Panel 3:
Privacy Issues for Pragmatic Clinical Trials

Privacy Issues for Pragmatic Clinical Trials

Ethical and Regulatory Issues of Pragmatic Clinical Trials Workshop

Lister Hill Auditorium, NIH

May 10, 2106

Privacy is a Fundamental, Critical Issue

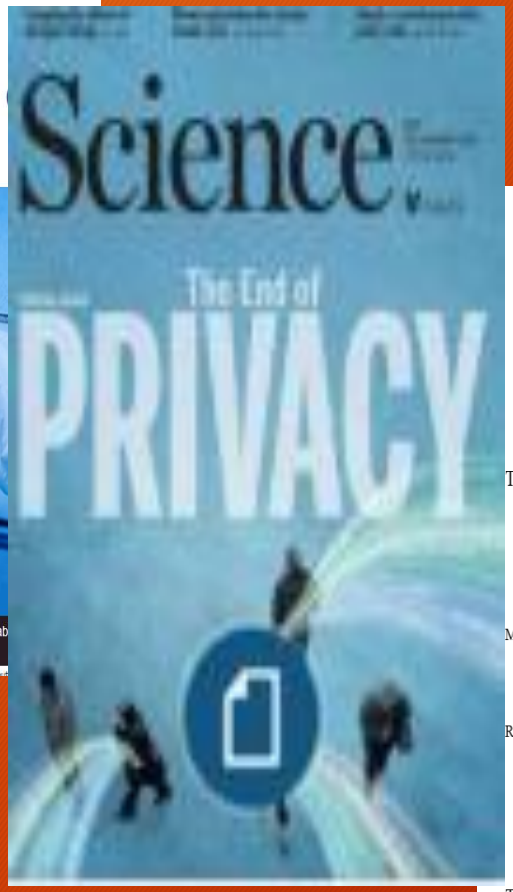
FROM SLATE, NEW AMERICA, AND ASU

Every Patient a Subject

When personalized medicine, genomic research, and privacy collide.

By Jennifer J. Kulynych and Hank Greely

Advances in data science and information technology are eroding old assumptions ab
the anonymity of DNA specimens and genetic data.



Calendar No. 428

114TH CONGRESS
2D SESSION

S. 2713

To provide for the implementation of a Precision Medicine Initiative.

IN THE SENATE OF THE UNITED STATES
MARCH 17, 2016

Mr. ALEXANDER introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

APRIL 18, 2016

Reported by Mr. ALEXANDER, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To provide for the implementation of a Precision Medicine Initiative.

Official Journal L 119

of the European Union

Volume 59

Legislation

4 May 2016

I *Legislative acts*

REGULATIONS

* Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (1) 1

What is Privacy?

Many and variable definitions – generally relating to an individual's "right" to keep secret certain facts, data or records about themselves.

Clinical Practice: "*Whatsoever things I see or hear concerning the life of men, in my attentance on the sick or even apart therefrom, which ought not be noised abroad, I will keep silence thereon, counting such things to be as sacred secrets.*" See Oath of Hippocrates, 4th Century, B.C.E.

Law: "the right to be let alone… free from unwarranted interference" from others…." See Blacks Law Dictionary.

What is Confidentiality?

- In brief, confidentiality refers to what we do to honor and protect individual privacy. (Often used synonymously with “privacy”)
  - For example:
    - HHS “Certificates of Confidentiality” are used to limit access to identifiable research records. See PHS Act 301(d) and https://humansubjects.nih.gov/coc/index.
    - HIPAA Privacy Rule – permits and limits uses and disclosures without permission
    - Privacy Act of 1974 – permits and limits uses and disclosures without permission
    - State laws – permit and limit uses and disclosures without permission

What is the Problem?

- ***What must we do to protect individual privacy in PCTs?***
- ***How can data be used in PCTs?***
- ***Who decides when data can be used?***
  - In his February 25, 2106 discussion on the Precision Medicine Initiative (PMI), President Obama talked about the need to "change the model" for data and sample sharing. He spoke about a general sense, if he were a patient, that if there are "tests on my genes… that's mine."
  - But the reality, consistent with long-standing law, policy and medical ethics, is that researchers frequently do not ask patients or research participants for permission for research with data or existing specimens.
  - Legal, policy and ethical standards are *evolving….*

Our Speakers Today

- **Ms. Sarah M. Greene**
  - Health Care Systems Research Network
- **Dr. Valerie Gordon**
  - NIH Office of Science Policy
- **Dr. Miguel Vazquez**
  - UT Southwestern Medical Center
- **Ms. Valerie Bonham**, moderator
  - DHHS, NIH Office of the General Counsel
  - bonhamva@mail.nih.gov

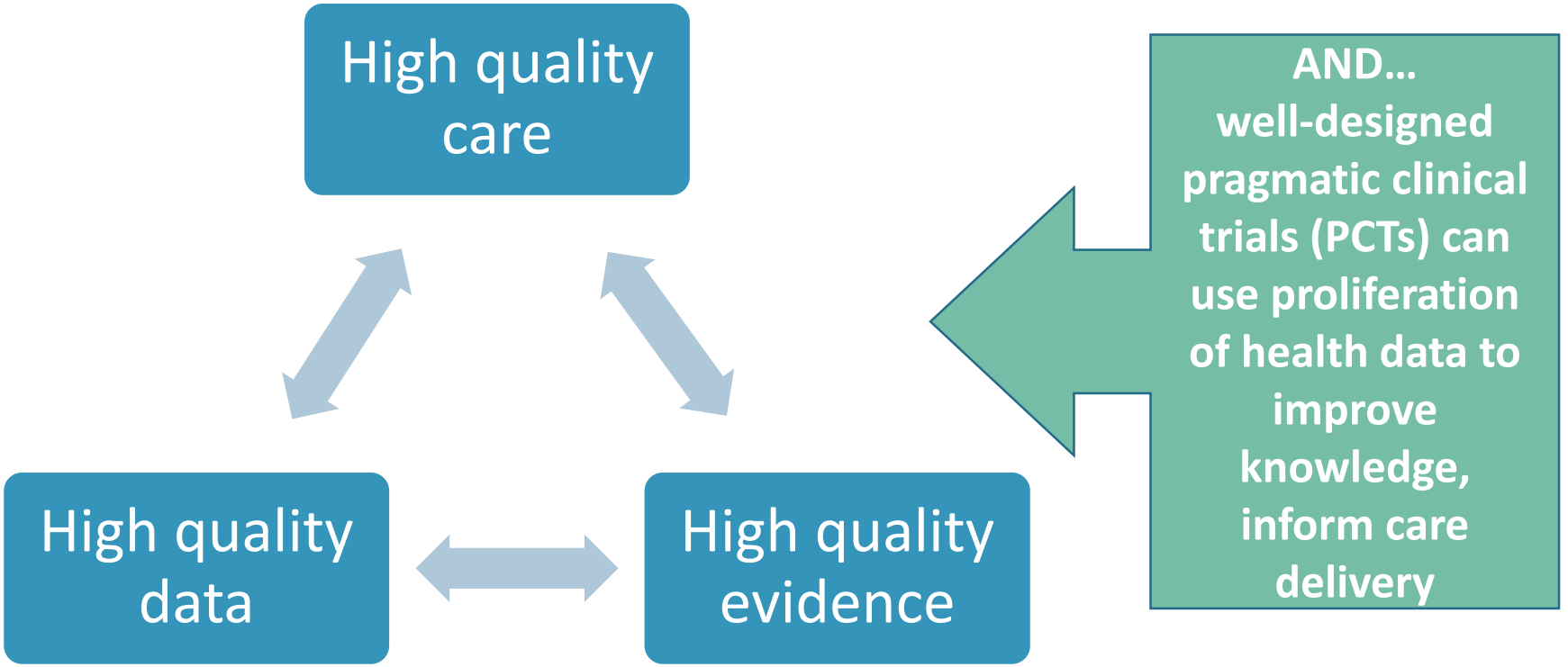
Privacy Considerations: Balancing Individual and Societal Good

Sarah Greene, MPH

Executive Director, Health Care Systems Research Network

Ethical & Regulatory Considerations in Pragmatic Trials
NIH Workshop - May 10, 2016

Premise: Care, Evidence & Data are Interdependent



However, complex challenges in health data privacy create impediments for pragmatic clinical trials

- **Regulatory Framework**
  - HIPAA – Authorization, or Waiver under certain conditions
  - Common Rule – outlines specifications related to information privacy, informed consent
- **Ethical Considerations**
  - balancing respect for individuals with justice
  - pursuit of optimal care for the greatest number
  - If data are collected for care, re-use without re-consent goes against principle of autonomy
- **Sociocultural landscape**
  - Data breaches
  - Patient engagement leading to greater involvement in care…and research
  - Health care heterogeneity: many diverse settings in which health research is conducted

Imperatives for Protecting Privacy

- If people feel their information is at risk of being disclosed, they may engage in privacy protecting behaviors (avoiding care, lying/not disclosing of conditions, seeking care in different geographic area)
- Information disclosure (deliberate or inadvertent) can negatively affect individuals' well-being—social stigma, employability, advancement
- Social compact – respect for persons conveys that individuals can self-govern how their information is used; protecting their privacy affirms our commitment to their ability to make decisions
- Health systems-based researchers are stewards only at the behest of the health system leaders; research breach has ripple effect on system

Interesting Range of Perspectives in the Literature

- Research participants just want to be asked, apt to say yes (Ludman 2010)
- Many observational studies would not have gone forward if individual consent was required (Selby 2015)
- IOM report on HIPAA's impact observed that some researchers reconsidered planned studies (IOM 2009)
- Role of trust in the institution conducting the research is important, warrants further exploration (Damschroder 2007)
- Participant education may lead to greater openness, participation (Ball 2014)

New Approaches to Protecting Privacy are Emerging

- **Deeper Engagement**: PCORnet Privacy Principles aver that decisions about data privacy must occur at the local level; no top down decisions about data usage
- **PEER**: Program for Engaging Everyone Responsibly (Genetic Alliance)
  - Customizable registry of voluntarily-supplied health information, with dynamic privacy protections – depending on research topic, funder, depth of data, research team, people decide what information to share
- **Opt-Out vs. Opt-In:** STOP-CRC Collaboratory Project uses opt-out model, where participants must actively decline to participate; otherwise, data are included
- **Notification:** Either broad or individual notification may be feasible for some PCTs
- **Community Consultation**: Notify public, enlist cooperation from representatives

What Will It Take to Advance from Current State?

- ***Continued education*** of the public, but also health system personnel about the value and benefit of research
- ***Continued engagement*** with patients, consumers, clinicians, policy-makers and other stakeholders
- ***Continued empirical studies*** of the efficacy of novel privacy-protecting methods, relative to current models

Thank you!

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Changing Landscape of Human Research:

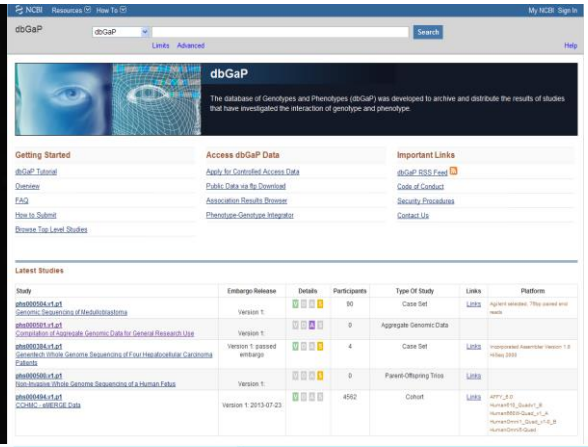
Privacy and Pragmatic Clinical Trials

Valery Gordon, Ph.D., M.P.H.
Director, Clinical Research Policy Program
Office of Science Policy

National Institutes of Health
Office of Science Policy

Cultural Changes

- Increasing engagement of research participants
- Overlap of research and clinical care
- Greater expectations for data sharing
- Growing emphasis on privacy



Shifting Regulatory Framework

Common Rule	NPRM
Biospecimens = Human Subjects, when from identifiable living individuals	Obtain, Use, Study, Analysis of biospecimens from living individuals = Human Subjects
Waiver of consent	More stringent waiver criteria
Pre-dates HIPAA	Excludes research activities covered under HIPAA
… adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data	Privacy safeguards for biospecimens and identifiable information Secretary's list of appropriate safeguards
	Comparative Effectiveness Research requires IRB review

Common Rule NPRM:
Privacy and Security Standards

- Researchers would follow:
  - Specific measures published by Secretary, HHS; or
  - HIPAA Privacy and Security standards

- Sharing permitted for:
  - Other activities, with equivalent safeguards, IRB approval, and no further sharing
  - Public Health
  - Other purposes, with participant consent

Common Rule NPRM: Enhancing autonomy, privacy, and data-sharing

- Emphasis on obtaining consent, decreasing waivers
- Allowing broad consent
- Maintaining identifiers, while enhancing privacy safeguards

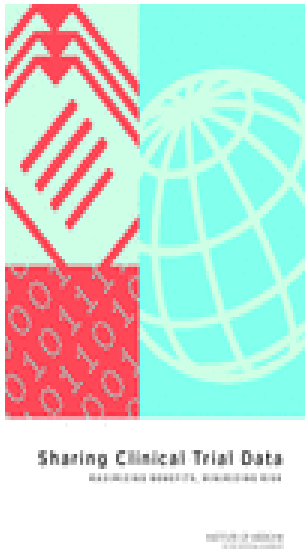
Privacy and Data Sharing

Summary or Aggregate Data

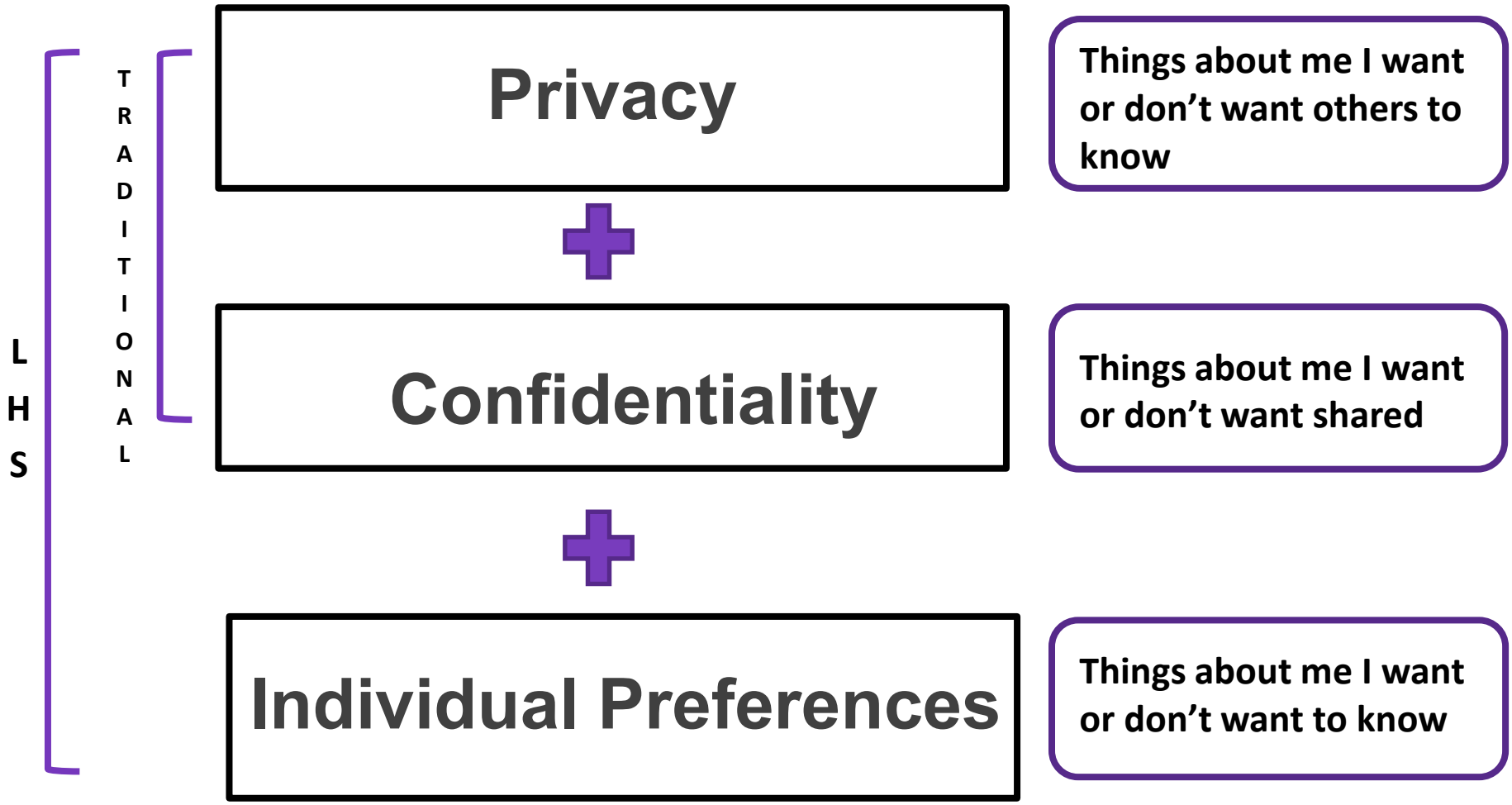
- NHLBI BioLINCC
  - Provides web access to data sets and biospecimens for secondary research by authorized users
- ClinicalTrials.gov
  - "… supports sharing of clinical trial data in a manner that both protects participant privacy, and allows the broader scientific research community to validate and build upon initial clinical trial findings."

Individual-Level Data

- 2015 IOM Report: "Sharing Clinical Trial Data Maximizing Benefits, Minimizing Risk"
  - Recommended employing "techniques for protecting privacy, in addition to de-identification and data security"
- ICMJE proposal:
  - "…there is an ethical obligation to responsibly share [de-identified] data generated by interventional clinical trials because participants have put themselves at risk."
    http://www.icmje.org/news-and-editorials/M15-2928-PAP.pdf



Learning Health System



NIH Collaboratory

Rethinking Clinical Trials™

Health Care Systems Research Collaboratory

Improving Chronic Disease Management with Pieces

A Pragmatic Trial to Improve Care of Patients with CKD, Diabetes and Hypertension

May 10, 2016

UT Southwestern Medical Center

pcci

Parkland

Texas Health Resources®

ProHealth Physicians

Department of Veterans Affairs

SUNY The State University of New York

ICD-Pieces Study Hypothesis

- Patients who receive care with a collaborative model of primary care-subspecialty care enhanced by novel information technology (Pieces) and practice facilitators (PF) will have fewer all-cause hospitalizations, disease-specific hospitalizations, readmissions, ER visits, CV events and deaths than patients receiving standard medical care.

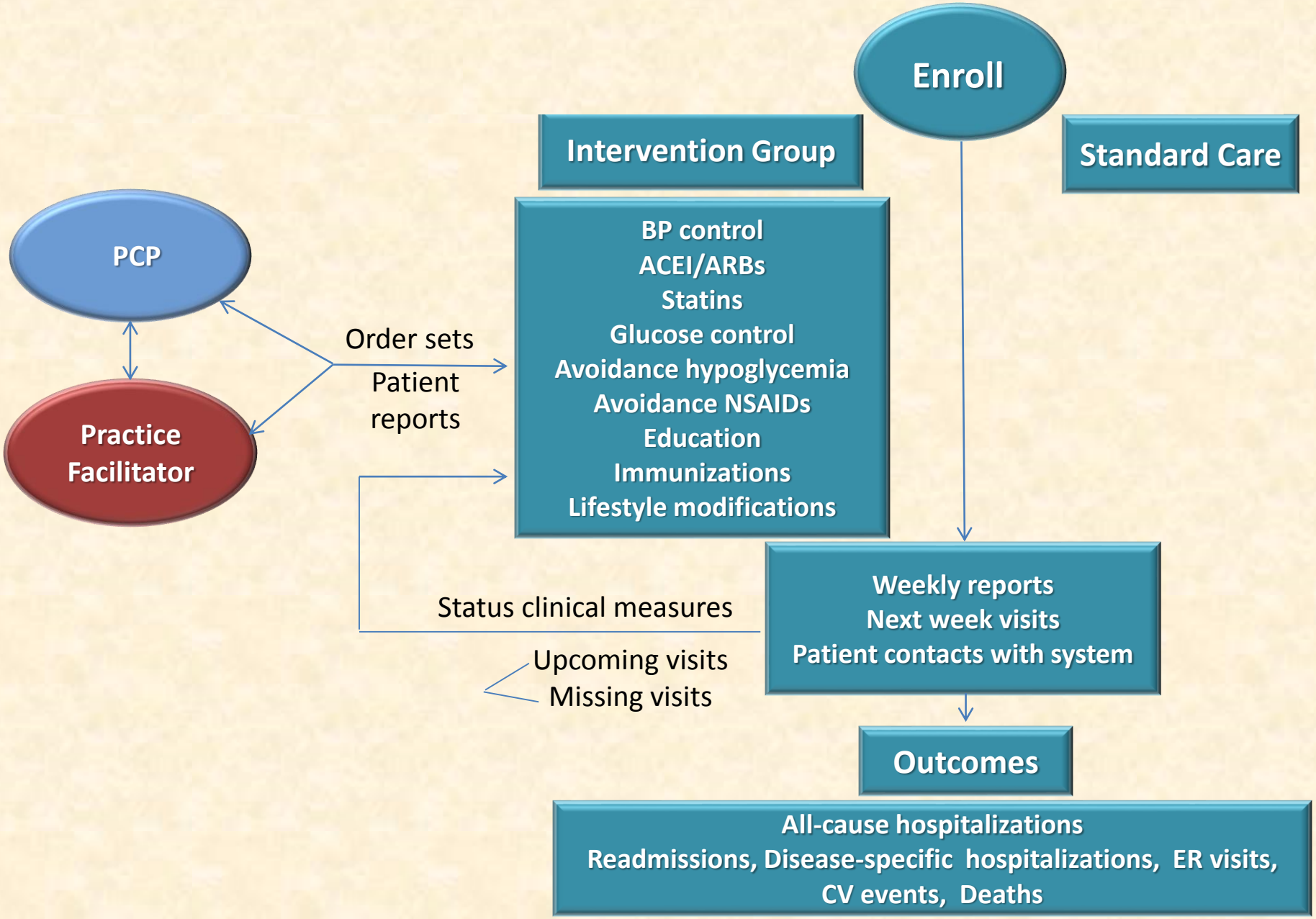
Diverse Participatory Healthcare Systems and EHRs

HCS	Description	Location	EHR
Parkland	Safety-net public	Dallas County	EPIC
Texas Health Resources	Private non-profit	North Texas	EPIC/All Scripts
ProHealth	Private non-profit	Connecticut	All Scripts
VA North Texas	Federal	North Texas	CPRS

What happens in the study?

- **Patients with triad of CKD, diabetes and hypertension are identified**
  - Objective and reproducible criteria
  - Leverage data EHR
- **Clinicians notified of eligible patients**
- **Pieces provides clinician support for implementation**
  - Primary care provider in medical home
  - Practice facilitator is key to facilitate implementation
- **Monitoring clinical measures and adjustments treatment**
- **Pieces facilitates ascertainment outcomes electronically**

ICD-Pieces Patient Care Work Flow



ICD Pieces and Oversight

- UT Southwestern IRB
  - Parkland Health and Hospital Systems
  - ProHealth of Connecticut
- Texas Health Resources IRB
  - Texas Health Physicians Group
- VA of North Texas IRB
  - VA Clinics

ICD Pieces and Waiver of Consent (1)

- Research involves no more than minimal risk
  - Interventions to implement “best care”
  - No experimental interventions
  - Control group receives “usual” standard care
  - Primary practitioners can make ultimate decision
- Research cannot be carried out without waiver
  - Large number of patients (>12,000)
  - Broad geographic distribution (>100 clinics)
- Respect for rights and welfare of patients

ICD Pieces and Waiver of Consent (2)

- Subjects will receive additional pertinent information after participation (intervention and control groups)
- Dissemination of results and study findings to patients and providers
- Assessment important outcomes
  - PROs
  - Patient and provider satisfaction
  - Burden of intervention
  - Ancillary study/ informed consent

Opt - Out (Intervention and Control Group)

- Patients informed on what is being done
  - Transparency and open information
- Notification
  - Broad-posters, flyers
  - Individual-Notification letter
- Contacts-phone number, website
- Opt-out requested
  - No future contact or use of data
  - IT removal of patient from participation

Privacy and Confidentiality

- Minimization risks breach of privacy
  - Safe environment with safeguards and plans
  - Identifiable data transmitted via secure FTP
  - Data storage secure database-”cloud” HIPAA compliant
  - Safety prior collaborations
    - Parkland (PCCI) and THR
    - ProHealth testing
- Data analysis
  - De-identified outcomes all study sites

VA of North Texas and Privacy

- Identified VA data will not be transferred to “cloud”
- Identified VA data stays behind VA firewall
  - Internal work by VA Quality Safety Personnel
  - ICD Pieces personnel WoC status with VA
- De-identified data merged at UT Southwestern for analysis
- Approvals IRB, Privacy Officer and Information Officer

ICD Pieces

- Pragmatic trial Multiple Chronic Conditions
- Four large Health Care Systems
  - Diverse workflows
  - Differences data transmission and storage
  - Unified analysis data
- Waiver informed consent
- Opt-out available to all subjects
- Opportunity to apply knowledge PCT to Learning Health System

Acknowledgement

Name	Institutional Affiliation	Role in the Study
Robert Toto, MD	UT Southwestern	Co-Investigator
Ruben Amarasingham, MD, MBA	PCCI	Co-Investigator/Parkland Site PI
George "Holt" Oliver, MD, PhD	PCCI	Co-Investigator
Adeola Jaiyeola, MD, MHSc	PCCI	Project Manager
Andrew Narva, MD	NIDDK/ NIH	Project Officer
Barbara Wells, PhD	NHLBI/ NIH	Scientific Officer
Ferdinand Velasco, MD	Texas Health Resources	THR Site PI
John Lynch, MHA	Pro Health Physicians Connecticut	Pro Health Site PI
Susan Hedayati, MD, MHS	VA North Texas Healthcare System	VA Site PI
Tyler Miller , MD	VA North Texas Healthcare System	VA Collaborator
Chul Ahn, PhD	UT Southwestern	Biostatistician
Song Zhang, PhD	UT Southwestern	Biostatistician
Brett Moran, MD	UT Southwestern	EHR Consultant
Perry Bickel, MD	UT Southwestern	Endocrinology Consultant
Chester Fox, MD	SUNY in Buffalo	Family Med Consultant
Linda Khan, PhD	SUNY in Buffalo	Co-Investigator

Questions and Answers

Please submit questions for the panelists to:

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