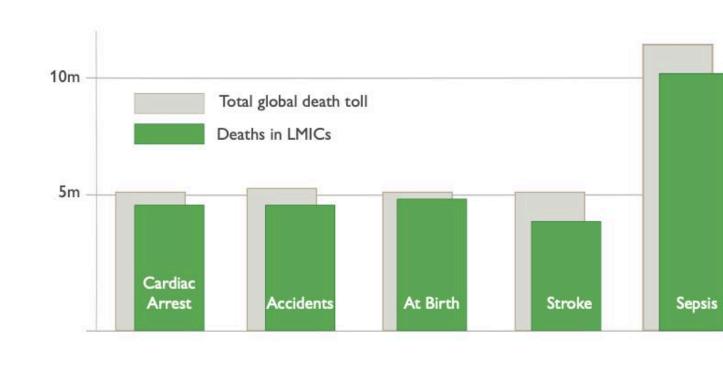


Why choose a Life Saving Intervention?



First, you can win more prize money! Actually, that's last reason you should. More than 30 million people die from preventable deaths every year. There are many interventions that could be considered "Low Hanging Fruit," and can be facilitated through technology applications that could be designed and prototyped by talented young people. Plus, if it's really awesome we might consider funding it or hiring your team to do so.



Laerdal Medical is the global leader in emergency response training and continuing education. Our 2,000+

And, well, you could earn more prize money.

Who We

Are:

simulation hardware & equipment used in the majority of Urgent Care training experiences and certification programs, as well as the vast majority of teaching hospitals, worldwide. We are looking to inspire the next generation of talented students and professionals to Help Save Lives by catalyzing their interest in a vast increase of accessible, quality, and continuous training in effective practice.

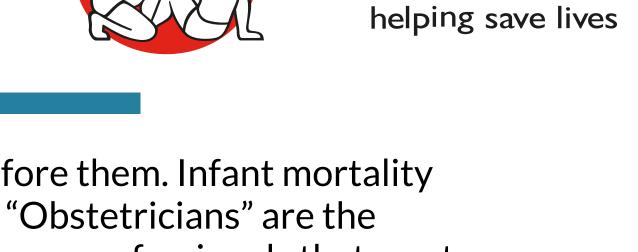
employees, in offices from Texas to India to Denmark to China, create IoT training manikins, VR simulations, and

## Expecting mothers have a bewildering but mission-critical experience before them. Infant mortality Some is still one of the leading causes of unnecessary deaths worldwide. While "Obstetricians" are the Context:

application!

Option: Emergency Dispatch Conversation/Copilot Al

Option: Maternity Support Team Chat



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licensed doctors who oversee the maternity journey, there are actually many professionals that must collaborate and communicate about and with an expecting mother. Challenge: Design and/or prototype a mobile application and/or text

message thread manager that enables thoughtful support, discussion, and case management around an expecting Mother that can be used in "low resource environments" May be a web-based admin view that shows aggregate text messages and group text

Ideas:

conversations around a team that supports an expecting mother. May be a mobile application, similar to WhatsApp or Telegram, that is optimized for those around the world who cannot afford expensive mobile lines or data plans.

The person who answers a call to an emergency number (think 911) is called the Dispatcher. The

of mission-critical importance. Yet, too often, Dispatchers are either not well trained, not too

Dispatcher's ability to triage, navigate, and correctly advise urgent and life-threatening situations is

evidence-based practices in emergency response settings.

insurance regime would squash it's adoption. So, maybe think of it first as a "simulator" -

While an amazing Conversational AI assistant that listens and surfaces practices and

protocols in real time would be game changing, the regulatory system and liability

it can help a dispatcher rehearse various life threatening scenarios, or a "feedback

Like any other HealthCare application with legal guidelines on data privacy and

security, either have a plan to address them or -- even better -- build it into the

Some

Context:

experienced, their training is out of date relative to evidence-based practice, or their guidebooks and manuals are similarly out of date. Challenge: Design and prototype a Conversational AI that can either listen in or respond to quick prompts that surfaces

Ideas:

engine" -- it can listen or get text transcription of a conversation and give feedback on "opportunities for improvement. Making this accurate and life saving would require a "Custom Large Language" Model" or at least a custom extension to a Layer One LLM. Building a thoughtful prototype User Experience / Interface and using Chat-GPT or one of the other APIs will suffice.

In most potentially fatal emergencies, someone nearby notices and calls for emergency help. For lucky patients,

that arrives ahead of professional support, such as EMTs in an Ambulance, is often the factor that keeps a patient

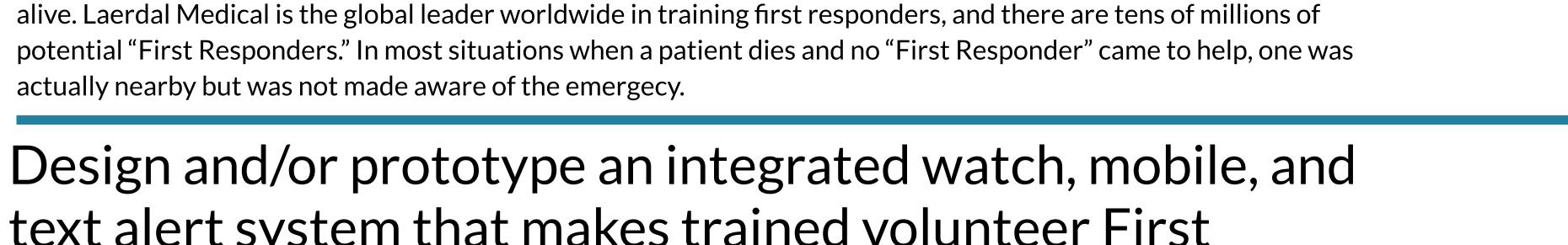
another nearby "First Responder" assists immediately with basic life support techniques. A trained "First Responder"

Some Context:

## Challenge: text alert system that makes trained volunteer First Responders aware of emergencies, and tries to assure at

actually nearby but was not made aware of the emergecy.

Option: First Responder Network & Response System



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Ideas:

Context:

Ideas:

Some

Context:

Ideas:

from.

Option: A "Chain of Care" API

they are well.

Option: A Timeless IoT Transponder

the API will be more likely loved.

Some

Context:

Challenge:

Ideas:

Some

etc).

Challenge:

experience and simply designing or wire-framing the rest would be appropriate. Don't forget that it's likely an emergency dispatcher that would be aware of this Application, so there would need to be a way for a dispatcher to enter a location, and any symptoms or context that would help the first responder. This would need to "push" out to First Responders within a certain radius.

Given a need for a fully integrated experience, focusing on prototyping one part of the

Option: LifeCoin Digital Currency A patient that has just recovered from a life-threatening condition or emergency often reflects that there were at Some least several people, often volunteers or under-appreciated (and underpaid) professionals, that were involved in

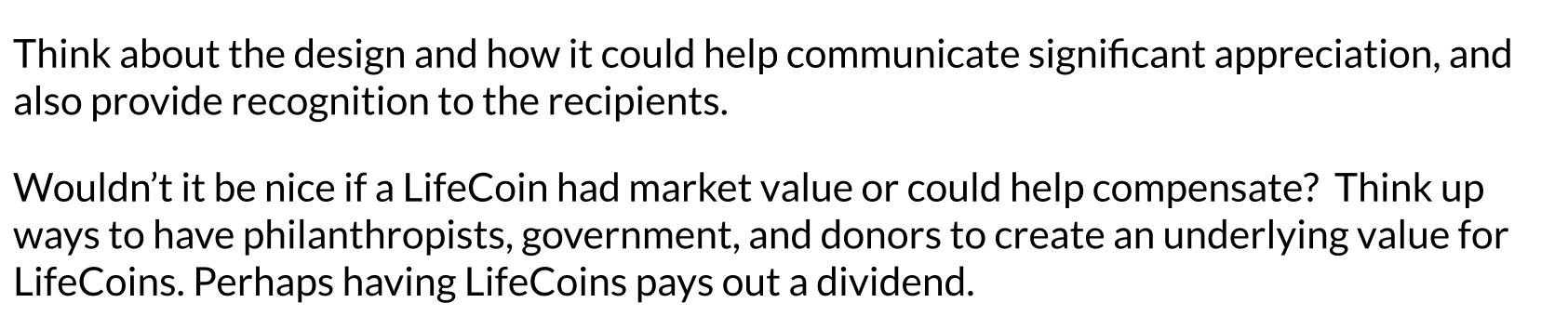
Design and/or prototype a Digital Currency and

Blockchain experience (maybe called "LifeCoin") that

least one will get there to save someone's life.



and Balloons just don't seem to express it.



keeping them alive. This is called "The Chain of Survival." Often the patient is unconscious, or everything happened so

fast they have trouble even knowing who all helped them so dearly. They may only know the doctor, or the police

officer, of the EMT next to them in the ambulance. These patients are FILLED with gratitude, and Thank You Cards

A vast body of research shows that the quality of patient care and positive health outcomes are strongly influenced by the patient's feelings about the "interpersonal communication" the receive during their care. Another vast body of research shows that those same factors are strongly influenced by whether or not their care providers followed

pretty basic protocols (checklists and connected action items) during diagnoses and care. Training, in it's current

Create a social experience that puts forward common but

important scenarios, prompts professionals (think Nurses)

The design should be simple, convenient, and easy to use; think through re-engagement

techniques, as the goal is to increase the frequency of this kind of learning and practice.

Think about the "data model" -- the file structure that data can be saved in and utilized

to respond real-time, then give and receive meaningful

design" could help peers give the kind of feedback that encourages learning.

If there is market or compensation value to a LifeCoin, you would need to prevent

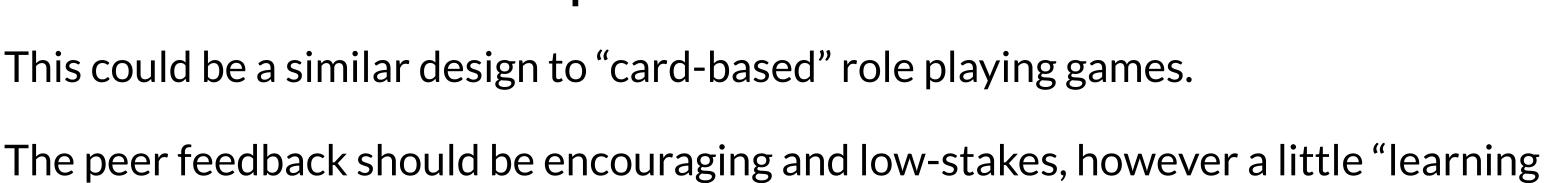
fraud. How would you get verification of this life saving event? And verification

that a recipient actually played a role in saving a life?

Option: Role Playing Scenario Game with Peer Feedback

form, is expensive, high-stakes, and front-loaded rather than continuous.

feedback from their peers.





Standard getting the most hype and adoption. We think it's time that the world sees the same kind of innovation for Healthcare seen elsewhere, yet we must uphold the duty of care necessary for Healthcare. Create a REST API that can capture any event,

intervention, product, or service in the "Chain of Care" --

from the moment a patient needs care until the moment

It should be high-security, using the latest paradigms in web security, (Zero Trust Architecture,

Data in Healthcare has been wrapped in a duty for responsible stewardship that other sectors have not shouldered.

While this responsibility is welcome and necessary, it's also meant that much of the data mobility that now exists in

sectors like Finance has yet to come to Healthcare. Healthcare does have similar "data standards," with the FHIR

Challenge: Create a cheap, safe, secure, IoT transponder that can

It should need no connection to a power grid.

Option: A Micro-Credentialing System for Medicine

send data on maker, use, and context if possible.

and practices that may be used along the chain of care.

expensive precision robots may be involved in Healthcare. As of 2024, expensive equipment that is always powered Context: by the grid and connected to WiFi can send extra-ordinary data into "the cloud" in ways that continually improve patient care. But for every robotic surgical device, there are hundreds of smaller items that have no way of plugging into the new world of HealthCare IOT. We would love to see an innovator change that.

Healthcare is full of devices, equipment, and material. Everything from bottles and jars, to life support systems, to

Ideas: It should be able to send data when it can connect, and how it can connect, to telecommunications signals.

Medical Education is still stuck in legacy models that front-load education and training into degree and licensing programs. "Medical Error" is now considered one of the leading causes of death and poor health outcomes. Many skills and practices should and must evolve quickly, as technology and evidence-based practices are introduced. Yet skills and practices don't evolve quickly enough (think decades), so there is a vital need for a better way to encourage small chunks of reading, practice, professional development, training -- any form of learning that can get wider and

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Challenge:

Some

more frequent.

Context:

Medicine that creates incentives for continuous learning and practice for front-line professionals. Think about how "credentials" are created and verified, and how their issuance to Ideas: individuals is created and verified.

Think about where these "credentials" should show up in ways that are meaningful to

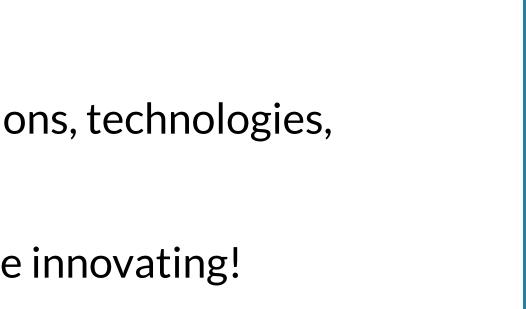
is in real life settings, face to face. How would a "hybrid" design work?

their recipient. Most care providers have some online presence, yet most of their work

Design and/or prototype a Micro-Credentialing system for

Think about how the "Knowledge Graph" within Medicine can be created, managed, and maintained in addition to the virtual certificate or badges.

User Interfaces that allow "setup" and "testing" the API for the specific object being added to Understand the complexities of the Chain of Care.... The people, organizations, technologies, Realize that no one has pulled this off successfully. By taking this on, you are innovating!



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