

In our modern world, preventable poor health outcomes make up a significant portion of our community health futures. Furthermore, the trillions of daily light-weight decisions made by individuals over their lifetime determine most of their subsequent health journey. With more than half of our citizens, 60 years of age or older, at high risk of developing or currently suffering from chronic diseases such as Diabetes Mellitus or Cardiovascular disease we propose to advance a **cross-generational gifting economy as a monetized alliance** that utilizes simple connected sensors and social networks to both engage and sustain optimal health behaviors across socially networked communities.

Increasingly today we recognize the potent effects of advancing scalable low cost sensors, coupled with socially networked environments; however many of our seniors (digital immigrants) lack the skills to easily benefit from these novel resources. Teaching an entire generation a new skill is not trivial. Meanwhile, our students (digital natives) continue to suffer ever increasing burden of tuition fees. Modern students clearly demonstrate a keen ability to master new technology with little to no effort. Our proposal seeks to unite the generation ahead with the generation behind against a common evil: **TUITION FEES** and in doing so, protect both generations against preventable poor health outcomes.

The central goal of our project is to design and implement a standard technology infrastructure in the form of a **campus-led community data commons** which will be the foundation for the monetized alliance. Students, professors and the community will be connected with the expressed intent to co-create health value. Civic-minded student groups, skilled in using social media will actively recruit community senior citizens, their grandparents, and their grandparents' friends to engage in innovative approaches to optimizing health behaviors long term. With the help of the Continua Health Alliance members, an interoperable ecosystem of light instrumentation (low cost, easy-to-use sensor devices) will enable high yield yet low risk data to track a standard unit of health value efficiency.

Our proposal has three components—(1) **Open ecosystem platform**: a standard community data commons framework with interoperable low-cost sensors and the technical support for student-led solution mash-ups throughout the course of a few semesters;(2) **Rapid prototyping innovation engine**: Multi-disciplinary student teams will design, mash-up and deploy a series of locally relevant solution

sets and actively recruit community and family members to road/stress test their innovations. Most are likely to fail with a few showing elements of success. Failures generate learnings and are rapidly dropped, successes are incrementally improved with replacement student teams every few semesters; (3) **Health data transaction transparency and informatics engine:** Alternative currencies will track the data donation transactions and offer data donors access to their share of monetization events unless they choose to “click here” to donate their share to the reduction of tuition fees. Over time, tracking the clinically relevant co-occurrences that drive the ebb and flow of community insulin resistance burden will serve as a standard currency of health value efficiency. An open-source platform will provide continuous outcomes analysis to support rapid iterations of improvements and exposures of best practices.

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