Law & Policy for Learning Health Care Systems
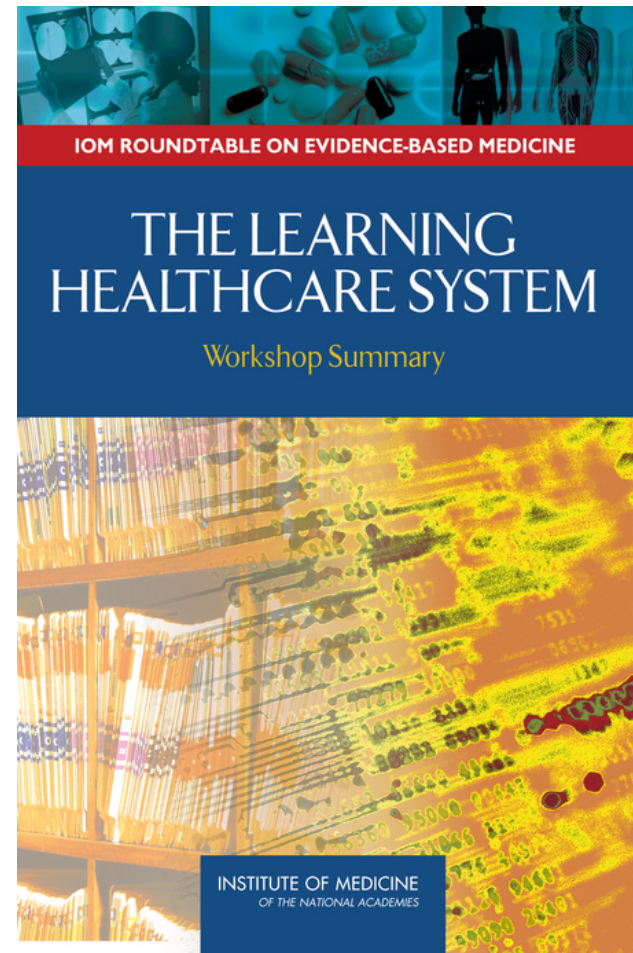
Frank Pasquale '01

Professor of Law, University of Maryland

Presentation for Yale Reunion '16
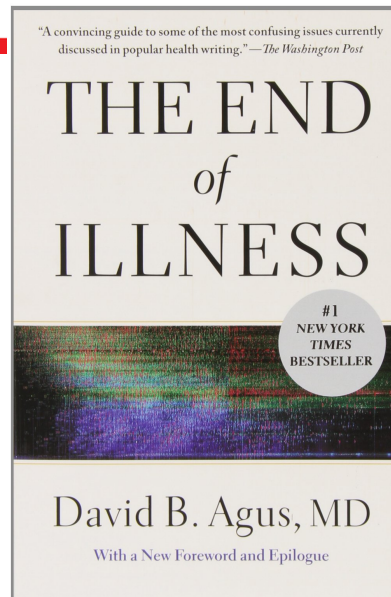
@HealthPI
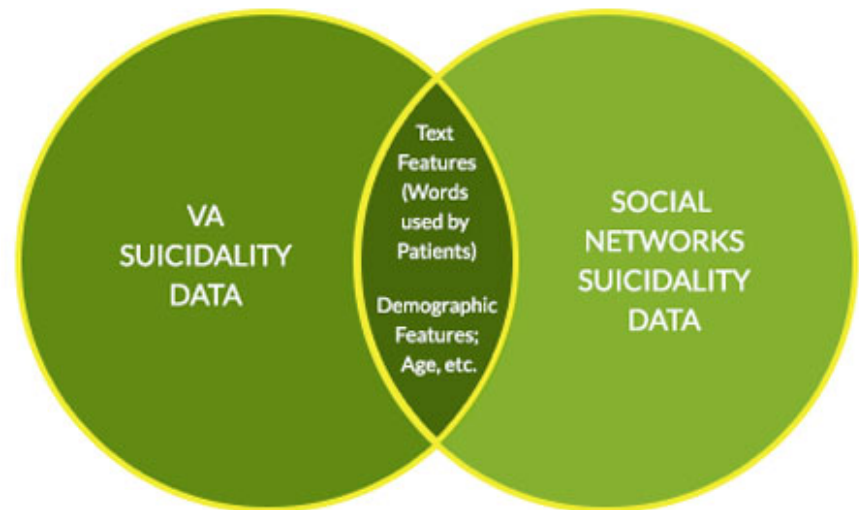
Clinical Care as Research Opportunity

- The traditional distinction between clinical care and research is breaking down.

- "Learning health care systems" (LHCSs) are one result

- The hope:
  - generalizable research
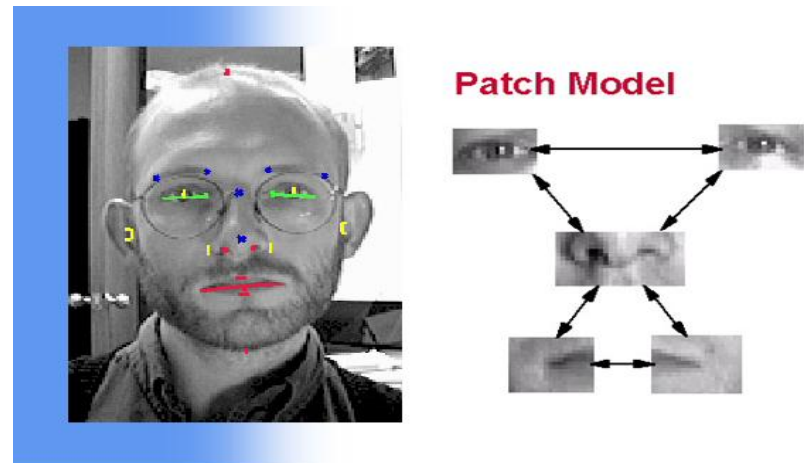 - personalized comparisons of treatment effectiveness

IOM ROUNDTABLE ON EVIDENCE-BASED MEDICINE

THE LEARNING HEALTHCARE SYSTEM

Workshop Summary

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Hype or Hope?

Mental Health & Automation

DURKHEIMPROJECT

AUTOMATED FLAGGING FOR PSYCHOLOGICAL HEALTH

and the prediction of negative events, such as suicide

VA SUICIDALITY DATA

Text Features (Words used by Patients)

Demographic Features; Age, etc.
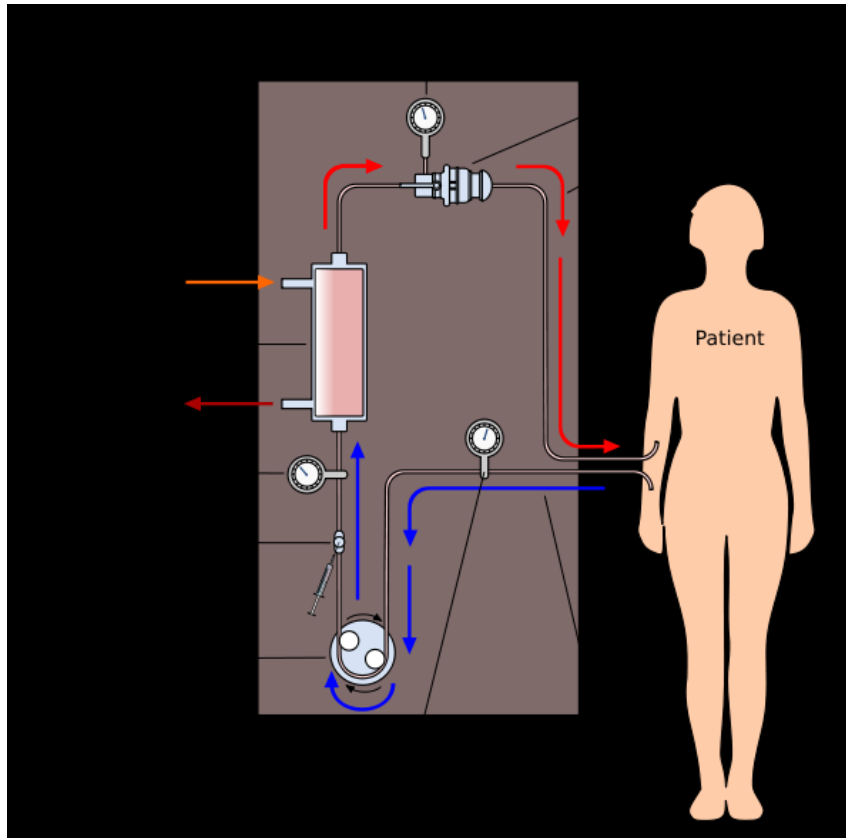
SOCIAL NETWORKS SUICIDALITY DATA

Machine Learning for Diagnostics or Decision Support

- Facial recognition software may eventually support depression screening.

- Should policymakers encourage it as standard care?

  - Embedded CDSS?

  - Facilitating HIE of face images?

At-Risk Patient Sorting

- A predictive analytics program might
  - Analyze data from 1000 dialysis patients
  - Identify 15 most at-risk
  - Nudge nephrologist to make appointment with them
    - Must they be told about this process?
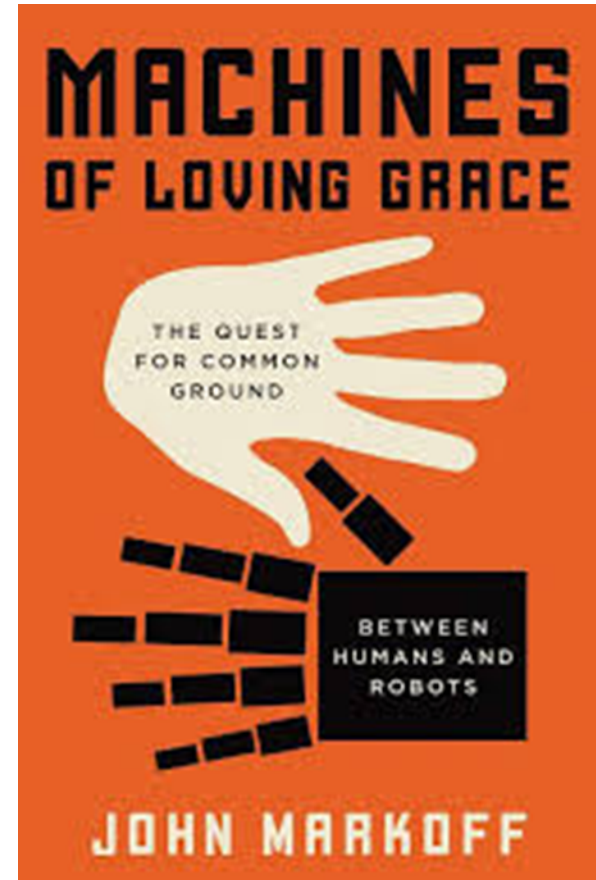   - Must the other 985?

Cloud Robotics Systems Learning to Comfort or Support the Elderly

Ideas for Informed Consent in the LHCS

- Complexity does not mean lack of regulability
- Access to data important for both
  - Autonomy
  - Privacy
  - Scientific and clinical validity
- Intelligence Augmentation vs. AI

Thanks for listening!

- I have more health & technology law links @HealthPI on Twitter

- & in my book: