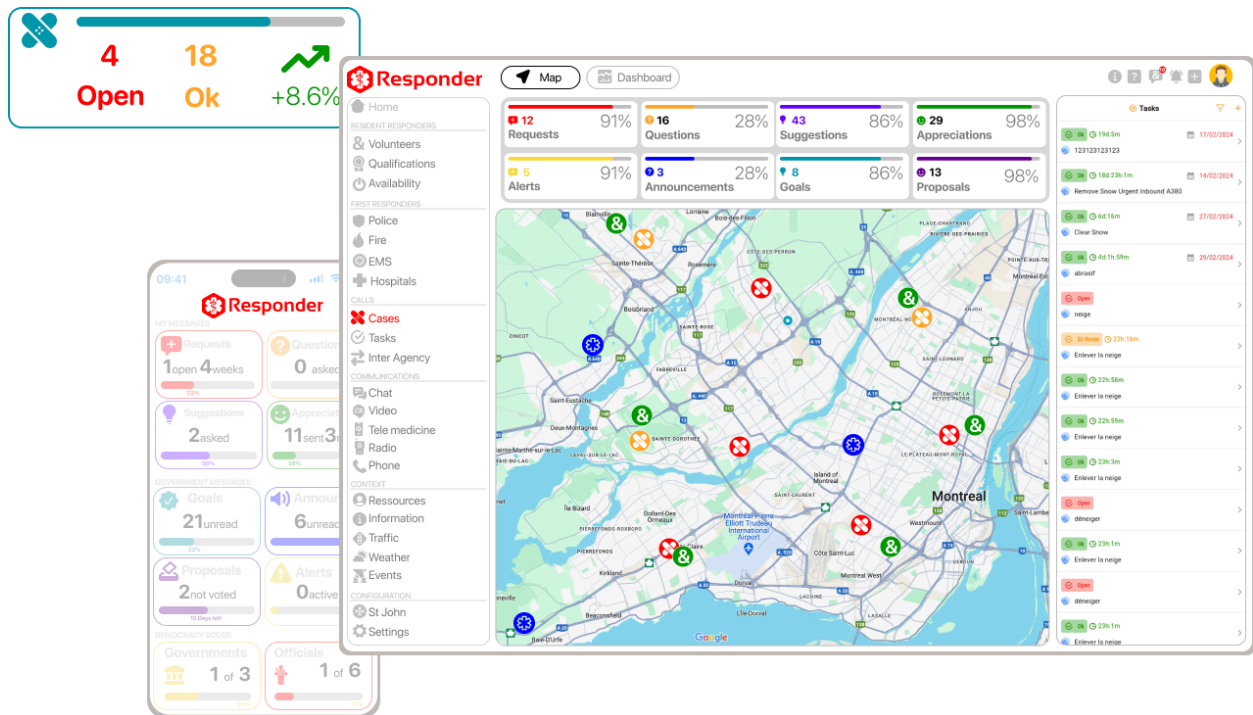


## Connected community care



## The Problem

The efficiency and timeliness of emergency medical services in Quebec has become a pressing concern, with reported cases of dangerously prolonged ambulance response times putting lives at risk.

These delays not only increase the morbidity and mortality rates of Canadians, but they also increase the anxiety and uncertainty faced by patients and their families during critical moments.

Many factors contribute to this horrific reality in Canada. Most notably it is a combination of our low population density, vast rural population, combined with the lack of financial, material and human resources available in our healthcare systems.

Statistics reveal a troubling trend: a significant portion of emergencies suffers from response times that fall short of the provincial standards, highlighting a gap in the provincial government's ability to provide the levels of service to which their constituents are in their rights to expect to receive.

Here are a few highly credible testimonials which highlight the urgency of this societal problem:

*“Nearly 85% of the largest municipalities in Quebec are generally incapable of providing an ambulance in the required time to a citizen whose life is in danger, our Bureau of Investigation discovered”*

- Réjean Leclerc  
Paramedic and Président of la Fédération de la santé et services sociaux (FSSS).

“The deadlines are abominable [...] If I have a heart attack this afternoon, after 15 minutes, it’s over»

- Yvon Garneau  
Québec Coroner Office

Ambulance delays: “This is unacceptable and dangerous. Clearly, lives are at risk right now”

- [TVA News](#)  
23 février, 2024

In light of these unacceptable response times, combined with the constraints facing our public health system in Quebec, it is imperative that the Ministry of Health implement a credible and viable solution to resolve the glaring failure to deliver emergency prehospital medical care, within the delays established and implemented by the Ministry itself.

## The Solution

With an alarmingly high number of municipalities unable to meet pre-hospital care standards, a novel and innovative solution is required.

Resident Responder.

This program seeks to address this alarming issue by leveraging the power of community engagement and technology by facilitating the training and mobilization of local volunteers to step-in and fill the critical time gap between the occurrence of a medical emergency and the arrival of professional medical help.

By doing so, the program aims not only to improve the chances of survival and recovery for those in dire need but also to enhance the overall resilience and preparedness of communities across Quebec.

## Summary

[Resident Responder](#) aims to revolutionize medical first response by connecting emergency 911 dispatchers with the closest, best qualified and available volunteer first responders, instantly mobilizing them with the click of a button, to provide initial assistance while EMS services are on-route.

This program will save countless lives by coordinating tens of thousands of willing and able members of the community to where their help can make a difference between life and death.

As you'll read below, the program would include many benefits such as volunteer registration and verification, 911 integration, individual and group volunteer alerting for mass casualty / catastrophic loss / natural disaster situations, volunteer navigation assistance, live audio and video tele-medicine support with EMS crews while on-route,, training resources, community support groups and many built-in safety features.

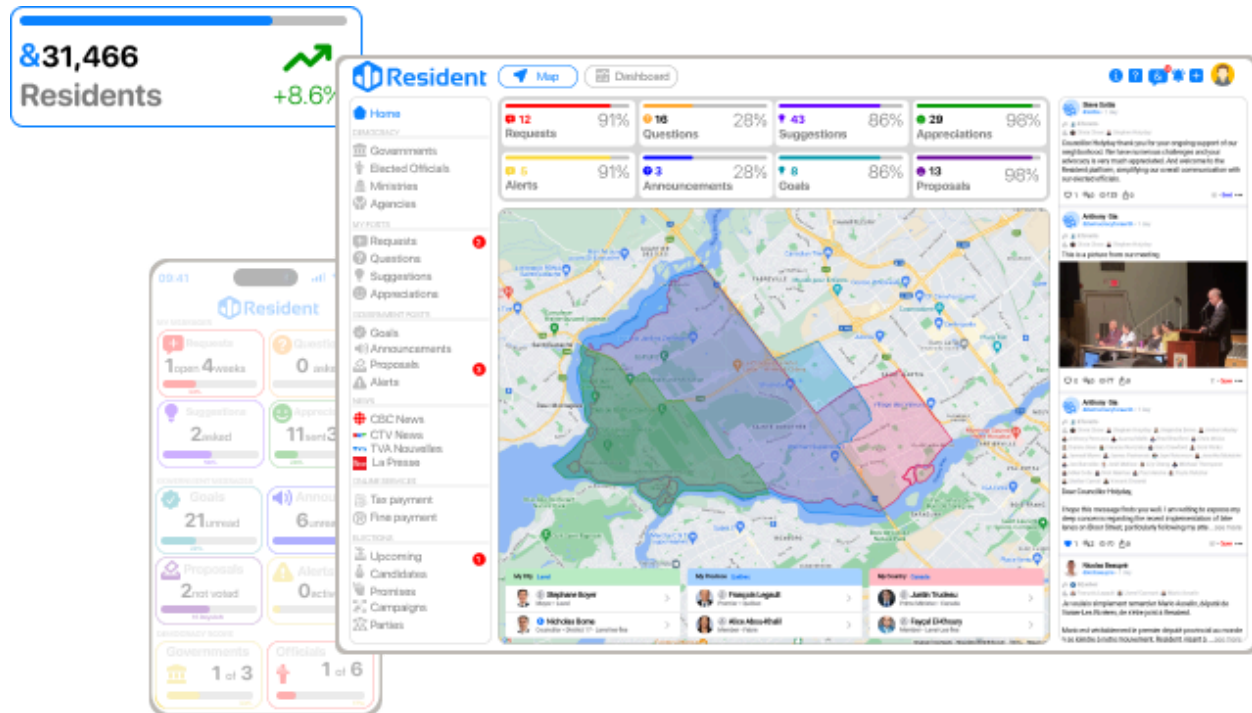
[Resident Responder](#) empowers communities, educates citizens, improves patient outcomes, promotes volunteering and showcases groundbreaking technological innovation, making it an invaluable initiative for the Quebec provincial government to improve and optimize our efficient yet fragile and overburdened public healthcare system.

This innovative solution will need to overcome challenges such as privacy considerations, a robust technology infrastructure, and a comprehensive legal and ethical framework. Thankfully, all of these aspects are already well solutioned in the existing Resident framework.

The key to success is aligning technology and the right partnerships. In this sense, it is a foregone conclusion that St-John Ambulance is poised to be the instigator of this revolutionary new solution designed to instantly match 911 dispatchers with the closest, best suited, and currently available volunteer first responders in the event of a medical emergency.

Baseline's existing Resident application can easily empower this capability given it is already a proven, highly sophisticated, user-friendly app and web portal which leverages the latest in mobile technology, user positioning, communication and alerting capabilities.

## What is Resident ?



Launched in September 2023 by [Baseline Telematics Inc.](#) after over 36 months of development, [resident.social](#) is a revolutionary social engagement platform designed to transform the way citizens interact with their governments, ministries, agencies, departments and elected officials, offering a host of benefits to all.

At its core, Resident serves as a dedicated space where Canadian citizens can engage directly with each other, and with their elected representatives and government agencies, fostering transparent communication, accountability, and civic participation.

Here's a brief overview of the benefits it offers to resident users:

### Direct Communication

Resident provides residents with a direct channel to communicate their concerns, ideas, and feedback to their elected officials and government representatives. Through the platform, users can voice their opinions, ask questions, and participate in discussions on a wide range of issues affecting their communities.

### Transparency and Accountability

By facilitating open and transparent communication between residents and government entities, Resident promotes accountability and ensures that elected officials remain accessible and

responsive to the needs of their constituents. Users can track their reps' actions and responses, holding them accountable for their decisions and actions.

## Civic Engagement

Resident empowers residents to actively participate in the democratic process by providing them with the tools and resources to engage meaningfully with their government. From participating in town hall meetings to sharing their views on proposed policies, residents can play an active role in shaping the future of their communities.

## Community Building

Through Resident, users can connect with like-minded individuals and organizations within their communities, fostering a sense of belonging and solidarity. The platform enables residents to collaborate on local initiatives, organize events, and mobilize support for causes that matter to them.

## Accessibility and Inclusivity

Resident is designed to be inclusive and accessible to all residents, regardless of their background, location, or socioeconomic status. The platform prioritizes accessibility features and multilingual support to ensure that everyone has a voice and can participate in civic discourse.

Overall, Resident offers residents a unique opportunity to engage with each other and their governments and elected officials in a meaningful and impactful way, driving positive change and strengthening democracy at the grassroots level.

## Introducing Resident Responder



Unleash the power of your community with Resident Responder, where everyday heroes come together to provide life-saving assistance in moments of need.

### Volunteer Registration and Verification

Volunteers, including off-duty medical professionals, certified first aid responders, and trained civilians, can register to become Resident Responders through the existing Resident app. They would provide their qualifications, certifications, and areas of expertise. The app would verify these credentials through a partnership with medical licensing boards and certification authorities.

### 911 Integration

The app, through its existing powerful geospatial mapping capabilities, would integrate directly with 911 dispatch systems. When a medical emergency call is received, dispatchers can use the app to assess the situation based on the information provided by the caller and determine if a volunteer responder could assist until professional emergency services arrive.



## Defibrillator Locator

The Defibrillator Locator functionality within the Resident Responder program is a vital tool designed to enhance emergency response efforts by mapping out the locations of all publicly available defibrillators across Canada.

This feature allows Resident Responders to quickly identify and access the nearest Automated External Defibrillator (AED) when responding to cardiac emergencies, significantly increasing the chances of survival by enabling immediate defibrillation before professional medical help arrives.

Through a comprehensive and regularly updated database, these life saving devices are always easy to find and available for Resident Responders to use when performing emergency first-aid medical interventions.

This ensures that communities are safer and more prepared to handle all too common and tragic sudden cardiac arrests.

## Real-Time GPS Tracking

The app would use real-time GPS tracking to maintain an up-to-date map of volunteer locations, when they make themselves available to the network. This allows immediate identification of the nearest qualified volunteer responder to any given emergency.

## Alert System

Upon identification of a suitable volunteer responder, the app sends an alert to their smartphone, detailing the nature of the emergency and its location. Volunteers can accept or decline the alert based on their availability and comfort with the situation. Their decision to accept or reject is instantly sent back to the 911 dispatcher, and from that point, live audio / video can be initiated between the dispatcher and the volunteer, or a qualified medical first responder and the volunteer, equivalent to a telemedicine consultation.

## Navigation and Communication

Once a volunteer accepts the alert, the app gives them the fastest route to the emergency location. It also enables secure communication between the volunteer, the 911 dispatcher, and, if necessary, the professional emergency responders en route.

## Safety and Security

The app includes features to ensure the safety and security of both volunteers and those they assist. This includes secure ID verification, real-time location tracking during the response, and an emergency button for volunteers to alert dispatchers if they encounter any issues.

## Training and Resources

[Resident Responder](#), in collaboration with St-John ambulance, would offer in-app access to training materials, guidelines, and resources to help volunteers stay updated on the best practices in emergency medical response.

## Community and Support

The app fosters a community of volunteers through forums, local meetups, and recognition programs to honor outstanding service.

## Implementation and Challenges

### Partnerships

Developing partnerships with local and national emergency services, and medical boards and certification authorities, is crucial for the app's success.

### Privacy and Legal Concerns

The app would need to navigate privacy laws and regulations, ensuring the protection of both volunteer and patient information.

### Technology and Infrastructure

Robust backend infrastructure is required to handle real-time data processing, GPS tracking, and secure communications.

[Resident Responder](#) would harness the power of technology to bring together willing and able volunteers with those in urgent need of medical assistance. Its success hinges on community participation, technological reliability, and seamless integration with existing emergency services.

## Benefits for the Quebec Government

ResidentResponder aims to enhance the community's resilience by supplementing professional emergency services with qualified volunteer first responders. By reducing response times in



critical situations, the app has the potential to save lives and provide reassurance to individuals in distress, knowing that a network of qualified helpers is just a tap away.

The introduction of the [Resident Responder](#) program which alerts volunteer first responders in the event of a medical emergency, presents several advantages for the Quebec provincial government.

These benefits range from enhanced emergency response times to community empowerment and cost savings

## Improved Emergency Response Times

### **Rapid Assistance**

By mobilizing qualified volunteers who are near the scene of an emergency, the program can significantly reduce the time it takes for victims to receive initial medical assistance, potentially saving lives.

### **Complementing Professional Services**

This initiative can effectively complement existing emergency services by providing immediate assistance, thereby improving overall response times across the province.

## Enhanced Community Engagement

### **Volunteer Empowerment**

Encouraging volunteerism within the community can lead to a more engaged and cohesive society. Volunteers who are trained and ready to assist in emergencies contribute to a resilient community.

### **Public Health Awareness**

The program can increase public awareness about the importance of first aid, CPR, and other emergency interventions, leading to a more health-literate population.

## Cost Efficiency

### **Resource Optimization**

Leveraging volunteer first responders can help optimize the allocation of emergency medical services (EMS) resources, ensuring that ambulances and professional paramedics are dispatched to situations where they are most needed.

### **Potential Reduction in Healthcare Costs**

By providing immediate care, the program might reduce the severity of injuries or health complications, potentially leading to lower healthcare costs associated with emergency and long-term care.

## Increased Public Safety

### **Broad Coverage**

This program can offer broader coverage, especially in rural or remote areas where professional EMS response times may be longer.

### **Disaster Preparedness**

In the event of a large-scale emergency or disaster, having a network of trained volunteers could be invaluable in providing immediate assistance, thereby enhancing the province's disaster preparedness and resilience.

## Technological Innovation

### **Showcasing Innovation**

Implementing such a program positions Quebec as a leader in technological innovation within public health and emergency services.

### **Data Collection and Analysis**

The program can provide valuable data on emergency response effectiveness, volunteer engagement, and public health trends, informing future policies and initiatives.

## Legal and Ethical Framework

### **Setting a Precedent**

Developing a comprehensive legal and ethical framework for volunteer first responders can serve as a model for other provinces or countries, highlighting Quebec's commitment to innovation in public safety and community health.

For the Quebec provincial government, this program represents an opportunity to enhance emergency medical responses, engage the community, save on healthcare costs, and lead in technological innovation and public safety initiatives. It aligns with the government's goals of providing high-quality healthcare, promoting volunteerism, and ensuring the safety and well-being of its citizens.

## Supporting our healthcare system

The program, aimed at leveraging volunteer first responders in emergency situations, can offer significant advantages to an overburdened public healthcare system, especially one that is pushed beyond its limits. Here are some of the key benefits:

## Alleviation of Healthcare System Pressure

By providing immediate assistance at the scene of an emergency, the program can prevent situations from worsening, potentially reducing the need for extensive medical interventions later. This can help alleviate the pressure on emergency rooms and healthcare facilities, which are often overwhelmed with cases that could have been mitigated with prompt initial care.

## Enhanced Pre-Hospital Care

The program ensures that individuals in distress receive basic or potentially life-saving care before professional medical services arrive. This early intervention can improve patient outcomes significantly, reducing the burden on hospital resources by lowering the chances of complications or the need for critical care.

## Optimization of Emergency Medical Services (EMS)

It is designed to help optimize the use of EMS resources by ensuring that ambulances and emergency personnel are dispatched to situations where they are most needed. This strategic allocation can enhance the efficiency of the healthcare system, particularly in areas with limited EMS resources.

## Reduction in Hospital Admissions

Effective early intervention can reduce the severity of injuries or health conditions, potentially decreasing the number of hospital admissions. This can free up hospital beds and resources for more critical cases, helping to manage capacity issues in healthcare facilities.

## Cost Savings

The program can lead to significant cost savings for the public healthcare system by reducing the need for expensive emergency care and hospitalization. By preventing situations from escalating, the program can help save on the costs associated with long-term medical treatment, surgeries, and rehabilitation.

## Community Empowerment and Education

[Resident Responder](#) empowers community members to take an active role in healthcare, promoting a culture of care and responsibility. The program also offers an opportunity for widespread education on basic first aid and emergency response, raising the overall health literacy of the population. This can lead to a more proactive approach to health and safety, potentially reducing the incidence of emergencies.

## Improved Patient Outcomes

Early medical intervention is often critical in determining patient outcomes. The program can significantly improve these outcomes by ensuring that immediate care is available, thereby enhancing the overall effectiveness of the healthcare system in saving lives and reducing the severity of medical conditions.

## Strengthened Public Health Infrastructure

By integrating volunteer responders into the public health response framework, the program strengthens the overall health infrastructure. It provides an additional layer of support that complements traditional healthcare services, making the system more resilient and adaptable to surges in demand.

[Resident Responder](#) represents a strategic innovation in addressing the challenges faced by an overburdened public healthcare system. By leveraging community involvement and providing early intervention in emergencies, the program can alleviate pressure on healthcare facilities, improve patient outcomes, and contribute to significant cost savings, all of which are critical in a system operating beyond its limits.

## Better medical outcomes

Designed to alert volunteer first responders in the event of a medical emergency, [Resident Responder](#) offers significant advantages for individuals in urgent need of medical assistance, especially within the context of an overburdened public healthcare system, as well as in rural areas where response times can be very long.

For individuals in urgent need of medical assistance, the system program offers a lifeline that complements the existing healthcare infrastructure. It not only ensures quicker and potentially life-saving medical intervention but also provides emotional support, enhances coverage in underserved areas, and contributes to the overall resilience of the public healthcare system.

## Faster initial response times

### **Reduced wait times**

Individuals in need can receive immediate care from nearby trained volunteers, potentially before professional emergency services arrive. This is crucial during the "golden hour," the initial period after a traumatic injury when prompt medical treatment is most likely to be successful.

### **Life-Saving Intervention**

For conditions such as cardiac arrest, choking, or severe bleeding, minutes can make the difference between life and death. Volunteer first responders can provide life-saving interventions like CPR, basic first aid, or stopping blood loss until professional help arrives.

## Increased Chance of Recovery

### **Early Intervention**

Early medical intervention can significantly improve the prognosis of various medical emergencies. By receiving prompt care, individuals may have better recovery outcomes and potentially avoid long-term complications.

### **Stabilization**

Volunteers trained in advanced first aid can help stabilize an individual's condition, preventing it from worsening and thereby improving their chances of a full recovery.

## Emotional Support and Reassurance

### **Immediate Presence**

Having a trained responder arrive quickly at the scene can provide emotional support and reassurance to the victim and their loved ones during a highly stressful situation.

### **Communication**

Volunteer responders can assess the situation and communicate vital information to professional emergency services en route, ensuring a more efficient and informed response upon their arrival.

## Enhanced Accessibility in Remote Areas

### **Coverage in Rural Regions**

In rural or remote areas, where professional medical services may be farther away, the solution can be particularly beneficial, ensuring that those in less accessible locations receive timely assistance.

### **Community-Based Solution**

Leveraging local volunteers who are familiar with the area and its people can improve the efficiency and effectiveness of the emergency response in these communities.

## Alleviation of Healthcare System Strain

### **Reducing Non-Essential ER Visits**

By providing immediate on-site assessment and care, some situations might be resolved without the need for an emergency room visit, thereby reducing the strain on hospital resources.

### **Optimization of Emergency Services**

The program allows for the more judicious use of ambulances and emergency personnel, focusing their efforts on situations that require advanced medical intervention, and potentially leading to a more sustainable allocation of healthcare resources.

## Community Empowerment

### **Strengthening Community Ties**

The program fosters a sense of community by encouraging residents to look out for one another, thereby promoting mutual aid and resilience.

### **Public Health Education**

Participants and the broader community may become more aware of health issues, first aid, and preventive measures, contributing to a more health-literate public.

## Partnership with St-John Ambulance

St. John Ambulance, known for its commitment to providing first aid and CPR training, as well as its network of volunteers who support public events and emergency response efforts, could play a pivotal role in facilitating the program in Quebec

St. John Ambulance can significantly enhance the program's effectiveness and outreach. Here's how:

## Training and Certification

### **Comprehensive Training**

St. John Ambulance could provide standardized, comprehensive training for volunteers in the program, ensuring they are well-equipped to handle a variety of medical emergencies.

### **Certification**

They can offer certification to volunteers, which would not only validate the volunteers' skills but also instill confidence in the individuals receiving assistance.

## Volunteer Recruitment and Management

### **Recruitment**

Leveraging its network, St. John Ambulance can help in the recruitment of volunteers, attracting individuals already interested in or trained in first aid and emergency care.

### **Management**

They have experience in managing a large pool of volunteers, which could be invaluable in organizing the workforce, including scheduling, availability, and deployment.

## Quality Assurance and Continuous Education

### **Quality Assurance**

St. John Ambulance could establish and maintain high standards of care among volunteers through regular assessments and feedback.

### **Continuous Education**

They can provide ongoing training and updates to volunteers, ensuring their skills remain current with the latest first aid and emergency response practices.

## **Integration with Emergency Services**

### **Collaboration with EMS**

St. John Ambulance already has experience with emergency medical services (EMS). This relationship could be leveraged to integrate first aid volunteers smoothly with professional emergency services, ensuring a coordinated response to incidents.

### **Communication Protocols**

Developing and implementing effective communication protocols between volunteers, 911 dispatchers, and professional responders would be critical. St. John Ambulance could share best practices and technologies to facilitate this communication.

## **Public Awareness and Engagement**

### **Community Outreach**

St. John Ambulance could use its platform to promote the [Resident Responder](#) program, increasing public awareness and engagement. This could include information sessions, demonstrations, and participation in local events.

### **Education Campaigns**

They could lead educational campaigns on the importance of first aid, CPR, and the role of volunteer responders in the community, encouraging more people to learn these vital skills.

## **Logistical and Material Support**

### **Supply of First Aid Kits**

St. John Ambulance could provide or facilitate access to necessary first aid supplies and equipment for volunteers, ensuring they are well-prepared for any situation.

### **Support Systems**

Offering logistical support, such as help with the app's development, data management, and volunteer coordination tools, could further enhance the program's efficiency.

A partnership with St. John Ambulance in Quebec would represent a powerful synergy that could significantly enhance community-based emergency response efforts. By combining St. John Ambulance's expertise in first aid training and volunteer management with the innovative approach of the [Resident Responder](#) program, this collaboration can lead to improved



emergency response times, better outcomes for individuals in need of urgent medical assistance, and a stronger, more resilient community.

## In Conclusion

I believe St. John Ambulance can initiate a transformative program that aligns with the purpose of Resident, which is to enhance community engagement, and extend it to public health and safety.

[Resident Responder](#) would be more than just a technological innovation in emergency response. It is a step forward in community empowerment, one that could only attain its fullest potential with St. John Ambulance as the shepherd.

The program's goal to connect volunteer first responders with those in urgent need of medical assistance is at the core of what St. John Ambulance is all about. By integrating the proper technology, St. John Ambulance can attain its mission at never before seen levels of social impact. This could be the single most important step forward in reducing emergency response times and filling critical gaps in our overburdened healthcare system.

The success of such a program hinges not only on technological innovation which is already built to a very large extent, but also and mostly on the depth of training and the strength of the volunteer network—areas where St. John Ambulance excels.

The development of a [Resident Responder](#) pilot project is a unique opportunity for St. John Ambulance to exploit its unparalleled expertise in first aid and CPR training in a whole new paradigm, one which would significantly and positively impact emergency medical response across Quebec for decades to come. Such a pilot project could quickly demonstrate not only its viability but also its potential to save lives and empower residents to help each other, while supporting our healthcare system.

Baseline would be prepared to do its part of collaborative effort at no cost to St. John Ambulance. Together, we would both gain valuable insights and data to refine the program further. With St. John Ambulance's vast experience in volunteer management and community engagement, combined with Baseline's innovation and technical prowess, the potential is very strong to set a new standard for emergency response in Québec. This program could even expand throughout Canada and possibly even abroad with the global reach of St. John Ambulance.

The ultimate goal of a pilot project would be to seek official government implication is ambitious but attainable. By showcasing the effectiveness and benefits of the [Resident Responder](#) program through our trial, we can make a compelling case for a wider-scale official launch.

The support of the Quebec government would not only legitimize the program but also ensure its sustainability and expansion, with the potential to become a model for other provinces and territories.

St. John Ambulance is the natural leader of such an initiative where technology and community intersect to create something genuinely life-changing, leading the way in a new era of emergency response, demonstrating the power of collaboration, innovation, and shared commitment to public safety.

This solution can be ready for a limited deployment trial in as little as 60 days from the moment an agreement is in place to secure the proper partnership and align clear roles and responsibilities between the parties.

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[Click here](#) to read my Blog written on March 5th 2024 titled “[Connected Community Care](#)” which covers my personal journey towards the creation of the Resident Responder program.