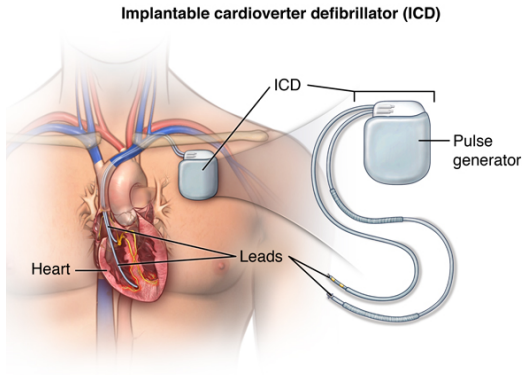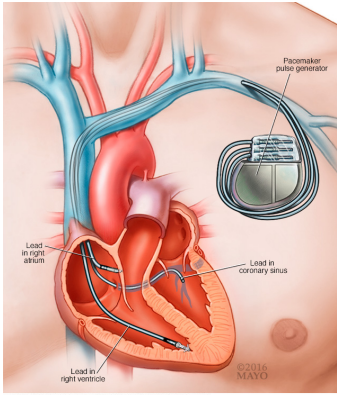# Closed-Loop Systems Today
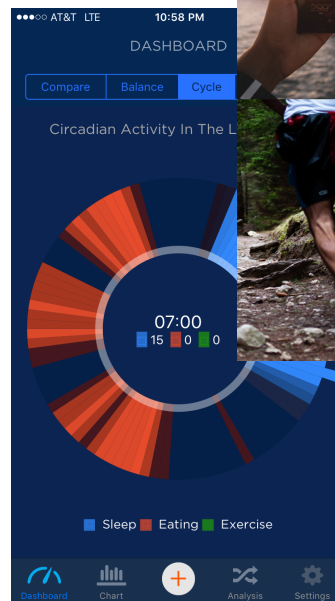

In the Body

In the ICU

In the OR

Closed-Loop Systems Tomorrow

Adding patient sensing and actuation:
Smart Rehabilitation

Adding context: Smart diabetes management

Adding people: Smart decision-support for high-value pathways

Some Issues For This Panel

- Challenges around data and models:
  - Biology vs. phenomenology
  - Data overload
  - Individualization and adaptation

- Challenges around implementation:
  - Ergonomics/interaction in human contexts
  - Risk assessment in the action loop
  - Verification: Security/privacy/safety

- Challenges around regulation:
  - What is safe/secure/reliable?