EXECUTIVE SUMMARY

iCOMPARE is randomized trial of two duty hour regimens in graduate medical education.

Rationale: Policy limiting duty hours in graduate medical education training programs has become a central point of debate amongst stakeholders. Evidence from human chronobiology and sleep science argues for shorter shifts, because fatigue leads to errors. Evidence from operations research argues for more continuity because patient handoffs also lead to errors, and may reduce the effectiveness of education necessary to produce independent clinicians for the nation’s future. No existing research helps navigate resident duty hour policy between these competing considerations. The goal of iCOMPARE is to provide evidence to help policy makers evaluate whether the duty hour standards that limit consecutive work hours for trainees should be changed.

Design:
- The trial focuses on trainees in Internal Medicine training programs, comparing two duty hour regimens:
  - the current standards, which include a 16 hour maximum continuous work period for interns, or
  - a more flexible schedule, constrained by 3 simple rules for all trainees:
    - 80 hours maximum duty per week*
    - 1 day off in 7*
    - In-house call no more frequent than q3 nights*
    * averaged over a 4-week period
- iCOMPARE uses a single-year randomized design, which means that each program will be assigned randomly to one of the two duty hour regimens. The trial interventions will occur between July 2015 and June 2016.
- This design parallels the FIRST trial in surgery, conducted from July 2014 to June 2015, which is looking at duty hour regimens among surgical trainees.
- The ACGME has granted waivers of duty hour standards for participating programs from July 2015 to at least June 2019. The waivers extend to trainees from other specialties that include rotations in Internal Medicine (e.g., Emergency Medicine).
- Outcomes will be measured in patient safety and trainee education.
- Outcome data will be derived from both existing sources, including Medicare claims, ACGME and APDIM surveys, and ACP in-training examination scores, as well as trial-specific beginning and end of year surveys.

Recruitment: Eligible programs include ACGME accredited Internal Medicine training programs which meet criteria for program size, patient volume, and patient population. Programs can check eligibility and complete a brief application by visiting iCOMPAREstudy.com.

Further information: The study is led by investigators at the University of Pennsylvania, Johns Hopkins University, and the Brigham and Women’s Hospital/Harvard Medical School.

iCOMPARE is likely to have an immediate influence on residency training policy. Participation in this study is an opportunity for program directors to be involved in these efforts. Duty hour regulation has transformed graduate medical education in ways that are well-meaning, but not evidence based. iCOMPARE will add evidence to the resident duty hour debate.