

About OMICS Group

OMICS Group is an amalgamation of [Open Access Publications](#) and worldwide international science conferences and events. Established in the year 2007 with the sole aim of making the information on Sciences and technology 'Open Access', OMICS Group publishes 500 online open access [scholarly journals](#) in all aspects of Science, Engineering, Management and Technology journals. OMICS Group has been instrumental in taking the knowledge on Science & technology to the doorsteps of ordinary men and women. Research Scholars, Students, Libraries, Educational Institutions, Research centers and the industry are main stakeholders that benefitted greatly from this knowledge dissemination. OMICS Group also organizes 500 [International conferences](#) annually across the globe, where knowledge transfer takes place through debates, round table discussions, poster presentations, workshops, symposia and exhibitions.

OMICS International Conferences

OMICS International is a pioneer and leading science event organizer, which publishes around 500 open access journals and conducts over 500 Medical, Clinical, Engineering, Life Sciences, Pharma scientific conferences all over the globe annually with the support of more than 1000 scientific associations and 30,000 editorial board members and 3.5 million followers to its credit.

OMICS Group has organized 500 conferences, workshops and national symposiums across the major cities including San Francisco, Las Vegas, San Antonio, Omaha, Orlando, Raleigh, Santa Clara, Chicago, Philadelphia, Baltimore, United Kingdom, Valencia, Dubai, Beijing, Hyderabad, Bengaluru and Mumbai.



ACRES

Alliance for Clinical Research Excellence and Safety

Application of Systems Thinking and Systems Engineering Principles to Enhance Safety and Pharmacovigilance through Real-Time Informatics

Greg Koski, PhD, MD

President and CEO

Alliance for Clinical Research Excellence and Safety

Drug Development Today— A Complex Ecosystem under Intense Environmental Pressure

The Big Picture...



In a rapidly changing environment the ability to survive is determined by the ability to adapt!



ACRES

Alliance for Clinical Research Excellence and Safety



Tufts Center for the
Study of Drug Development

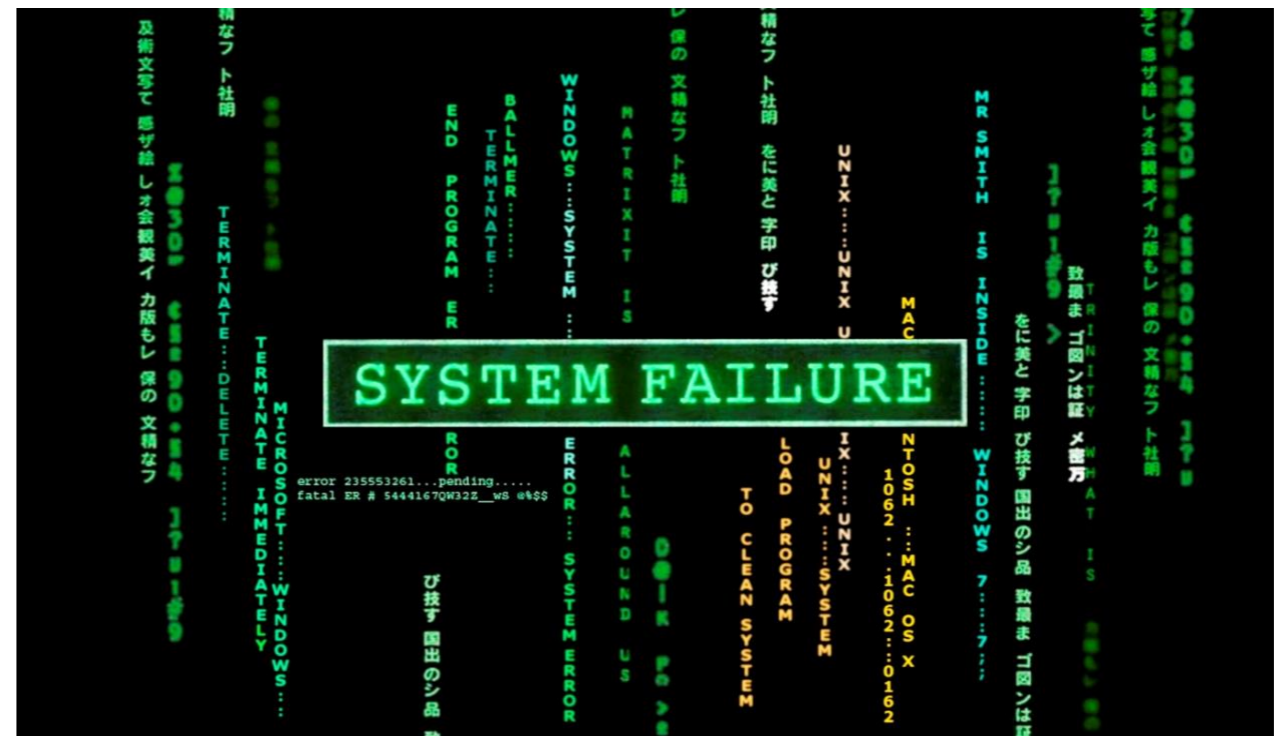
“The drug development model has not fundamentally changed in more than 50 years, when the Kefauver-Harris Amendments of 1962 established the current standard for the clinical testing of investigational drugs”

*--Kenneth I. Kaitin, PhD
Tufts CSDD Director*

Change Management— It takes a crisis!

“The current approach to drug development is inefficient, ineffective and unsustainable.”

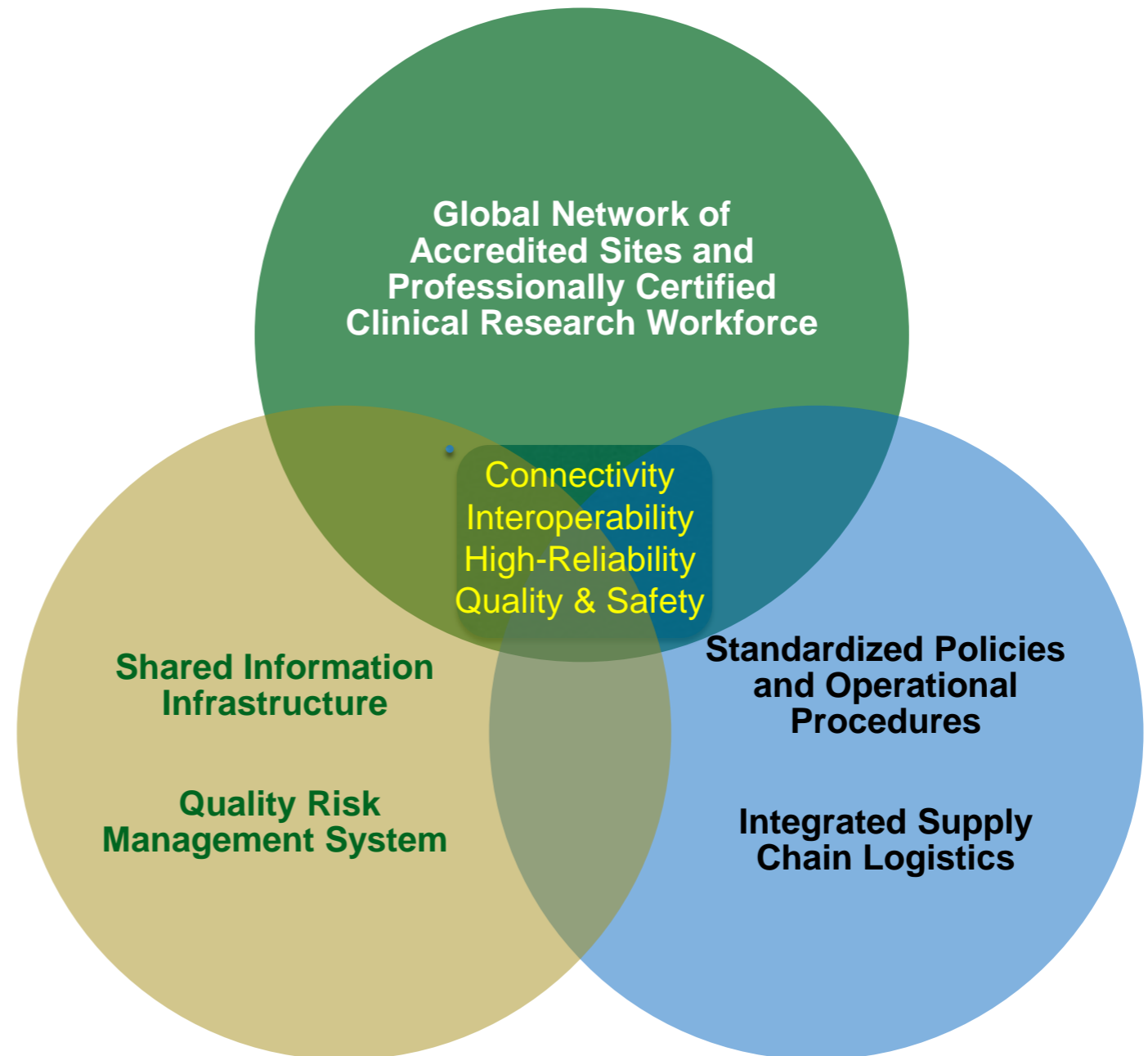
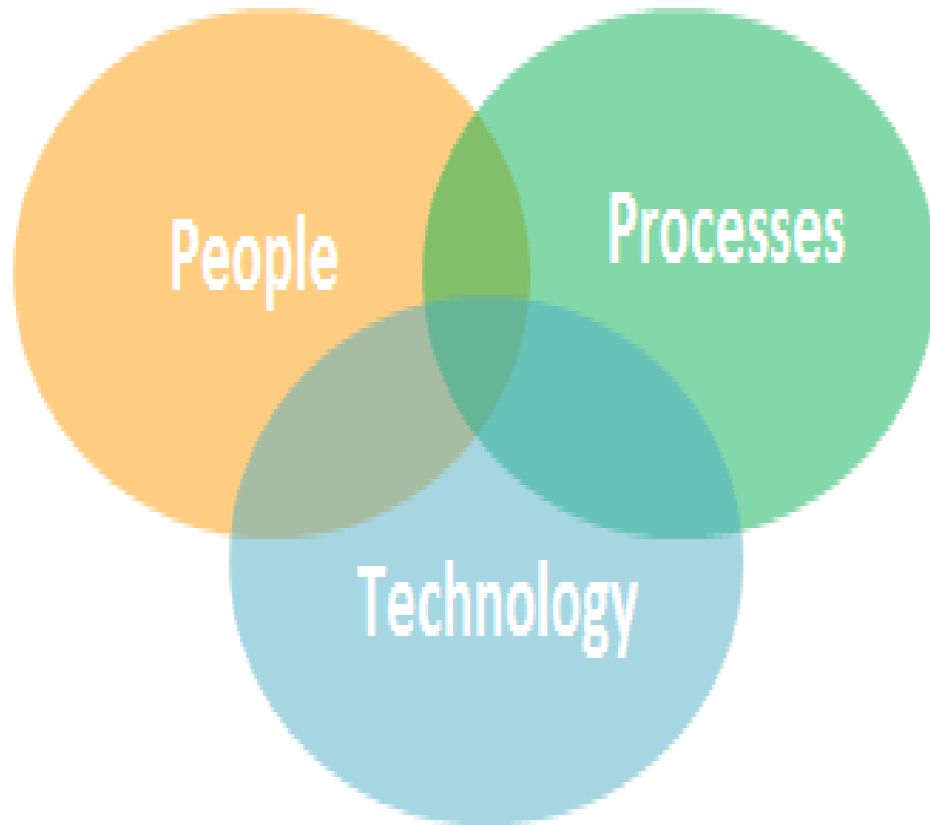
DIA Europe, 2010



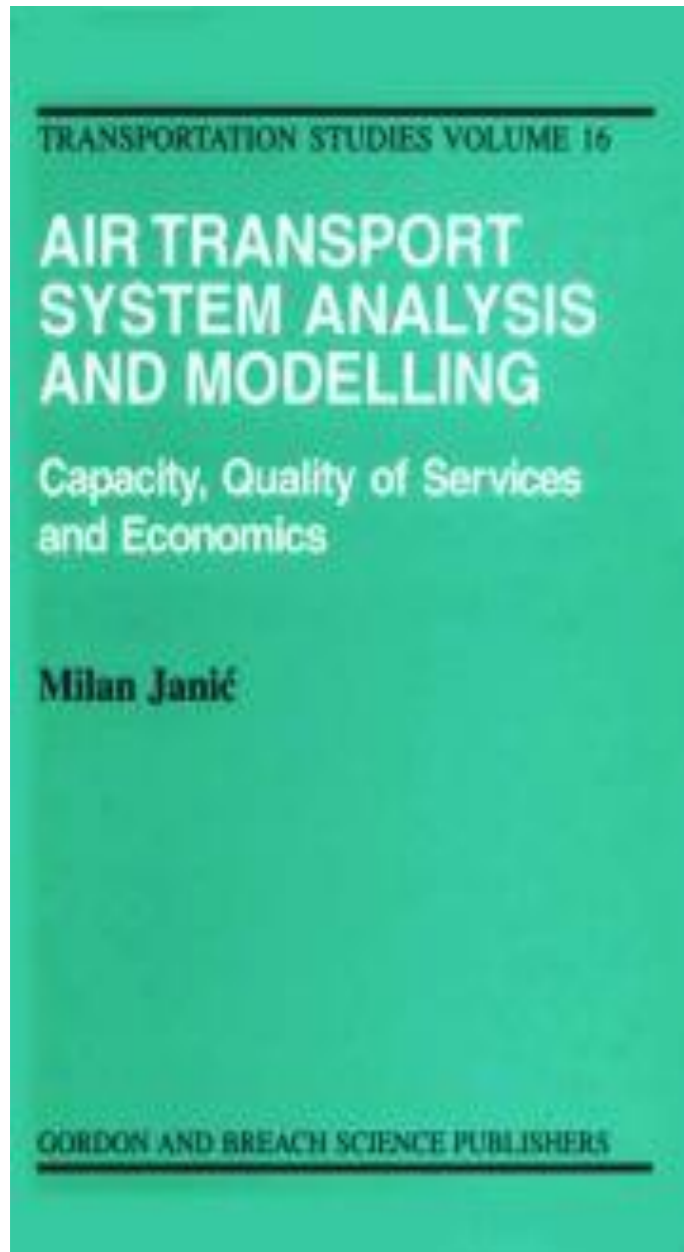
From Silos to Network Systems



Fundamental Elements of an Enterprise System for Clinical Research

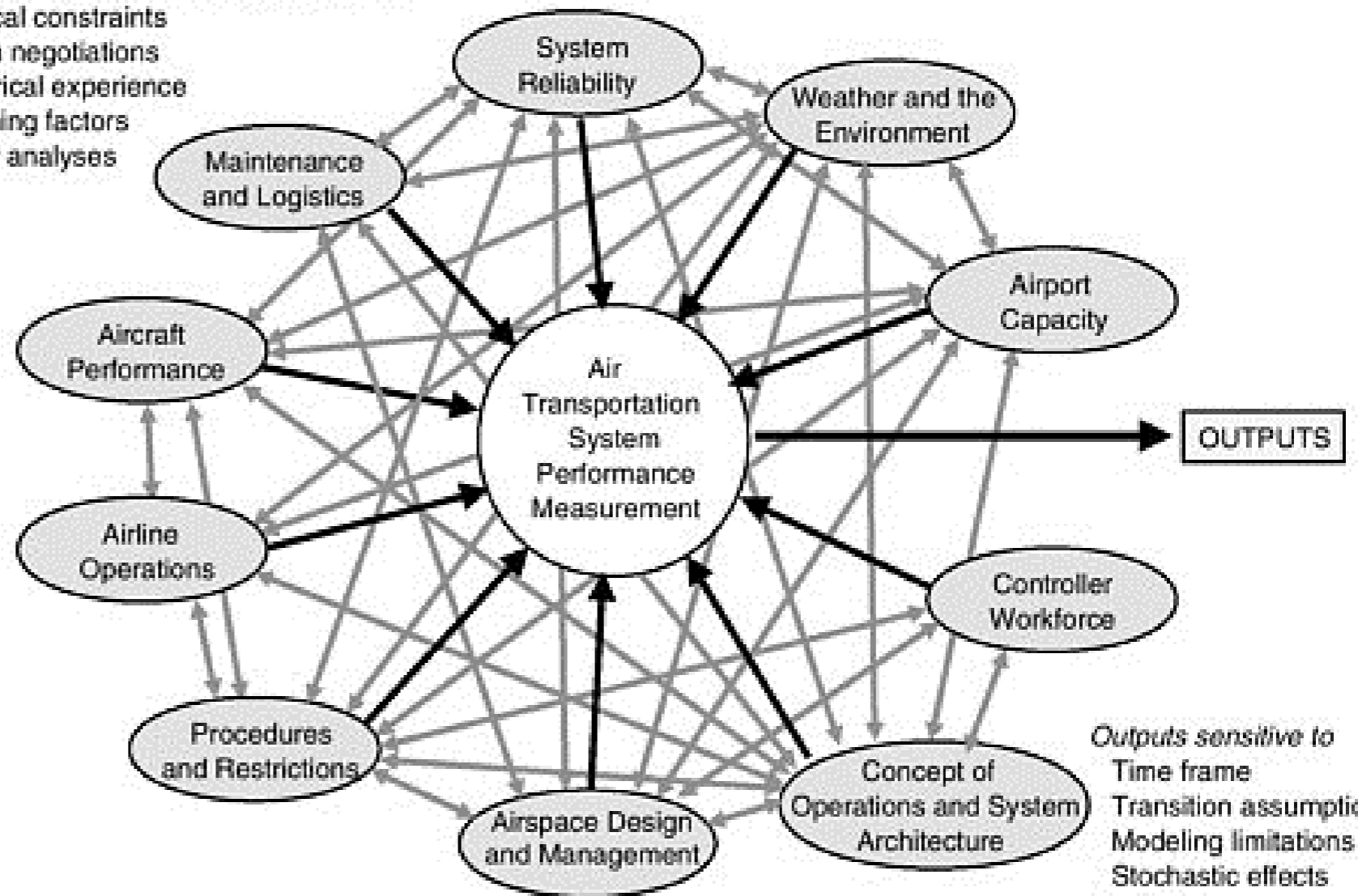


Systems Thinking: The Global Air Transport System



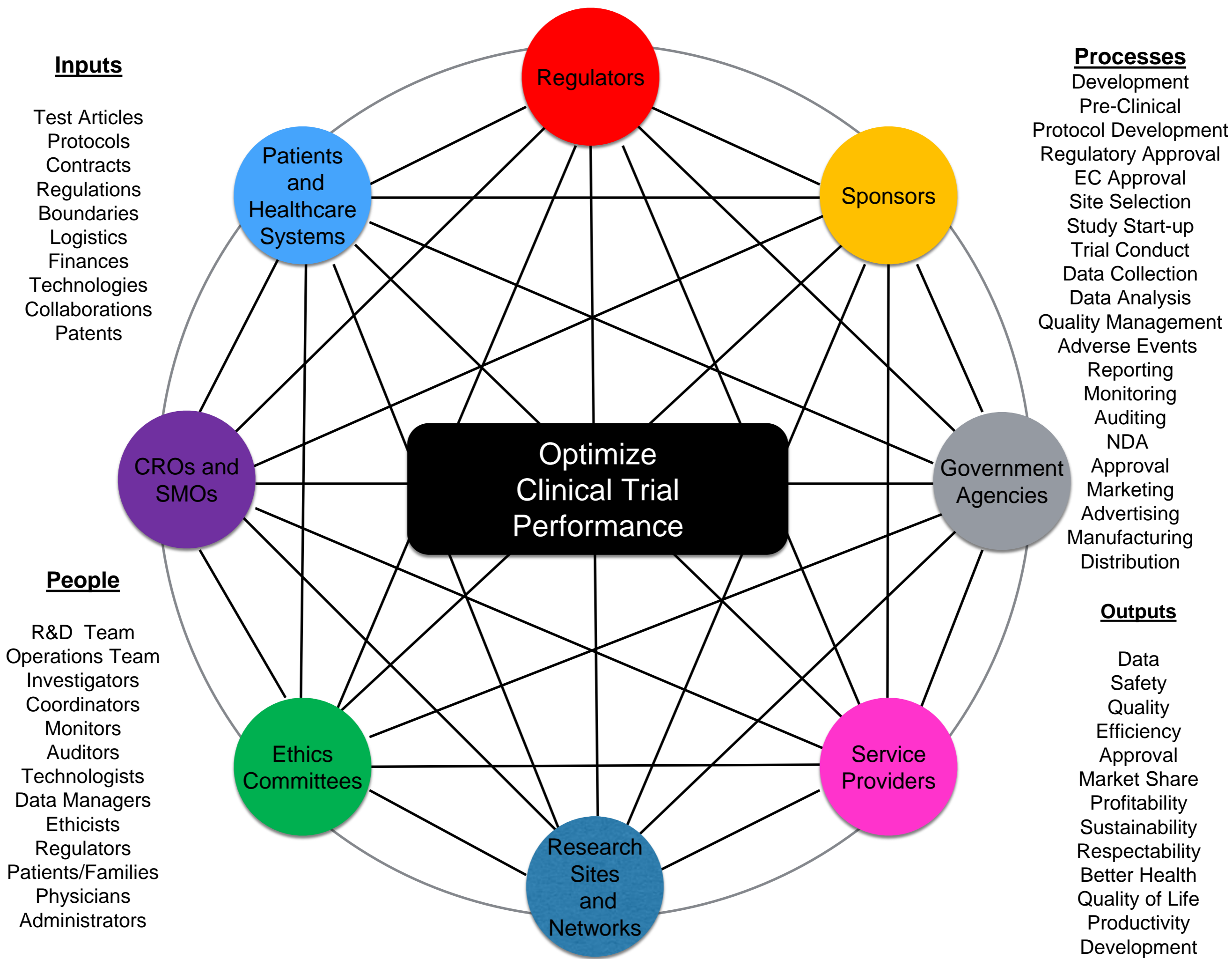
Inputs derived from

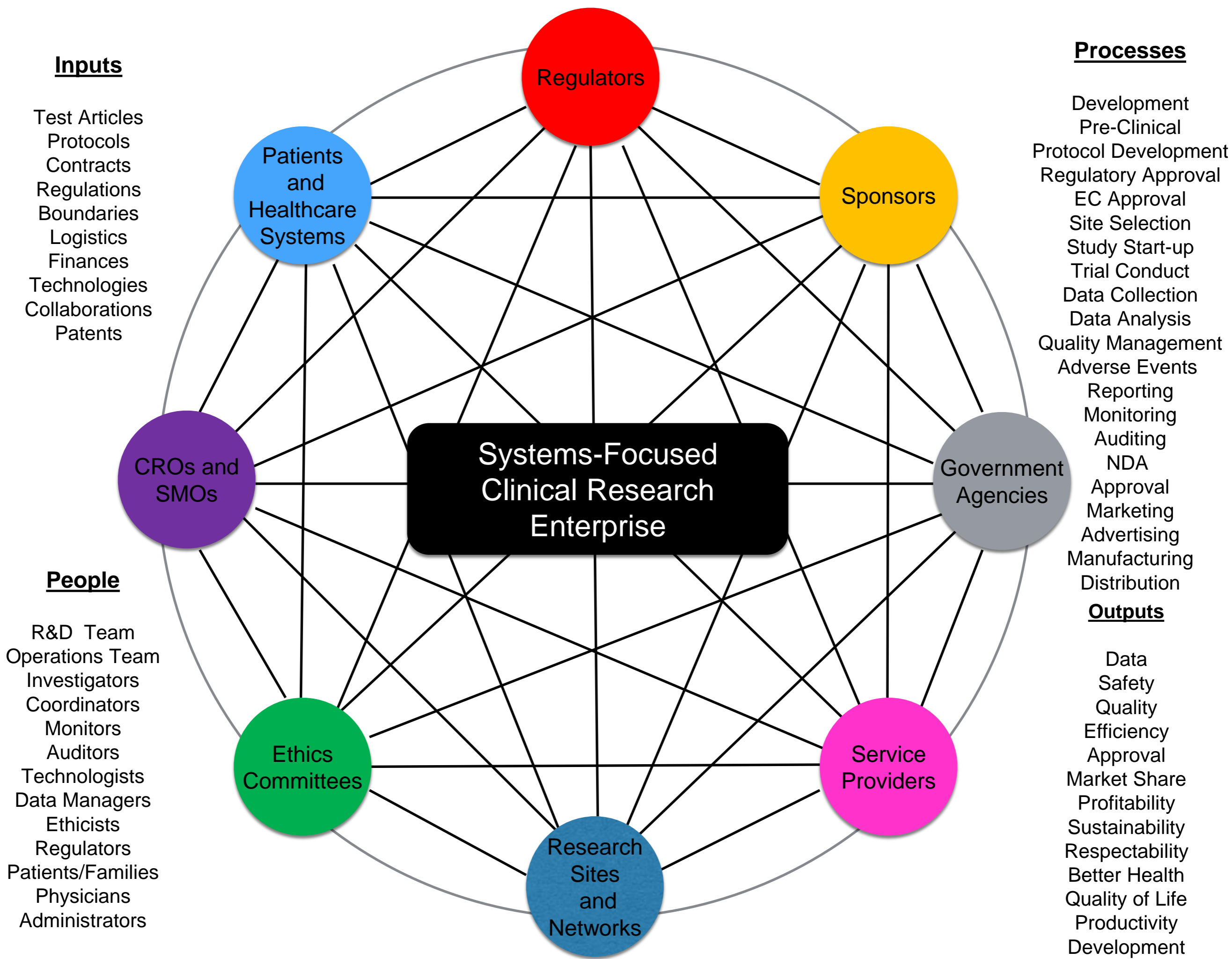
- Budget size and allocation
- Technical limitations and opportunities
- Political constraints
- Union negotiations
- Historical experience
- Planning factors
- Other analyses



Outputs sensitive to

- Time frame
- Transition assumptions
- Modeling limitations
- Stochastic effects
- Metrics





Inputs

Test Articles
Protocols
Contracts
Regulations
Boundaries
Logistics
Finances
Technologies
Collaborations
Patents

People

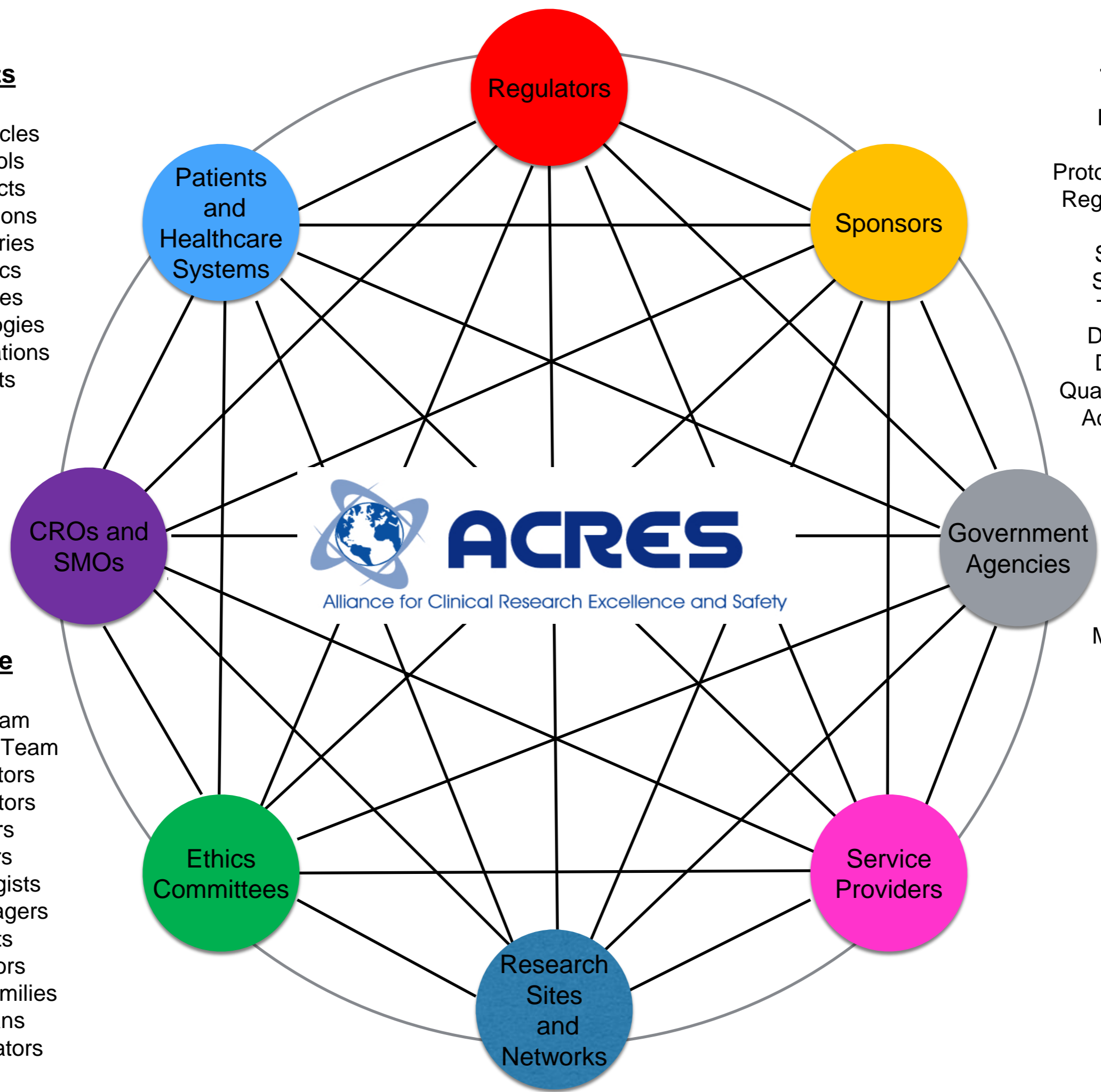
R&D Team
Operations Team
Investigators
Coordinators
Monitors
Auditors
Technologists
Data Managers
Ethicists
Regulators
Patients/Families
Physicians
Administrators

Processes

Development
Pre-Clinical
Protocol Development
Regulatory Approval
EC Approval
Site Selection
Study Start-up
Trial Conduct
Data Collection
Data Analysis
Quality Management
Adverse Events
Reporting
Monitoring
Auditing
NDA
Approval
Marketing
Advertising
Manufacturing
Distribution

Outputs

Data
Safety
Quality
Efficiency
Approval
Market Share
Profitability
Sustainability
Respectability
Better Health
Quality of Life
Productivity
Development





What is ACRES?

A non-profit multi-sector alliance of like-minded people and organizations working collaboratively in the public interest to build a shared global system for clinical research excellence—

To promote Accountable Research™ by aligning ethical principles and professionalism with good business, scientific, medical and regulatory practices, within an enterprise safety culture.

ACRES Foundation Initiatives

Initial projects are underway in each of four operational domains where critical processes for research sites, sponsors, CROs, regulatory authorities, ethics committees, and research subjects intersect to achieve "clean data" with greater efficiency, safety and interoperability -- at the points where change is most needed.



Sites Matter!

“For too long, the industry has failed to recognize the importance and value of well-established, sustainable, high-performing research sites. They are a resource that we have undervalued. Now is the time for us to take a more systemic approach that promotes site productivity and sustainability...”



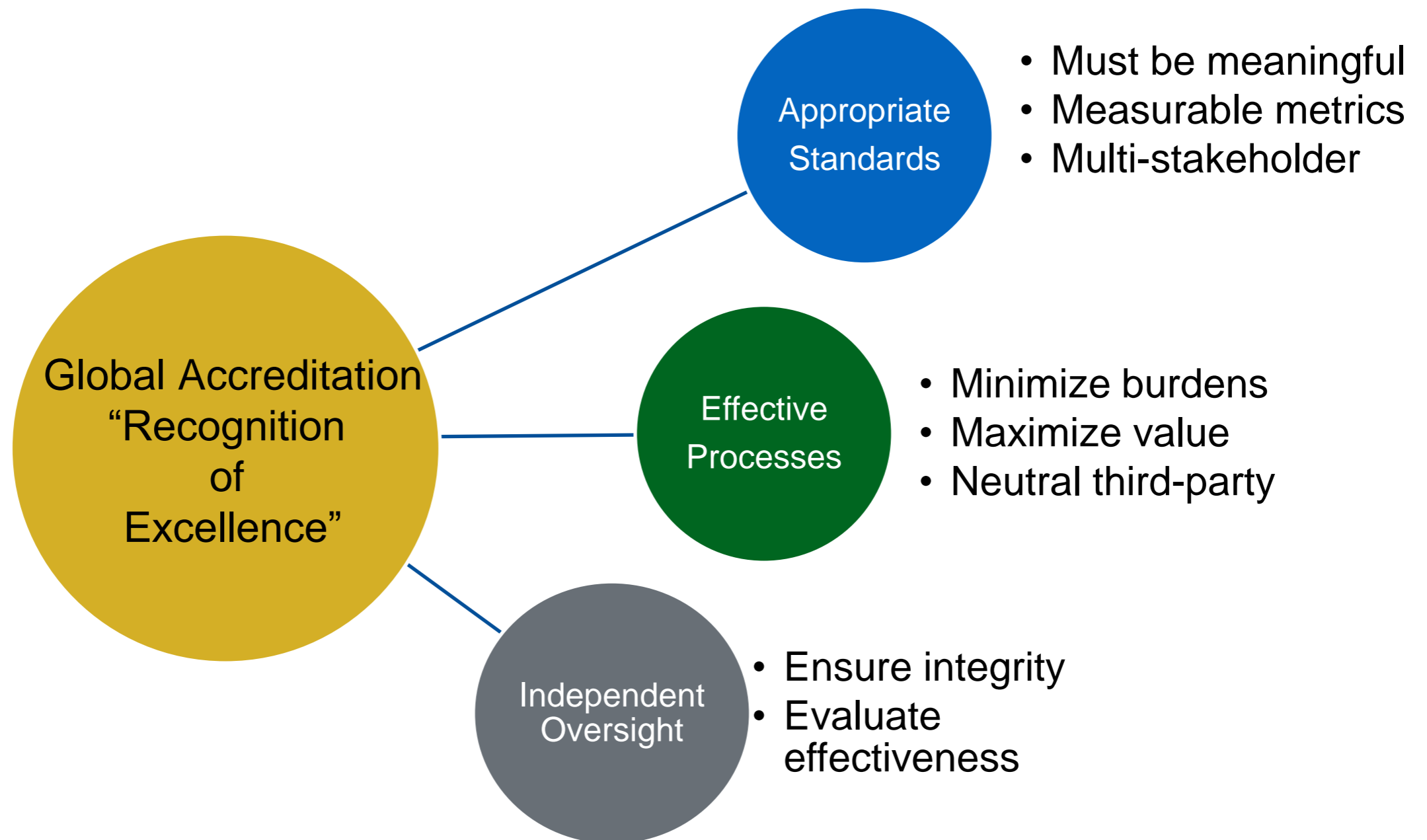
--Briggs Morrison, MD

*Vice-President for Global Medicines Development
and Chief Medical Officer, AstraZeneca
Member of the ACRES Board of Directors*

The Harsh Reality of Clinical Research Sites Today

- 70% of clinical research sites never do more than one clinical trial in the business lifetime
- Fewer than half of sites meet enrollment goals and 10% never enroll a single subject
- Few sites have professionally trained and certified research personnel
- Many sites are still using paper records without EDC/CTMS
- Monitoring accounts for nearly one-third on clinical trial budgets
- Redundancy, delays, non-compliance, and poor quality are the norm rather than the exception

Elements of Effective Accreditation



Site Accreditation Standards Initiative

Establish an efficient, effective and representative Project Steering Committee

Engage critical stakeholders to champion efforts for site accreditation and workforce certification

2013

Convene broad-based Collaboration Summit (s) to refine Scope, Strategy and Structure

2014

Empower a Global Working Group for Standards and Process Development

2015

Develop and Implement necessary standards and agreements

Pilot Test and feedback from stakeholders

2016

Refine standards and implementation through regional networks

Evolving needs of Society and Stakeholders



- Public Trust
- Professionalism
- Quality Assurance
- Site Performance
- Risk Management
- Information Technology



Sustainable system infrastructure to drive clinical research quality, safety and efficiency

Urgent Challenges

- Education and training
- Trial complexity
- Site selection
- Performance
- Monitoring
- Data management
- Pharmacovigilance
- Regulatory compliance
- Delays and redundancy
- Time to market
- Ethical review
- Misconduct
- Public confidence
- Economic pressures
- Global disparities

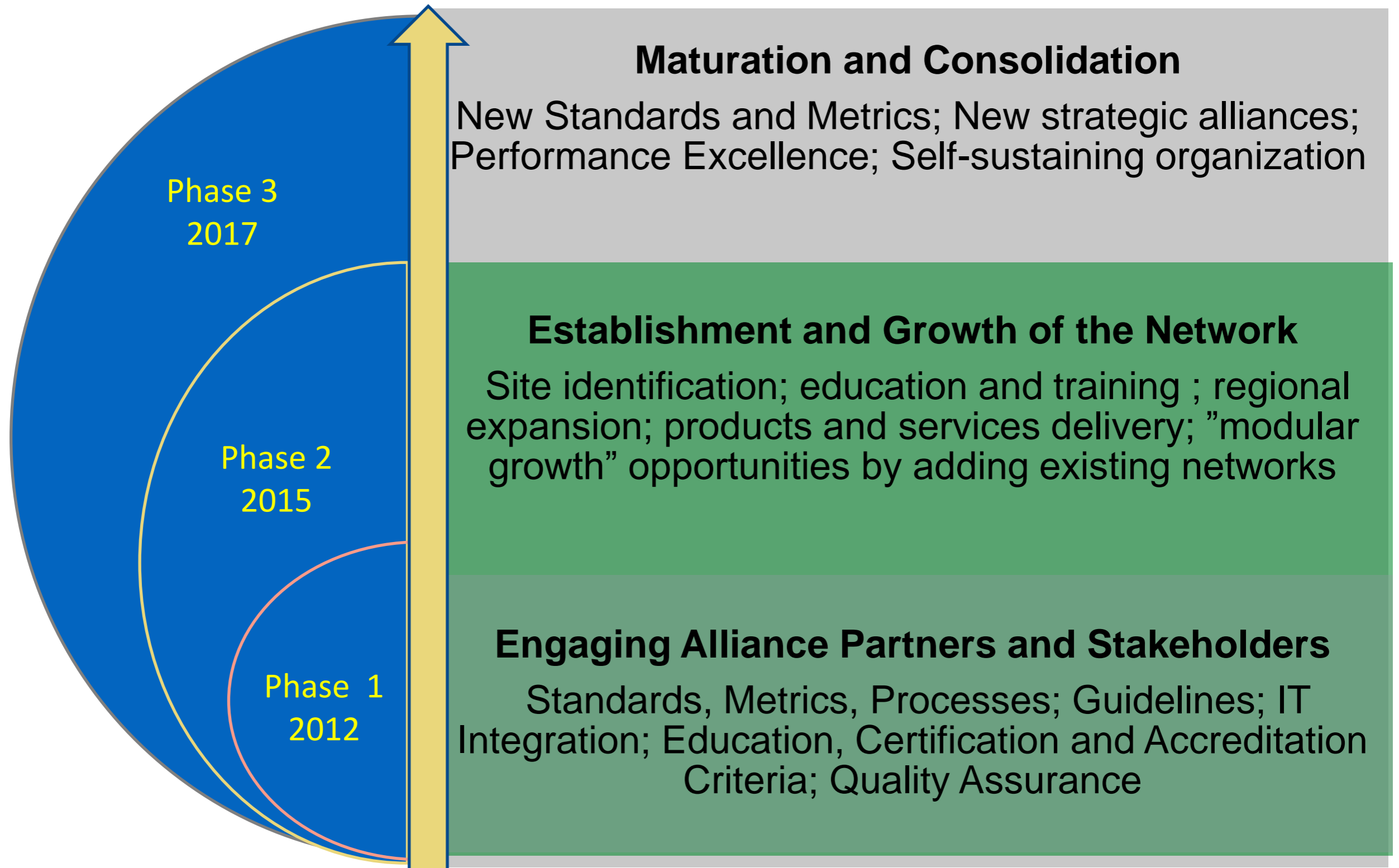
ACRES Value Proposition

More effective application of existing resources to build a sustainable, shared “system infrastructure” will provide a handsome return on investment-- economically, scientifically and socially.

Current estimates of waste due to inefficiency and redundancy in the clinical trials process is approximately 30%

An effective system could realize *annual* savings in excess of \$20 Billion

Implementation Strategy and Timeline



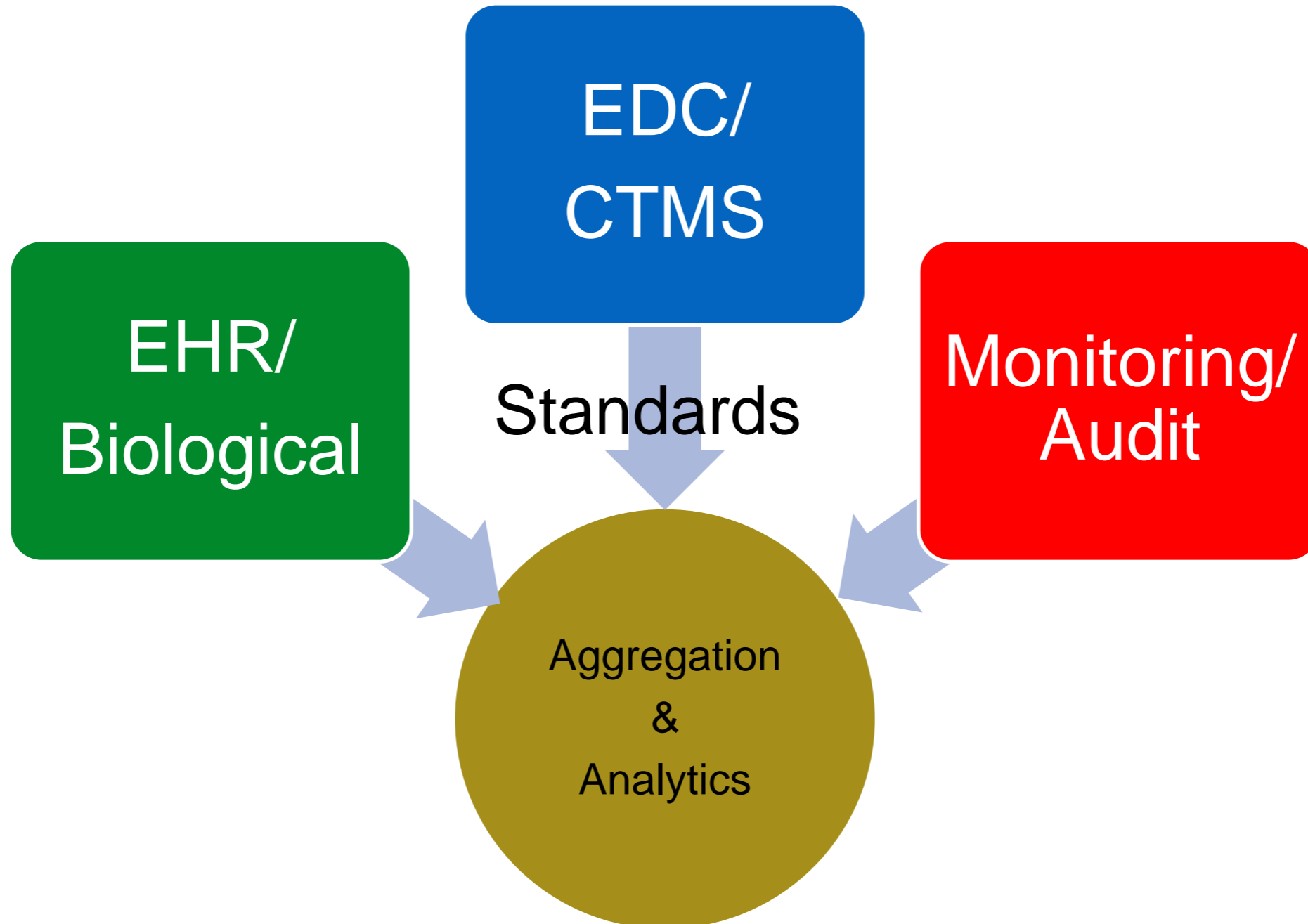
Safety and Pharmacovigilance— Why are we flying blind?

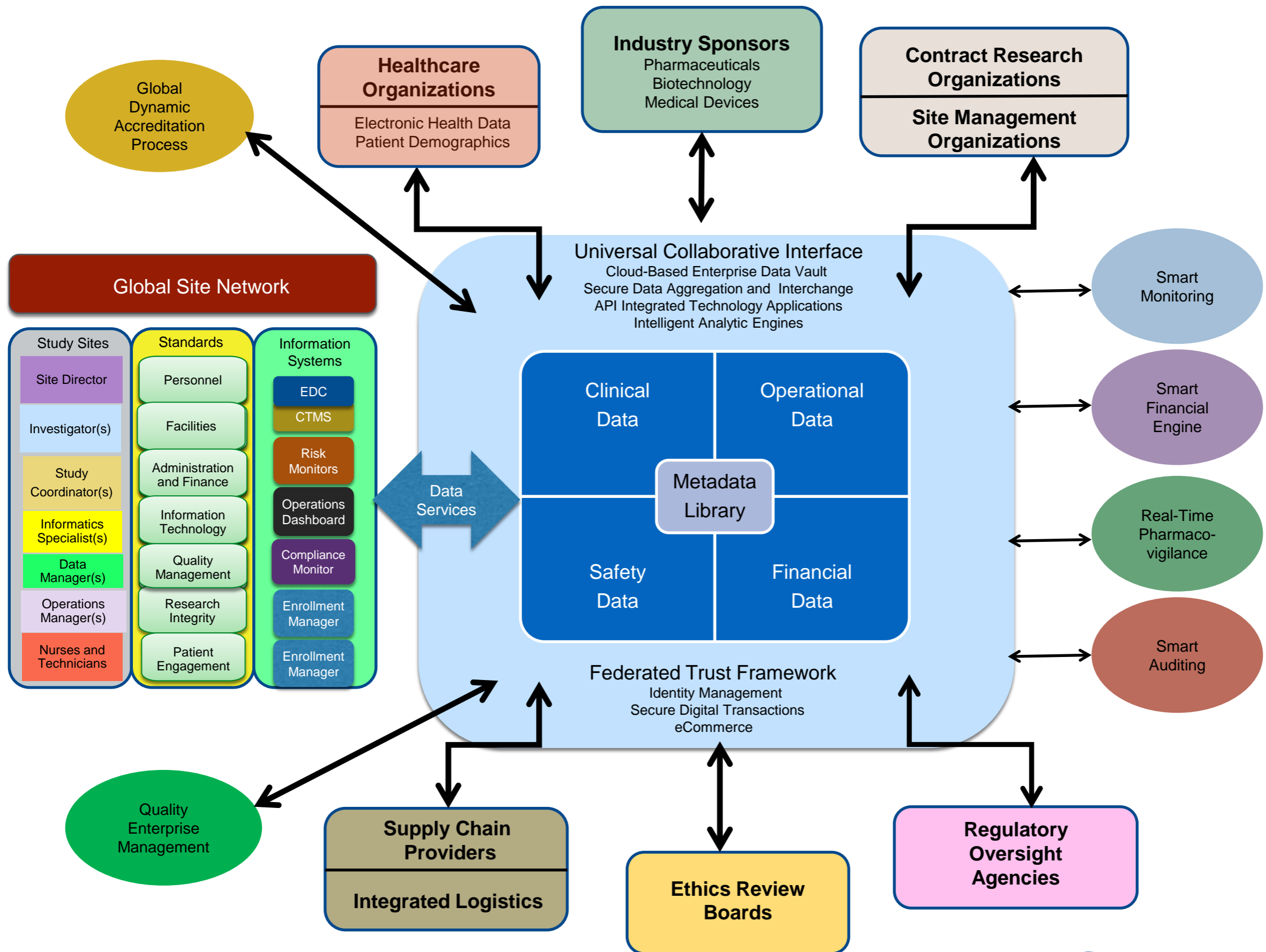
Personal Health and Biological
Information (including Genomics)

Clinical Trials and Trial-Generated
Adverse Reaction Data

Monitoring and Oversight Data

The Power of Data Standards, Sharing and Aggregation





**Committed to Systems Solutions
for Accountable Research™**



ACRES

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Let us meet again..

We welcome you all to our future conferences of OMICS
International

**5th International Conference & Exhibition on
Pharmacovigilance & Clinical Trials**

On

September 19 - 21, 2016 at Vienna, Austria

<http://pharmacovigilance.pharmaceuticalconferences.com/>