Self-Tracking My Family's Well-Being

Sergio Bogazzi, www.familysmarts.net
Tracking various aspects of well-being

**Tracking and analyzing**
- Doctor’s visits
- Vitals
- Medications
- Income/Expenses
- Symptoms
- Immunizations
- Activity/Workouts
- Menstrual cycle

**Tracking only**
- Urine/Stool results
- Imaging/X-rays
- Surgeries
- Travel/Vacations
- Heart exams
- Allergies
- Family history
- Blood results
- Therapies
- School grades/Feedback

**Not yet tracking**
- Speech/Text analysis
- Work performance
- Mood/Emotions
- Stress/Mindfulness
- Learning/Courses
- Screen Time
- Sleep
- Food/Nutrition
Data rolls up into a weekly health dashboard
Dashboard for each member of the family
...Activity and workouts
Personal finances and cash flow
...tracking our favorite neighborhoods

https://goo.gl/yDZUSL
Project: Rethinking Seasonal Allergies

https://goo.gl/JEDHtk
By **improving gut health**, I would have a more effective method and natural remedy to reduce the effects of seasonal allergies.

By keeping my respiratory pathways mucus free with the use of **saline nasal rinses**, I could improve respiration throughout Spring allergy season with possible benefits to digestive system too.

By **relying less on antihistamines as a primary remedy**, but better timing their use when additional relief was absolutely necessary, I could further reduce the effects of seasonal allergies while minimizing the drug’s side-effects.

[Link to source](https://goo.gl/JEDHtk)
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Project: Rethinking Seasonal Allergies

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How is the data collected?

• Digital archives
  (prescriptions, vaccinations, medical visits, blood tests, report cards)

• Casual observations
  (height, weight, mood, HR)

• Exceptional events
  (coughing, sneezing, fever, fatigue, other pains)
Information to grow practical knowledge
Machine Learning – automatic text classification
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Data Integration – importing financial transactions
Reporting & Visualization

- Symptom Rainbow
  - Cardiovascular and Lymph...
  - Digestive System
  - Eyes and Ears
  - General
  - Male Reproductive System
  - Mental Health
  - Musculoskeletal System
  - Nervous System
  - Respiratory System
  - Skin, Nails, and Hair

- Year over Year
- Total Weekly Symptoms

- BSS

- Days since last start

- First name
  - Sergio
As a reference, the data significantly \textbf{expands} the \textbf{time window} and detail in which we recall things. For example, without the data, we may only recall medicines taken over the past three months. With the data, we can instantly access a record of every medicine taken over time.
“Tracking alone creates mindfulness. So Quantified Self what’s it about? So for me it was about if you are doing any amount of real tracking and looking at what you’re doing, you get more mindful about what it is that you’re doing.” - Rob Portil

Benefits – conscientiousness
Lesson learned - simplicity

• self-tracking solutions the whole family could use.
• Instead of quantifying everything, I would quantify only the exceptional events.
• Reliability and consistency over fanciness
Lesson learned - accuracy

- Accuracy over fanciness
- In the example of blood pressure monitors, I preferred upper arm-based monitor over wrist-based ones for the proven accuracy improvements.
Lesson learned - data protection

• The sometimes closed and proprietary nature of the cloud-based solutions today make it difficult to retain full control and ownership of your data.

• The state of fragmentation in the wearables market also forces users to juggle across multiple overlapping and incompatible solutions. Sometimes with no choice but to copy their confidential data to a provider’s less than secure infrastructure.
Lesson learned – run projects

Explore the data early and often; adopt a fail fast approach with projects; learn and hammer away at the data until new insights develop.
Lesson learned – moderation

"Not everything that can be counted counts, and not everything that counts can be counted."

William Bruce Cameron
Next steps

- Self-tracking through home assistants
  (i.e. Google Home, Alexa, Microsoft Cortana, Mycroft)
- Sleep tracking
  (zero touch, super simple for entire family)
- Tracking through Natural Language Processing
  (To reduce the structured data collection overhead)
Looking ahead

- From *self*-tracking to *sense*-tracking
- From *analytics* to intelligence *assistants*
- From Family well-being to *extended* Family well-being
Thank you

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sergio@familysmarts.net
slides: https://goo.gl/bztJGK