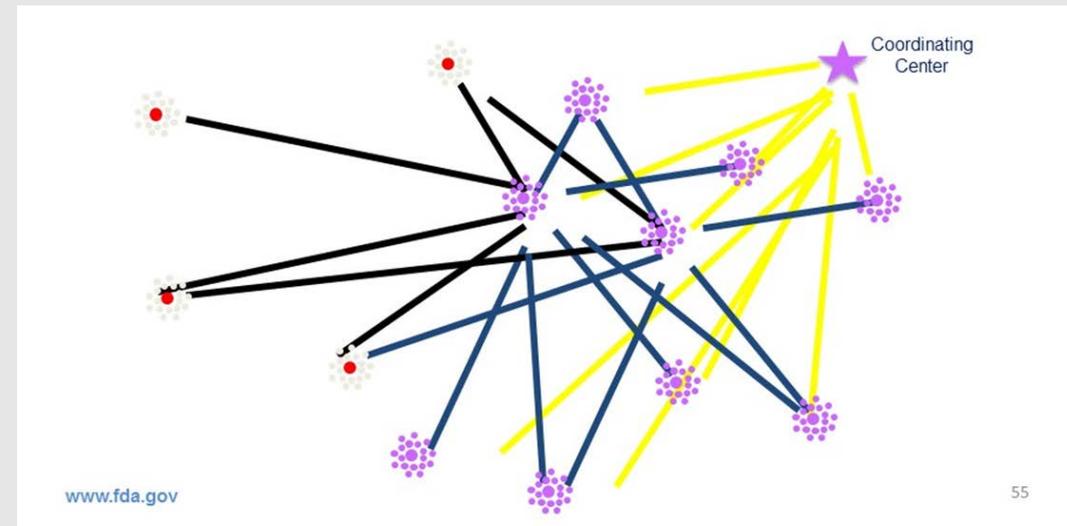


Population Prescriptions: A learning Population Health System for Reducing the Burden of Cancer

OVPR&ED Strategic Research Leadership Program Project Update

April 3, 2017

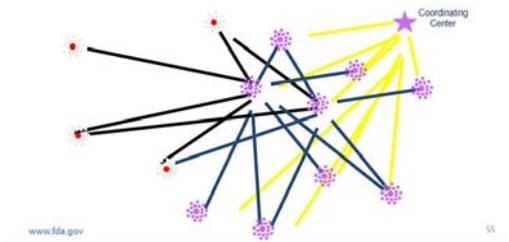
Rob Califf 31 Mar 2017 FDA and Pragmatic Trials: “Brimming with confidence about the data science technology and methods. What’s needed is **curating and embedding into practice.**”
(Chair, Board of Directors, People-Centered Research Foundation)



Phase II Purpose

The **long-range goal** of our project is to integrate cancer research resources with real-world public health and clinical care settings in order to routinely identify and deliver effective interventions for cancer prevention, risk assessment, screening, prognosis, treatment, and survivorship.

The objective of Phase II is to evaluate whether a complete picture of care and outcomes can be created for a cohort of cancer patients by sharing insurance claims, hospital discharge, electronic health record, cancer registry, pathology, personal health, and tissue/molecular data.



Phase II Results

1. Stakeholder Interviews

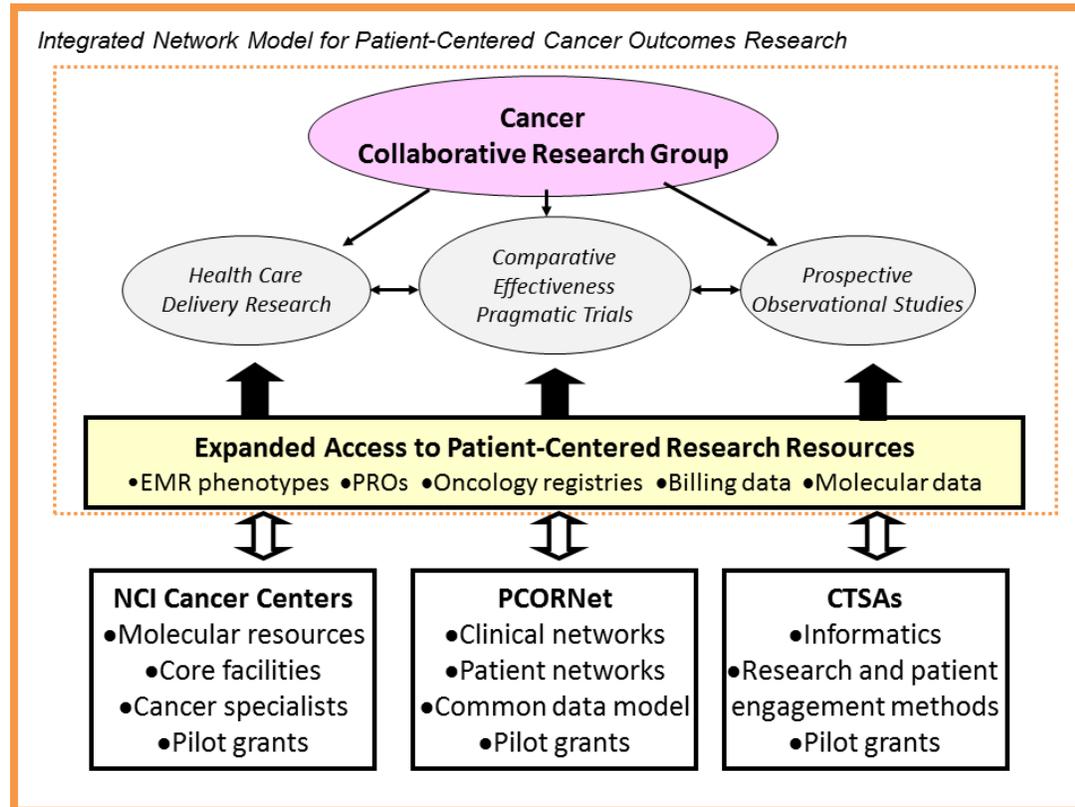
- Several initiatives to contribute data to large-scale networks are underway
 - Health systems with multiple affiliated clinics use digital data that are regularly curated for quality of care and to get paid
 - Large-Scale Networks: Sentinel, PCORnet, NEST, All of Us, ORIEN
- Regardless of use case, networks need mostly the same data

2. Six pilot projects (5 underway, 1 in planning)

Recommendations for Phase III

1. **Prototype model** for integrating access to national data resources (next slide)
2. Need to form **enterprise-wide UI workgroups** to ensure that we can maximize the benefits

Prototype Model for Integrating Access to National Data Resources

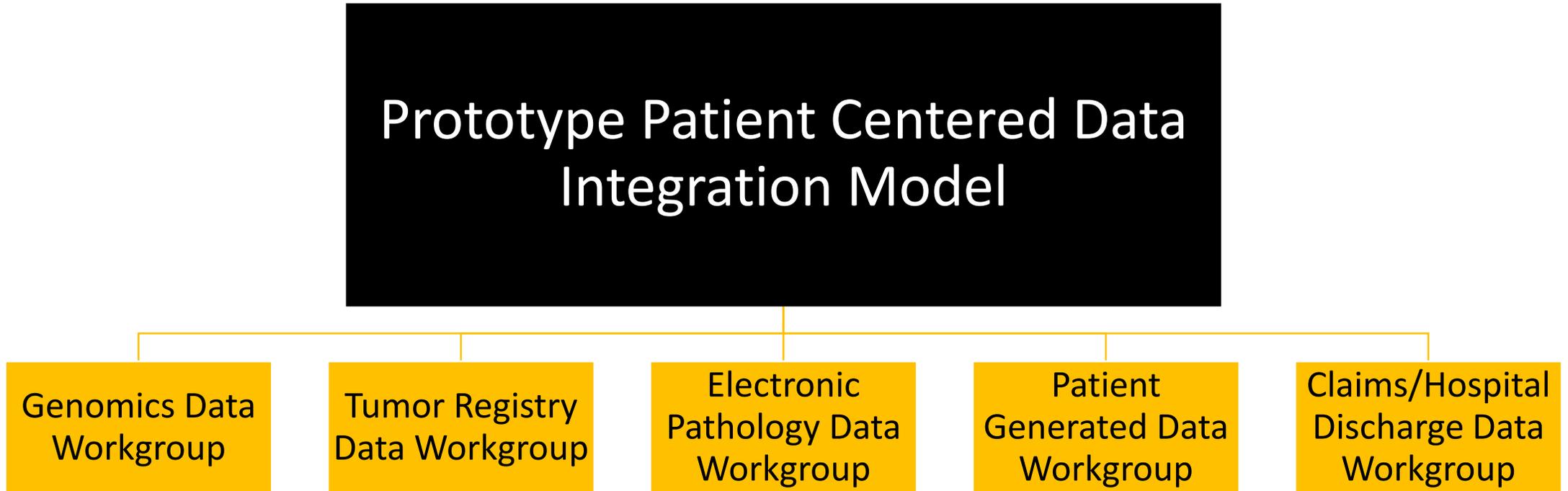


- Taking advantage of the recently launched Cancer Collaborative Research Group, part of the PCORnet CRG initiative to catalyze new multi-network research
- Collaborative research agenda is promoted by integrating access to three national resources: NCI Cancer Centers, PCORnet, and CTSA program hubs

Enterprise-wide UI workgroups

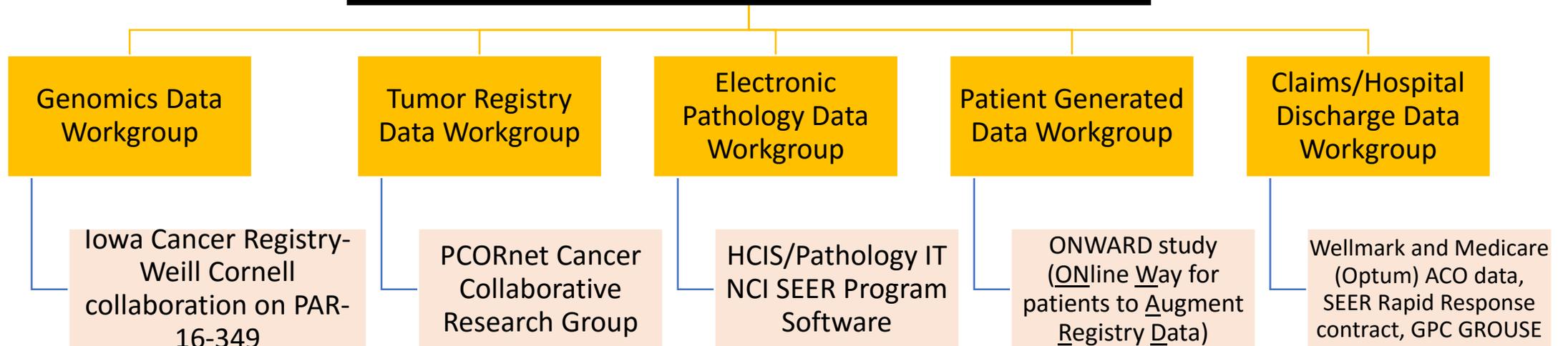
- Workgroups charged with enhanced data sharing across 3 domains:
 - Clinical: new data, e.g. (a) “incorporating discrete data from NGS testing into the EHR in a format usable for analytics and clinical decision support” and (b) forking ePathology data feed into Epic
 - Research: ICTS clinical research data warehouse (CRDW) feeds multiple network data models under an established research data repository IRB
 - Public health: new data types for cancer surveillance

Suggested Work Groups



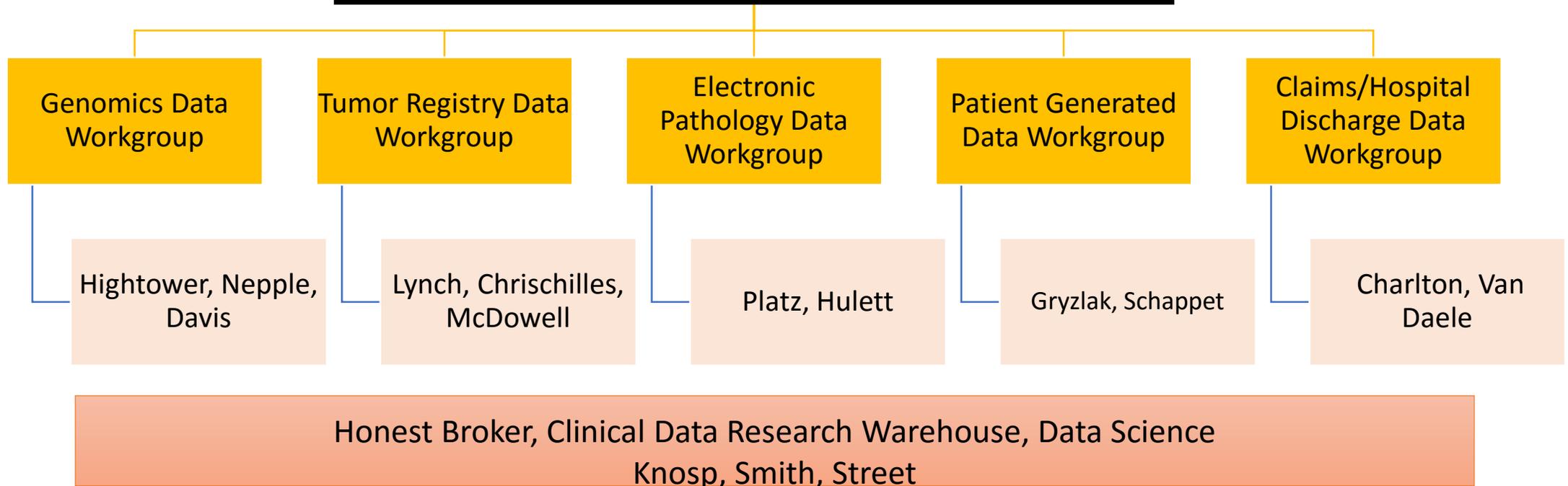
Phase II Pilots Aligned with Work Groups

Prototype Patient Centered Data Integration Model



Sample Phase III Workgroup Teams

Prototype Patient Centered Data Integration Model



Outcomes

- Short-term outcomes: **integrated access to national data resources**, engagement and training of research community
- Expected long-term outcomes: robust laboratory translating and evaluating novel informatics methods, expanded participation in interoperable data networks, rural population health delivery models, robust infrastructure for patient- and population-oriented research (and grant funding)