

# Ethically Prescribed Technology

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# Objectives

During this session, participants will:

- Identify the ethical dilemmas involved in prescribing currently available technology.
- Explore several different ethical concepts in relation to specific prescription scenarios that help to illuminate the considerations for clinicians.
- Relate the ethical concepts to their own practice



# Ethical Dilemma

An **ethical dilemma** is a complex situation that often involves an apparent mental conflict between moral imperatives, in which to obey one would result in transgressing another.

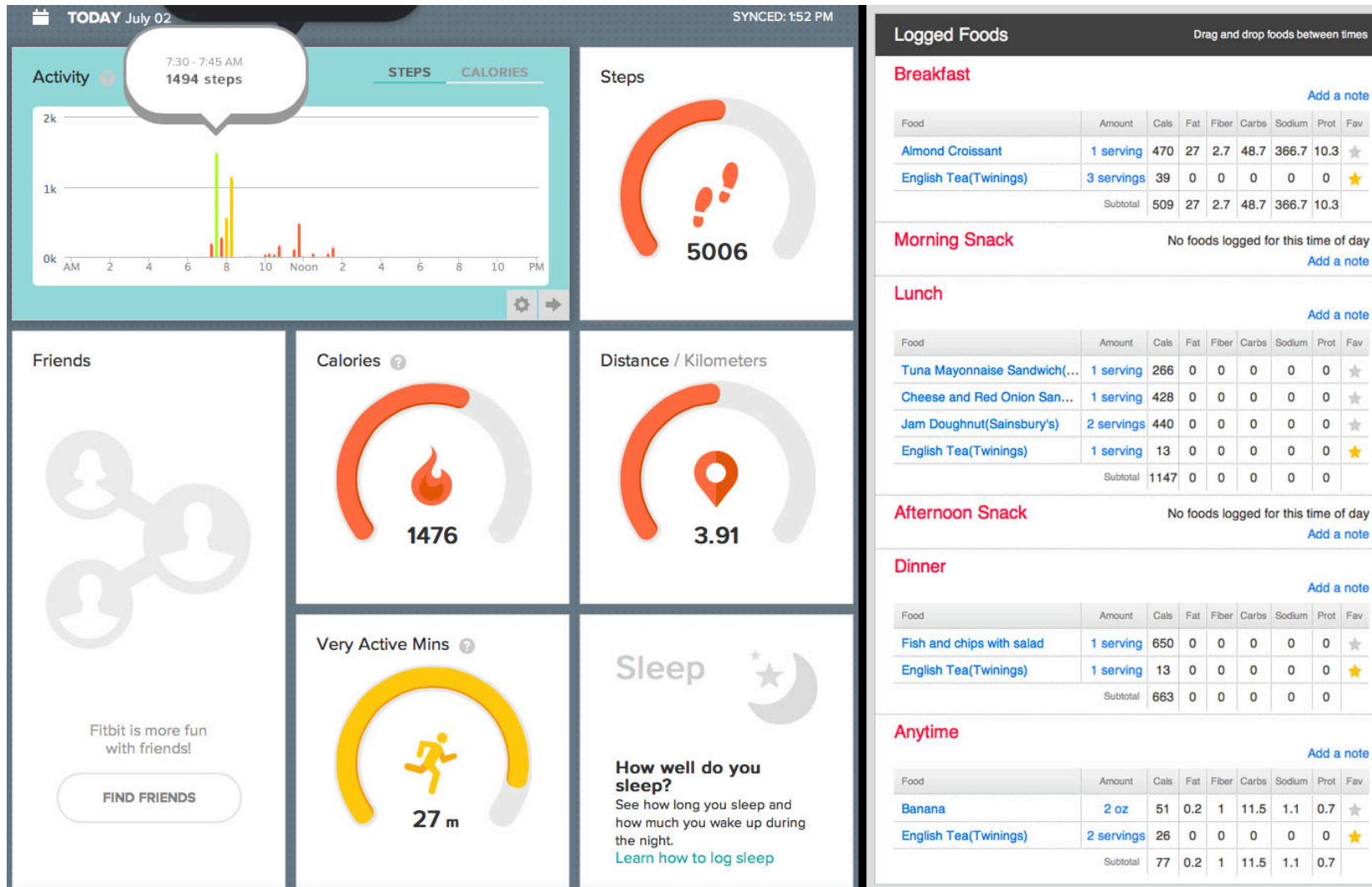
Wikipedia



# The Future is Now!



# ...and we are generating data!



# Advancing Technologies

- Remote patient monitoring/data gathering
  - Fall detection/bed exit
  - Repositioning frequency
  - GPS locators
  - Malfunction alerts
- Automation of client care
  - Support surfaces with turning/percussion abilities
  - Care giving robots
- Smart chairs



# What's your perspective?

We need to have an awareness of the “filters”  
we have





**I have a confession.....**

**.....I love technology!**





# What assumptions do you make?



# Choices

Should a client trade their autonomy and independence for security and privacy?



Autonomy  
Independence

Security  
Privacy



# Ethical Concepts

- Autonomy
- Fidelity
- Beneficence
- Nonmaleficence
- Justice



# Ethical Concepts: Autonomy

- “Autonomy means the right to self-determination and freedom from unnecessary constraints, interference, or loss of privacy”

Cook, A.M., & Polgar J.M. Assistive Technologies Principles and Practices (4<sup>th</sup> Ed)



# Related Concepts

- Competency
- Informed consent
- Paternalism



# Monitoring Systems

## “Safety” Monitoring

- Fall detection devices
- GPS locators
- Bed exit alarms

## Behaviour monitoring

- Client Monitoring
  - Activity monitors
  - Tracking weight shifting (e.g. sensi-mat, power tilt wheelchair)

## Questions:

- What data collected/ transmitted?
- Who owns the data
- How is the data stored/ secured?
- Who receives alerts?
- What is the expected use of the data/alert?



# Ethical Concepts: Fidelity

- Faithful, loyal and trustworthy behavior (being loyal to the patient)
- Expectations (Purtilo, 2005)
  1. Treat client with respect
  2. Health care provider (HCP) is competent and capable of performing the duties required of their professional role
  3. HCP adheres to a professional code of ethics
  4. HCP follows the policies and procedures of your organization and applicable laws
  5. HCP will honor agreements made with the patient





# Fidelity

*“health care professionals may find themselves at odds between what they believe is right, what the patient wants, what other members of the health care team expect, what organizational policy dictates or what the profession or law requires”*



# “Behaviour” Monitoring Of Care Provider

## Assumptions

- Data is collected and analyzed
- Feedback is provided to caregivers
- May contribute to performance reviews
- Data is stored locally

## Questions

- Does the monitoring device provide a true picture?
  - How is client choice monitored?
  - How is the context considered?



# Ethical Concepts: Beneficence

- “Requires that the intervention be provided with the intent of doing good for the patient involved. Demands that health care providers develop and maintain skills and knowledge, continually update training, consider individual circumstances of all patients, and strive for net benefit.”

<https://web.stanford.edu/class/siw198q/websites/reprotech/New%20Ways%20of%20Making%20Babies/EthicVoc.htm>



# Ethical Concepts: Nonmaleficence

- Not causing harm to others directly or through avoidance of actions that risk harming others

Cook, A.M., & Polgar J.M. Assistive Technologies Principles and Practices (4<sup>th</sup> Ed)



# “Behaviour” monitoring Malfunction alerts

## Assumptions

- Data is collected and analyzed
- Feedback may be provided to client directly
- Therapist/caregiver may be notified that client is not following programmed recommendations
- Provider may be notified of a malfunction with the equipment
- Data is stored remotely



# “Behaviour” monitoring Malfunction alerts

- What is the clinician's/providers responsibility regarding follow up?
  - What if the prescriber leaves that facility/organization?
  - What if the funding to repair the equipment is not available?



# Ethical Concept: Justice

- Deals with the issue of fairness in individual, interprofessional, organizational and societal contexts.

Cook, A.M., & Polgar J.M. Assistive Technologies Principles and Practices (4<sup>th</sup> Ed)





# Automation of Care

## Assumptions

- Device “supplements” human care

## Questions

- Is supplemented/automated care better?
- What value is the human interaction
  - Can this be measured?



# Smart Wheelchairs

## Assumptions

- Makes power mobility accessible to people who would otherwise not qualify for a power mobility device

## Questions

- Is it funded?
- How much assistance is provided?
  - Who determines this?



# Keys to Ethical Provision of Technology

- Recognize your own biases
- Consider the potential ethical issues associated with any new technology
- Assess the client to determine their needs and values
- Consider the principles of autonomy, fidelity, beneficence, nonmaleficence, justice



# Resources

- CAOT Position Statement: Assistive Technology and Occupational Therapy (2012)
- Cook, A.M., & Polgar J.M. Assistive Technologies Principles and Practices (4<sup>th</sup> Ed)
- [http://www.atdementia.org.uk/editorial.asp?page\\_id=66](http://www.atdementia.org.uk/editorial.asp?page_id=66)  
(information on Assistive technology for people with dementia)

