## Connected Emergency Response Centre and Seamless HealthCare

Subject: NBEC 2021

#### **Submission for domains:**

Digital Health and Environment dynamics

### Author(s):

K.S.Venkatram (Gap Analyst for sustainable development/growth/sense and respond systems, AOEC 2021)

Abhiram (Technical consultant and Operations Advisor for Healthcare)

Aakkash (BTECH AE interested in CCMA)

#### **Dates of documentation:**

04/09/2021: Draft created

30/09/2021: SAAI Factory Hackathon timeline updated

#### **Problem statement**

We propose a Connected Emergency Response Centre (CERC). This is a part of our Green Globe responsiveness (solution finding) to help sites and occupants understand, prepare for, incorporate readiness and mitigate adversity due to climate change, which we think are subjects for Digital Health and Environment dynamics.

In our journey to recommend the CERC, we have sent out insights to interested decision makers like the SAAI Factory Hackathon (the evaluations for the challenge are due to complete by \frac{15}{09}/2021, \text{06}/10/2021), residential sites, educational institutions, business sites like apparels & garments industrial units, government sites, banks, parks & gardens etc where responses from the stakeholders are still being consolidated.

We highlight that our recommendation is simple at the preliminary level but is a macro-and-micro level when being incorporated.

As a gap analysis consultancy, we have been developing solution highlights or details for the macro-and-micro level and have numerous proof of concept websites and associated documents to help agility, responsiveness and risk reduction in healthcare for adversity due to climate change and environmental disasters.

The preliminary recommendation is the addition of Emergency Response pincodes and LifeScores to sites & occupants to bridge gaps that affect healthcare providers in emergency response to seamlessly plan for, save & protect life. Our work in progress URL for VeriSafe Healthcare <a href="https://www.venkataoec.wixsite.com/verisafenhealth">www.venkataoec.wixsite.com/verisafenhealth</a>



The Connected Emergency Response Centre will help understand the LifeScore or Ability of a site and its occupants to prepare for, sense & respond, save or protect life at the time of a threat, disaster or accelerated risk.

The Connected Emergency Response will help design a Critical Path method (CPM) or Emergency Response for each occupant, community or site, where the LifeScore or Ability will decide the awareness/seamless care critical for a relevant response.

#### The proposed solution

The solution proposes to help implement

- A Seamless bridge or CERC connect to Healthcare Providers / Practitioners
- ❖ A LifeScore Enabler for Patient Care (with the help of a CERC Connected Companion Card and Pre-training)
- ❖ A LifeScore Enabler for Health & Medical History Information (with the help of a CERC Connected Companion Card and Pre-training)

#### The pre-training could be for versions such as

**CERC Connect** 1: For Medical history

**CERC Connect 2: For Geriatric history** 

CERC Connect 3: For Pediatric history

CERC Connect 4: For COVID-symptoms or unscreened health issues

CERC Connect 5: For Emergency Response for LifeScore abilities

CERC Connect 6: For a medico-legal case

#### Why is this problem solving important?

We are part of a bio-cluster where a site/residence can have

- Couples planning for a baby
- > Mothers to be
- > Babies and children in their early years (0-12 years)
- > Senior citizens
- > Sick, afflicted, debilitated patients
- People on life support drugs, medicines, remedies, immunizers, health/wellness products

The LifeScore of all associated people at a site/residence can matter for seamless care that is critical for a relevant response.

We find seamless care is important and is not always proximity based. Data about the LifeScore of a site/residents/occupants can help other requirements.

If a CERC could report LifeScores of associated people, Healthcare providers or Emergency Response units for the CERC Emergency Response pincodes can help in the Vital Sense & Respond mindfulness and Categorization of procedures or steps to be followed (based on a similarity algorithm); they could help start crisis mitigation or assistance for sensitized decision making.

**Being Seamless** in this case would mean being sensitized and connected for what can be done in **life changing conditions**.

#### A simpler but insightful Seamless Care bridge

The CERC will help design a bridge for

- (a) For safe, veritable and immediate evaluation, or diagnosis, or care or operative procedures available at CERC healthcare provider sites
- (b) Different diagnostic services available at CERC healthcare provider sites
- (c) Emergency help assistance available at CERC healthcare provider sites
- (d) Need based referrals facilitated by CERC healthcare provider sites
- (e) Vital mindfulness for LifeScore abilities at the time of an emergency response via LifeScore packs, guides and forums

Vital Sense & Respond mindfulness



Vital-mindfulness-pack

Vital-mindfulnessguide

Vital-mindfulnessforum

#### **Stages in the Solution development**

- 1. Deploy a landing page that enables sensitization, work in progress URL <a href="www.venkataoec.wixsite.com/verisafenhealth">www.venkataoec.wixsite.com/verisafenhealth</a>
- 2. Enable interested parties to register into the programme
- 3. Develop emphasis for the Connected Emergency Response Centre programme, where there is a newer responsiveness and risk reduction in healthcare and vital mindfulness for adversity due to climate change and environmental disasters.

- 4. Deploy a "Being Seamless Forum" that develops more interest and support for Sense and Respond systems for connected emergency response that aligns with abilities of bio-clusters of people in disasters, risks and adverse environments.
- 5. Empower people to use this Connected Emergency Response and Companion Card vision

#### Stages of fund raising

- 1. Proof of concept with self-investment
- 2. Proof of concept to real-world solution via funding (from competitions/hackathons/management authority sensitization)

#### Details of why funds are required

- 1. Deployment of Web platforms
- 2. Development of CERC LifeScore Hubs
- 3. Development and Incorporation of CERC Desks
- 4. Google Cloud investments for a CERC registry
- 5. Design of "Ready to use" LifeScore packs, guides and VeriSafe Healthcare programme specific action plans

#### Financial projections for the pilot

- 1. Deployment of Web platforms (TBD INR)
- 2. Development of CERC LifeScore Hubs (TBD INR)
- 3. Development and Incorporation of CERC Desks (TBD INR)
- 4. Google Cloud investments for a CERC registry (TBD INR)
- 5. Design of "Ready to use" LifeScore packs, guides and VeriSafe Healthcare programme specific action plans (TBD INR)

# For sustaining through any economic recession and dynamics in demand/supply balance for healthcare & human resource provisioning

We find an R+ Analytics strategy is necessary for risk mitigation in the post pandemic return to normalcy, where the strategy is Reflective, Recognizable, Reportable and Responsive. The strategy involves

- 1. Designing (Reflective) Solution Deployment that uses a LifeScore and a "Being Seamless Forum"
- 2. Baselining (Recognizable) best practices in Healthcare
- 3. Bridging (Reportable) Quality in ICU(s), CCU(s)
- 4. Improving the agility of Emergency Response Networks via Connected Emergency Response Centres and Emergency Response pincodes
- 5. Functioning via Companion Health Cards and R+ **Health Desks**
- 6. Incorporation of a Veritable and Safe Healthcare Model with Analytics to suit the dynamics seen