Law & Policy for Learning Health Care Systems

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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
Hype or Hope?
Mental Health & Automation

AUTOMATED FLAGGING FOR PSYCHOLOGICAL HEALTH
and the prediction of negative events, such as suicide

VA SUICIDALITY DATA

Social Networks Suicidality Data

Text Features (Words used by Patients)
Demographic Features; Age, etc.
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: