarian Cancer GWAS study (>4000 Illumina 610K chips – Phase I) (release based on GINA)
 - ◆ Biospecimen data from NCI/NIH funded studies
 - ◆ Lung SPORE data (research, tissues and clinical)
 - ◆ Future: TCC data (microarrays, images, biospecimens and clinical metadata)



MCC caBIG Implementation Team

- Research IT
 - ◆ Sunil Shanmugam
 - ◆ Robert Sprinkle
 - Biomedical Informatics
 - ◆ Andrew Hoerter*
 - ◆ Xiaotao Qu*
 - ◆ Zhihua Chen
 - ◆ Greg Bloom, Ph.D.
 - ◆ William Ge, Ph.D.*
 - ◆ Steven Eschrich, Ph.D.
 - IT
 - ◆ Don Wasylyna
 - ◆ Don Chancey
 - ◆ Graham Smith
 - ◆ William Totten
 - MCC Deployment Lead
 - ◆ David Fenstermacher, Ph.D.*
- * Working with Ponce School of Medicine to implement caTISSUE Suite and caGrid

