Norwegian Centre for
Integrated Care and Telemedicine

NST

# Mobile Peer Support in Diabetes

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DiabetesBuddy.org
Your diabetes is my diabetes

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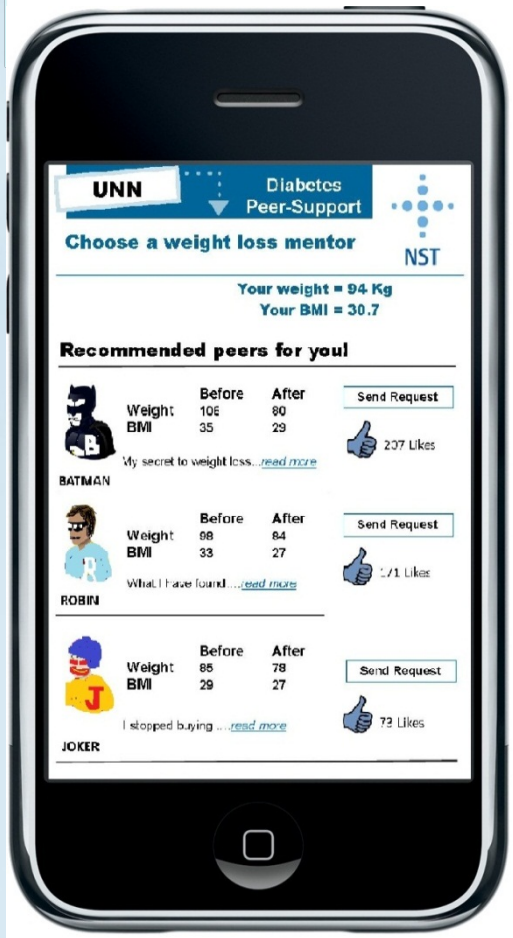
# Introduction

- Main motivators
  - mobile devices have become more user-friendly
  - leverage social media success in healthcare
  - counter Internet health info explosion by tailoring

# Research Goals



- Goals for a peer support framework
  - find peers based on health status++
  - filter relevant user-generated content
  - deploy on (ubiquitous) mobile devices
  - measure effect of patient-to-patient dialogue on:
    - health outcomes
    - self-efficacy

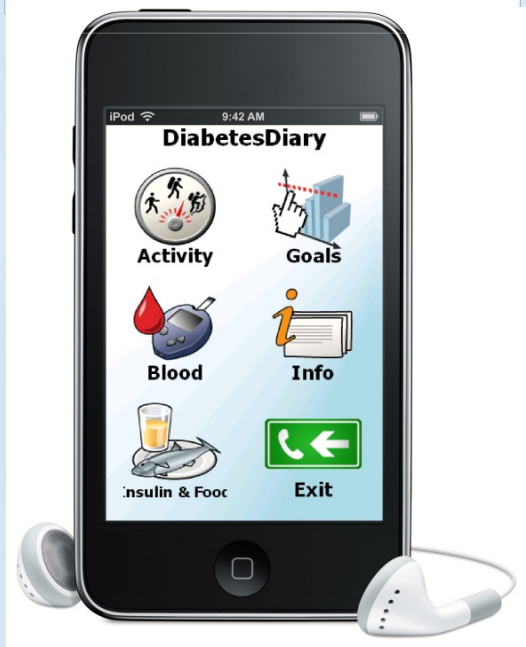


# Research Goals

- Some challenges
  - forming a good representation of the user [patient]
  - persuading users to consent to data acquisition
  - maintaining motivation to participate in a longitudinal trial
  - sustaining relationships during a trial

# Methods

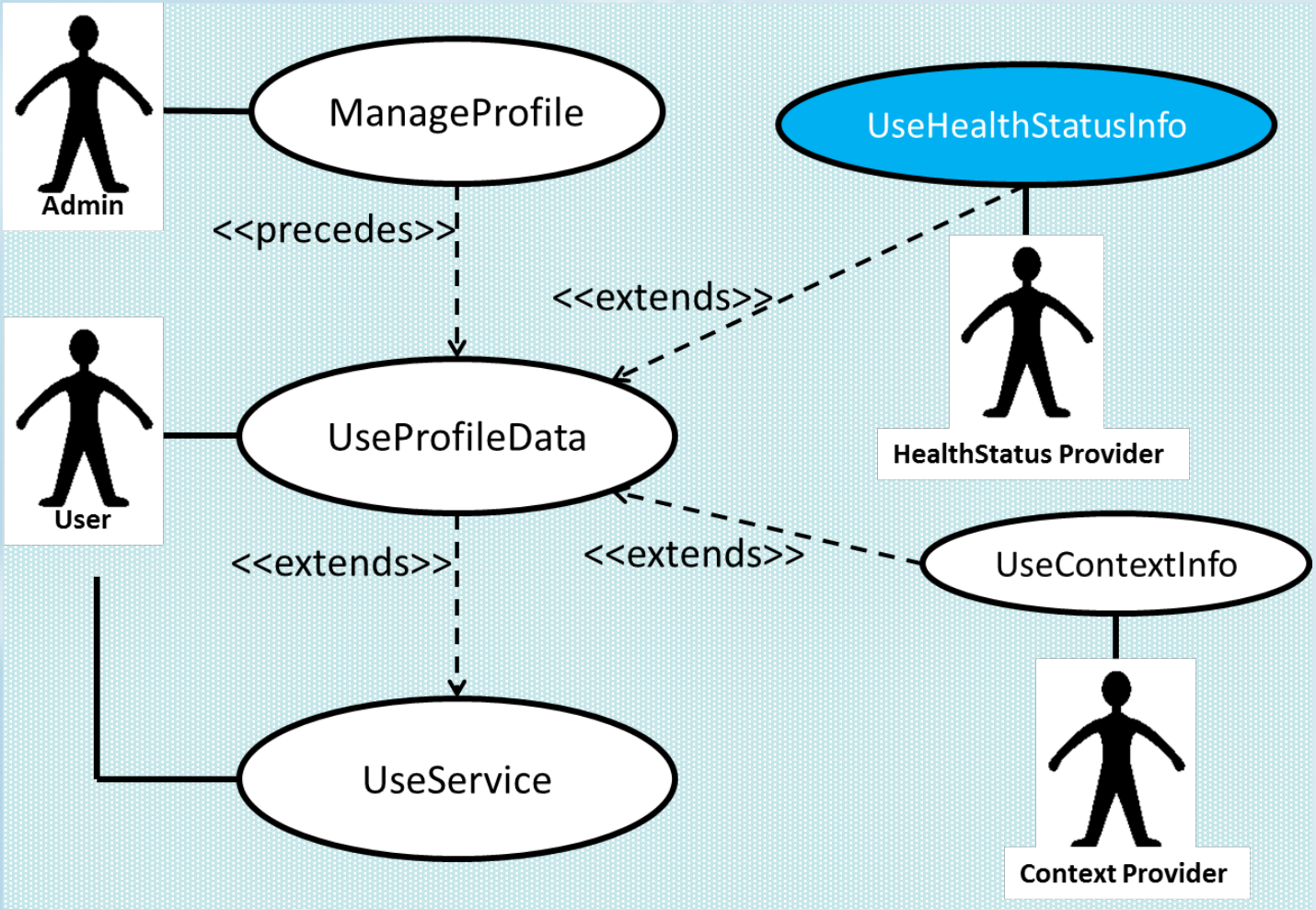





- Patient data acquisition & modeling
  - daily blood glucose values
  - daily food habits
  - daily physical activity and weight
  - learning user data and modeling health status
- Fostering mentor-protégé relationships
  - extending Morris et al. (2009) ideas for fostering social engagement

# ETSI extension





# Discussion




- Early results confirm the feasibility of:
  - adding health status to the user model to filter peers
  - learning user data from (near) real-time health data
  - adapting recommender systems to eHealth requirements
  - managing relationships using mentor models

- Conclusion and future work
  - personalizing health social media is feasible using personal health data
  - Need for evaluating healthcare recommender algorithms (e.g., relevancy and performance)
  - Need to elaborate social/psychology theories - relationship dynamics