

Theme One: As it currently manifests, diabetes is a grueling lifelong journey.

Poignant Anecdotes & Qualitative Observations

- A soon-to-retain mental health professional used to weigh 600lbs and lost significant weight, he now uses a strict mindfulness-based approach to eating and physical wellness. It required significant behavioral changes and lots of self love. Maintenance with his weight management is an on-going task.
- Diary entries from the cultural probe demonstrate a pattern of unrelenting emotional and physical management, constant planning and mitigation are required.
- A mental health professional notes how the perceived “cure through technology” for closed-loop insulin pumps/CGMs ended up being a disappointment for many people, and that a byproduct of current diabetes management tools is technology fatigue.

Associated Number Codes:

- 4 Long term complications
- 11 Medical trauma
- 27 Mental load of constantly anticipating risk
- 30 Physical side effects
- 32 Fatigue, no relief, burden
- 33 Technology fatigue
- 34 Isolating

Proposed Design Requirements

- Be socially aware and sensitive to users
- Do not add to the already high burden of disease management
- Use language and content that is realistic and grounded

Theme Two: Diabetes is stigmatized, but human virtues of respect, empathy, and validation are absolusions.

Poignant Anecdotes & Qualitative Observations

- A mental health professional working with youth notes the high expectations and criticisms from adults and how it negatively impacts self-esteem and self-worth, while a school nurse with Type 2 Diabetes cried when talking about how kids came to her to talk emotionally about diabetes because other adults in their lives didn't understand what they were going through.
- A person with Type 2 Diabetes kept two glucose meter devices, one was virtually synced to his doctors office, he would first test on the non-synced device to assess if he should also test on the device that was synced to the doctors office, this behavior was driven by fear of being judged.
- A respondent from the qualitative survey who lives with long-term complications notes how being mislabeled with Type 2 Diabetes by his nephrologist caused a delay in

treatment that they could have benefited from earlier had they correctly been labeled with Type 1 Diabetes in their chart.

Associated Codes:

- 2 Judgement/stigma/shame/hiding disease from others
- 3 Misidentified as Type 2
- 18 Respect and validation
- 19 Empathy

Proposed Design Requirements

- Build in elements of respect and validation toward the user
- Give users as much autonomy and choice as possible, do not make anything mandatory

Theme Three: An individual's perspective (past, present, and future) on their disease management is dynamic and has significant influence on mental health.

Poignant Anecdotes & Qualitative Observations

- Self talk and language parallels how well one is managing their blood glucose numbers; blood sugar is bad therefore I am a bad person.
- In the user journey, there are known points in life stage (youth versus geriatric) or event basis (newly diagnosed, job stress, development of long-term complications) where an individual's perspective can dramatically be influenced.

Associated Number Codes:

- 7 Emotions and changes in management
- 12 Self-talk and language choice
- 17 Experienced with disease management
- 24 Perspective
- 26 Balancing freedom of choice vs. consequence of choice
- 36 Experience by life stage

Proposed Design Requirements

- Support different mental models of approaching mental wellness
- Educate and encourage users to establish self awareness in their mental health

Theme Four: Doing one thing to manage diabetes, even if it is the smallest action of self-care, has tremendous influence on mental wellness.

Poignant Anecdotes & Qualitative Observations

- A retired school teacher in Pennsylvania loves crafting handmade cards and being a leader in her church group, these activities bring her spiritual purpose and joy.

- A respondent in the cultural probe notes that she takes mini-breaks from wearing her Dexcom to give herself a mental break from constant monitoring.
- Qualitative respondents who engage in diabetes community activities note positive mental wellness benefits.
- In a post cultural probe activity debrief discussion, participants appreciated how the diary prompts got them to think about and positively validate the amount of effort they put into taking care of themselves.

Associated Number Codes:

- 8 Patient having to advocate for themselves
- 12 Self-talk and language choice
- 13 Impact on mental health
- 22 Mindfulness based activities
- 23 Mental health resources and support
- 25 Self-love and acceptance
- 28 Relationship with food

Proposed Design Requirements

- Design based on neutrality and mindfulness
- Encourage users to experiment and find what works for them

Theme Five: Social connection is a lifeline when treading water is not enough to keep from drowning.

Poignant Anecdotes & Qualitative Observations

- In all research methods, social engagement with the diabetes community was ranked as a top activity with a lot of benefit.
- Several individuals attributed strong personal support networks as an essential component to their diabetes management regime.
- Social connection is diverse and personal, it could be participating in volunteering for special olympics for one's daughter, having the familiar presence of a cat by your side, or through daily personal prayer to one's savior.

Associated Number Codes:

- 15 Community engagement and support
- 16 Role models
- 20 Strong personal support network
- 21 Pets
- 35 Spirituality

Proposed Design Requirements

- Educate and offer awareness of the benefits of social connection

Theme Six: The relationship with one's healthcare professional is critical to physical well being, but there is great opportunity for emotional well being that many lose out on.

Poignant Anecdotes & Qualitative Observations

- A mother who has lived with Type 1 Diabetes for 40 years was told by her childhood physicians that she wouldn't live a long life unless she had perfect blood sugars. She lived most of her life with strict regimen management with the use of fear and self-hate.
- A qualitative survey respondent notes the grief they experienced at losing a trusted nurse practitioner who left their care clinic and how the new doctor dismissed alternative management practices that the respondent was engaged in but benefiting from.
- Several individuals participate in long-term therapy with mental health professionals and find this type of professional integral to their diabetes management regime.

Associated Number Codes:

- 1 Scare tactics
- 5 Physician not supporting patient
- 6 Loss of trusting/supportive physician relationship
- 9 Substandard patient care
- 10 Physician mistakes
- 14 Positive physician interaction

Proposed Design Requirements

Theme Seven: There is shared recognition that more advocacy and resources need to be put towards supporting people with diabetes and their mental health needs.

Relevant Anecdotes & Subthemes

- Mental health professionals agreed that there are systemic gaps in mental health and diabetes care needs; too many people in need and not enough professionals, not enough adoption and education on evaluation tools, not enough awareness of distress and burnout
- Mental health professionals agreed that more resources need to be free, diabetes is an expensive disease

Associated Number Codes:

- 29 Healthcare resources and access
- 37 Impact of disease is not equitable
- 38 Need for patient screening and data tracking
- 39 Data privacy
- 40 Treatment Tools

Proposed Design Requirements

- Enable capabilities to share with others
- Make accessibility integral to the experience design, rather than a constraint