

DESIGN CONSIDERATIONS

A successful medication management system should be able to...

Administer medication

- Help users take medication at right time of day
- Help users take the correct medication
- Help users take the correct dose

Effectively utilize technology

- Share patient information with multiple stakeholders (family members, caregivers)
- Provide details about medication when desired
- Have a simple interface that is easy to learn
- Track patient's medication adherence
- Remain reliable - identify potential errors and tech malfunctions
- Generate alert messages when patient threshold reached

Add value to interactions with doctors

- Humanize patient (i.e. use narrative or pictures)
- Promote safe medication practices and handling
- Facilitate communication between doctors and patients
 - which doctors patient is under care
 - what medications are prescribed
 - questions about medication administration ie missing dose
- Organize patient information for doctors
 - Could include questions that arise between appointments

Promote accessibility

- Adhere to standard accessibility guidelines
- Easy to open containers
- Accommodates sensory and physical limitations like touch, sight

Promote independence

- Promote patient independence for medication management
- Empowers users and slows caregiver burnout

Adapt

- Anticipates special medication requirements (pill taken with food, without food, sitting up, with water)
- Manage different forms of medications (pills, liquid, patch)
- Provides portable travel solutions
- Can be continuously customized by users: labels, time of day, pill storage units
- Can be integrated with other medication management systems
- Can accommodate different quantities and sizes of medications
- Can accommodate frequently changing medication regimens

Organize

- Provides multiple views for information (calendar and chronological)
- Keeps medications separated
- Prevents medication from spilling
- Prevents medication becoming lost
- Labels can't rub off
- Remains transparent at all times

Monitor

- Tracks when medication are being taken
- Tracks what medications are being taken

Keep information secure

- Retains the user sense of privacy
- Adheres to HIPAA laws

- Only available to those who administer medication (patient, or child-safe)

Remind

- Provides instructions for how to take medications
- Provides reminder for refills
- Provides reminders that are persistent but not intrusive
- Provides cues to manage medication (could include visual, audio, tactile)

Use time efficiently

- Little time to complete tasks

Integrate with new or existing habits

- System helps build routines and habits
- Integrates with user habits and routines
- Adapts to changes in patients routines (if lunch is eaten later, a pill that is taken with lunch is taken later)