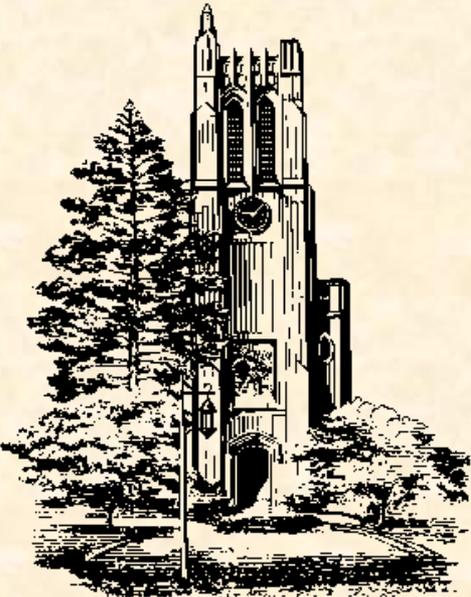# MICHIGAN STATE UNIVERSITY

Alpha Demonstration
Mobile Health Management System

Team Medtronic
CSE 498, Collaborative Design

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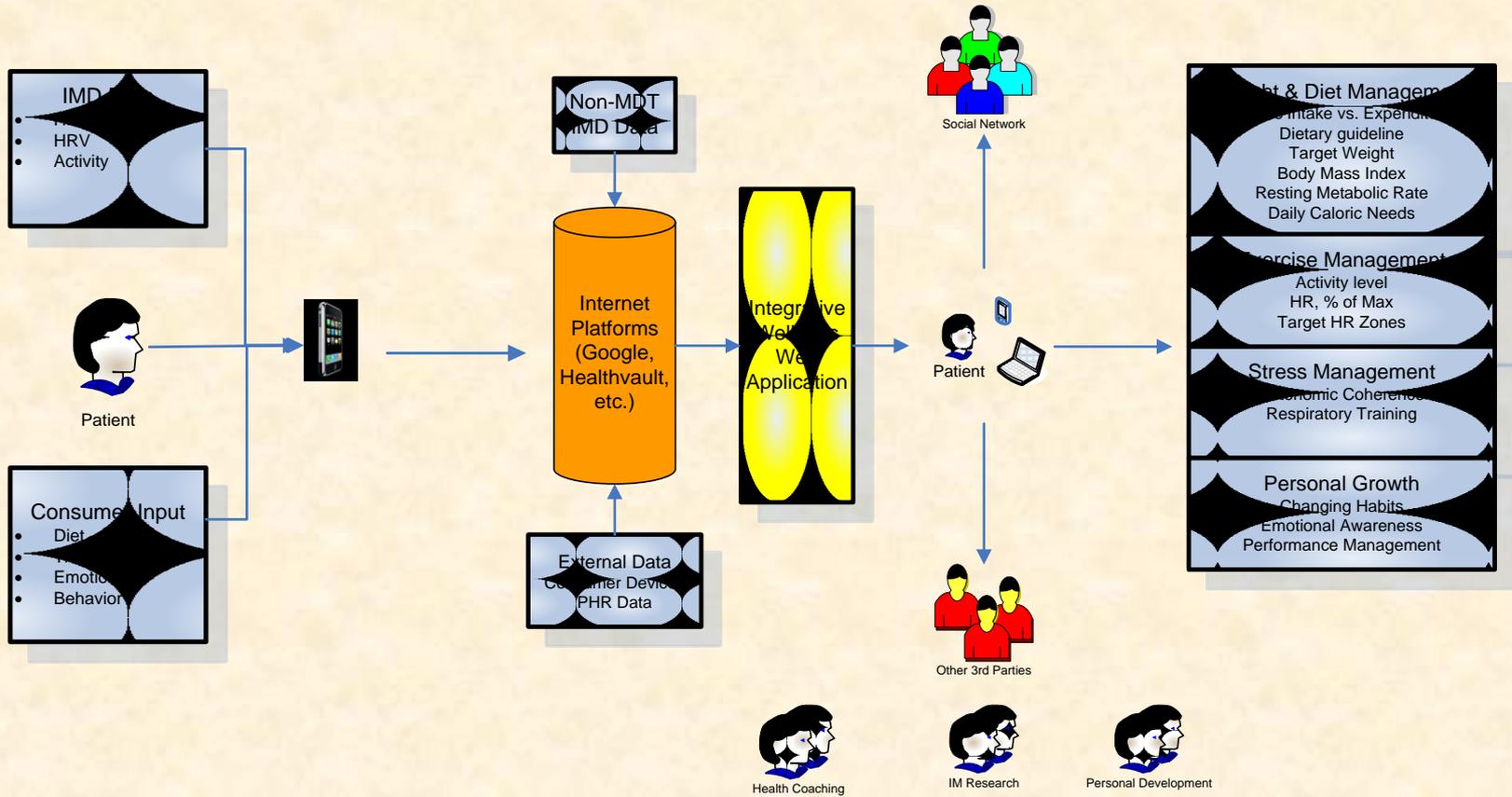Michigan State University

Spring 2010

Project Overview

- Mobile Health Management System
- Improve health and prevent future health problems
- Two applications to track health:
  – iPhone Application
  – Web Application
- Input food and exercise information
- Select goals to track
- Display user's progress on graphs
- Suggest healthier food choices

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Architecture Illustrated

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IMD
- HRV
- Activity

Patient

Consumer Input
- Diet
- Emotion
- Behavior

Non-MDT IMD Data

Internet Platforms (Google, Healthvault, etc.)

External Data Consumer Device PHR Data

Integrative Wellness Web Application

Social Network

Patient

Other 3rd Parties

Health Coaching

IM Research

Personal Development

Weight & Diet Management
Caloric Intake vs. Expenditure
Dietary guideline
Target Weight
Body Mass Index
Resting Metabolic Rate
Daily Caloric Needs

Exercise Management
Activity level
HR, % of Max
Target HR Zones

Stress Management
Autonomic Coherence
Respiratory Training

Personal Growth
Changing Habits
Emotional Awareness
Performance Management

Screen Shot

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Screen Shot

What's left to do?

- Add more goals to track
  - Heart Rate
  - Blood Sugar
- Add device data
- Suggest food
- Only show goal specific information
- Account registration
- Edit account information
- Correlation of graphs
- Alerts when user has not entered data in