• Describe your solution.  
• How will you do it?  
• How does it work?  
• What does it look like?  
• How will you implement it?  
• Where will you implement it?

NETWORK (CANCER COMMUNITY- PATIENTS AND FAMILY MEMBERS)

PHASE 1:

The project initiator patient starts playing the game and data is collected (cancer type and stage, patient location language, ethnicity already data already pre-populated). Supporter patients with similar diagnosis and interest participate in the multiplayer game and build a community of possible study subjects, giving also input in regards to inclusion and exclusion criteria, psychosocial data and motivation. An instant support group and “cancer community” is created based on the particular cancer type.

TECHNOLOGY INFRASTRUCTURE consists in an Internet based, game like mobile application easy to deploy via current technology to Apple or Android devices, prescribed by a physician and fillable at local retail pharmacy. HIPAA compliant platform will offer Cloud storage of data and has the ability to import patient data from his electronic medical record for customized play.

DATA: matching users with content, relevance is powered. Data analysis and study design platform are managed by CTCP professional staff. If enough hits accumulate to power statistical significance for a potential study, the crowdsourced project becomes reality and enters PHASE 2.

PHASE 2:

This phase consists in creation of a clinical trial warehouse where crowdsourced projects are submitted for bidding to a community of interested businesses. Project is initiated by CTCP which provides the moderating platform. Supporters are the businesses interested in getting the data about crowdsourcing community (potential study patients).

Supporter can win the bid by:

* Proving it has the financial ability to fund the newly designed study
* Having a current funded study meeting specifications already in which case it gets priority.

THE HIGGHEST BIDDER WINS THE PROJECT AND THE LIST OF PARTICIPANTS WILLING TO BE ENROLLED

Lower bidders pay CTCP for “playing” – percentage of pool of money is donated by CTCP for clinical trial participants that cannot afford the travel and logistic expenses of the trials after enrollment- distributed preferentially to winning teams. Lower bidders can approach participants after the winning bidder declined the participant for its clinical trial. At that time, the name can be passed to all lower bidders that paid for playing for consideration of inclusion in alternative trials.

• Who will be involved (stakeholders)?  
• How much will it cost to create the solution (an estimation)?  
• How much will it cost to implement the solution (an estimation)?  
• How many people will be impacted?  
• How long will it take to create the proposed solution?  
• Why will it work? Why is it viable?

CTCP will include development of a HIPAA compliant mobile application in the form of a game. The application will have the ability to interact with patient’s electronic medical record in unidirectional manner to import patient’s personalized information. Application will be prescribed by patient’s physician and filled at the local retail pharmacy which will be the entity where data transfer will take place. The application will include patient education about their particular cancer diagnosis and accepted current therapies for it with statistics about prognosis. It will also introduce information about how clinical trials are conducted and the technical aspects of clinical trial stages and requirements. The patient and its supporter patient followers will be able to share impressions and grade the experience in the social media and to post updates about the study if matched, with feedback from friends and family. Periodic new study or guideline updates will be downloaded to the game application making it a fluid platform with updated versions periodically stimulating constant use of the application. “Thought of the day” and “Wellness tip of the day” along with reminders specific to the patient’s diagnosis could be incorporated in later versions and if patient starts traditional therapy for their cancer, the new information will also be updated in the application and create a new game with new functionalities such as management of side effects, clinical trial availability for the new patient category. The application developer in association with a platform manager and professional staff will own but also analyze and manage data, make statistical analyses and prepare the finalized product for offering in the clinical trial warehouse bidding process. Data can be consistently mined at later dates with creation of alternative databases to be offered for new available studies. Supporters with special interests and low enrollment sites can also contact CTCP with projects for mining CTCP databases for suitable candidates.

Proposed solution could be created within 6-12 months but costs will depend on the type and graphics of the game desired (technical and artistic features of the game).

Potential impact of this solution is extremely large. It is estimated that the numbers of survivors for the 10 most prevalent cancer sites among males and females in the United States as of January 1, 2014 for all cancer sites include 6,876,600 males and 7,607,230. The majority of cancer survivors (64%) were diagnosed 5 or more years ago, 15% of cancer survivors were diagnosed 20 or more years ago and nearly half (46%) of cancer survivors are 70 years of age or older (<http://www.cancer.org/cancer/cancerbasics/cancer-prevalence>). All these patients are potential customers for CTCP since there are a multitude of clinical trials that are not focused on therapy but on alternate aspects in the oncology spectrum of interest. The solution is viable since it is technology driven, puts the patient/ consumer at the center and eliminates the stigma of a clinical trial, replacing it with a game. Patient motivation is addressed and the power of the community and the social cohort phenomena would incentivize patient from “why not me too” and altruistic reasons to consider clinical trial from a new perspective.