

Improving Cross-Program Collaboration with the Australian Red Cross Victorian Emergency Services



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May 3, 2023

Improving Cross- Program Collaboration with the Australian Red Cross Victorian Emergency Services

An Interactive Qualifying Project
submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
in partial fulfillment of the requirements for the
degree of Bachelor of Science

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Date:
May 3, 2023

Report Submitted to:

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Abstract

The Victorian Red Cross delivers services across four program areas: Emergency Services, Migrant Support, Community Program, and the Community Mobilisation team. The Victorian Red Cross is seeking to strengthen coordination across programs to better support the people they aid—this project aims to complement those efforts. To accomplish this, the team: developed a framework for analyzing coordination, applied the framework to describe Red Cross' current system, and utilized the framework to make recommendations to address opportunities that emerge in the data.



Acknowledgements

The past 14 weeks spent on this project have truly been an honor, and we would like to thank the people who have made this project possible.

To our community partner – Fyowna Norton, thank you so much for engaging with us and supporting us throughout this journey. It was an honor to be trusted to do such important work. We couldn't have done it without you.

To all the staff, volunteers, and members that we had the pleasure to interview and survey – thank you for taking the time to make this project possible. You are the voices of the Red Cross.

To our advisors Professor Stephen McCauley and Professor Lorraine Higgins, for joining us on this rollercoaster of a project and supporting us through its entirety.

Authorship

Antone contributed to the introduction in the form of the “Black Saturday” bushfire section. He also wrote the background section pertaining to “Australian Red Cross programs ensure vulnerable communities receive support”. He also wrote the methods, findings, and results for “Information Management”. Additionally he assisted in editing the findings and recommendations as well as created some of the original process maps.

Bryce's role included being the primary writer for The disaster context in Victoria, Supporting people and communities that are more vulnerable before, during, and after disasters, the Synergy portion of SINE, and the Discussion sections. He also was the co-author for Why cross-program coordination is essential, Objective 1, and objective 3 sections. He was also the lead for creating each of the process maps, this included research, writing, and creating the example maps for this section. Finally, Bryce's roles were concluded with some last-minute revisions.

Dante was the primary author of the abstract, introduction, the Engagement component of SINE. Additionally, he was the co-author for Why cross-program coordination is essential, methodology, and findings. Additionally, he was an editor of the background, methods, and findings. Dante was the primary author and editor of all method instruments in Appendices A, B, C, D, E, and F.

Owen wrote section two about vulnerable communities within Victoria and the disproportionate impact of disasters on them. He also wrote about vulnerable populations and what the Red Cross is doing to help them. Next, he worked on the networks section of the methods, findings, and results. Additionally, he helped with various other sections throughout the report as well as editing. Finally, Owen did all the final formatting on the proposal.

Executive Summary



Victoria, Australia has recently experienced a range of disasters, including storms, floods, heatwaves, bushfires, and COVID-19. The Red Cross has played a critical role in supporting affected communities, providing aid through various programs, including Emergency Services, Migrant Support, Community Programs, First Nations Peoples, and International Disaster Relief. The Red Cross' psychosocial programs form the foundation of their work, helping individuals, households, and communities prepare for, respond to, and recover from emergencies. The ARC is a complex organization consisting of multiple interacting programs. These programs work to provide preparedness, training, emergency relief, and humanitarian services.

This complex organization with its multiple programs is analyzing its current strategies and looking for organization-wide opportunities to better serve the people and communities of Victoria. The Victorian Red Cross wants to be proactive by understanding its current coordination efforts and ensuring programs are working in sync. This project aimed to identify opportunities

for stronger coordination between its emergency services program (Vic ES) and other Red Cross programs. To accomplish this goal, we completed three objectives; we: 1) **Developed a framework** for analyzing coordination at the Victorian Red Cross; 2) **Applied the framework** to describe the Red Cross' current system and identify gaps and opportunities across programs; and 3) **Made recommendations** to address these gaps and opportunities.

Framework

Based on our review of literature on program coordination and on preliminary discussions with the Red Cross leadership, we developed a framework that allowed us to systematically assess coordination of the Red Cross' programs. The framework, which we call SINE, was developed based on four principles of exceptional coordination.

- **Synergy**, which relies on a shared understanding of program goals and operations across an organization and

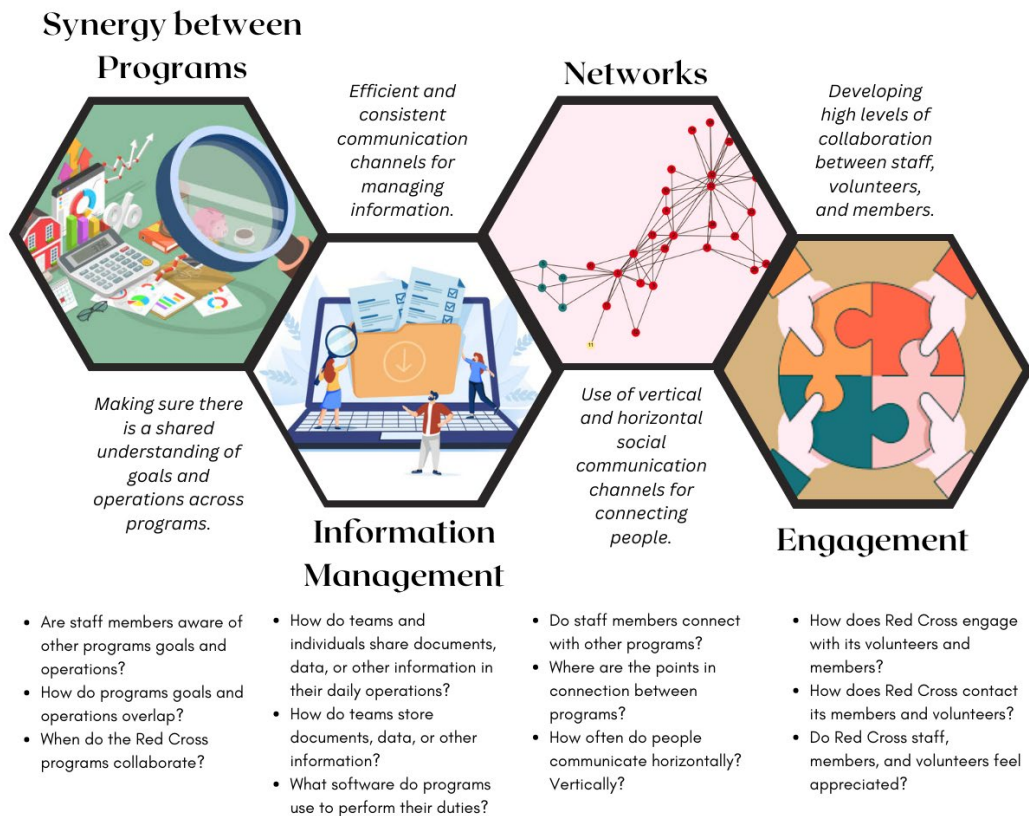


Figure 1: SINE with standard research questions

allows programs to more effectively share resources.

- Uniform **Information management**, which is essential for making information more accessible to a wider range of employees who need it.
- Social **Networks** that connect staff horizontally and vertically within and across programs.
- **Engagement**, which is the development of high levels of collaboration between staff, volunteers, and members throughout the Red Cross.

Through SINE, the team was able to analyze the Red Cross' interoperability and make recommendations for improvement. We created a set of research questions relevant to each part of the framework, which are represented in Figure 1.

Applying the Framework

To address our research questions and gain insights into the coordination strategies at the Red Cross, our team employed various methods. We participated in program briefings, a volunteer conference, and a zone meeting to gain operational insights. In addition, we conducted interviews with 15 staff members and 1 volunteer to comprehend their understanding of program goals, and created several process maps to illustrate program operations. We also used a

jamboard activity to create social network maps to document staff interactions. To further gain insights into stakeholder interactions, we developed a survey that was distributed to a majority of staff, members, and volunteers.

Synergy between programs

During the interview process, it became evident that most of the **staff members were not well-versed in overall program objectives and mission statements**. Research in academic literature indicates that well-defined goal statements can lead to better utilization of resources (Garnett and Kouzmin, 2007). In addition, our interviews revealed that the staff on average rated their understanding of other programs' operations as 4.1 out of 10 (where 1 meant no understanding and 10 meant complete understanding). These findings suggest that there is room for improvement in providing staff and volunteers with a better understanding of each program.

Process maps reveal the daily operations of programs, so sharing the maps we created with all staff, volunteers, and members might be a way to facilitate a greater understanding of daily operations. Process maps can also reveal **areas of overlap between programs**, possibly facilitating cross-program collaboration (Figure 2). The blue circles in Figure 2 highlight two sections

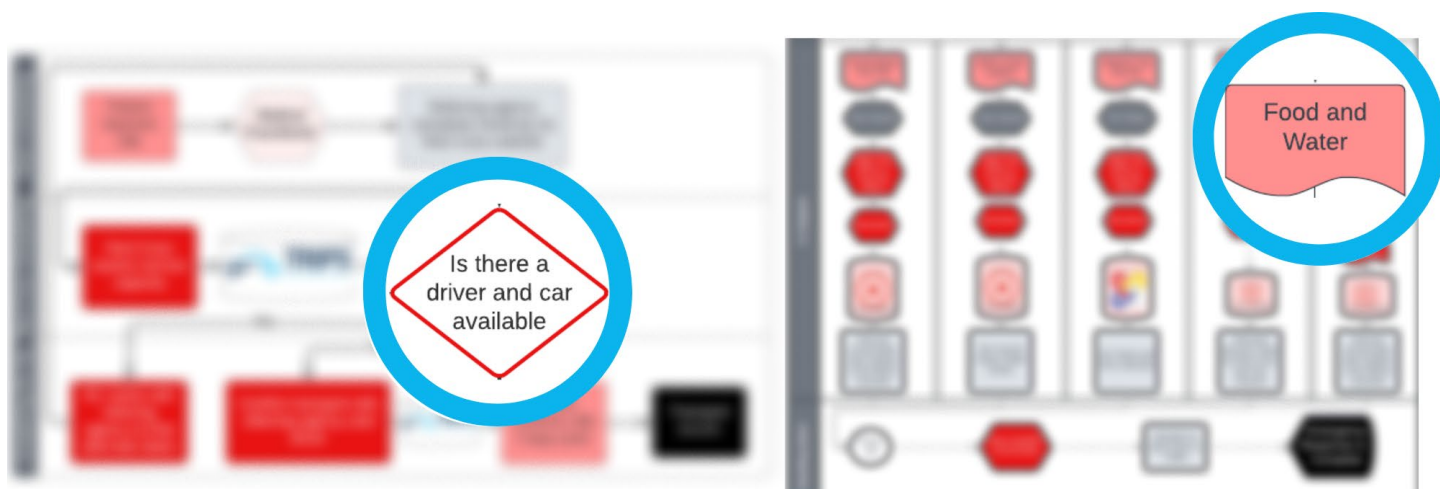


Figure 2: Process maps for the Community Programs Patient Transport and Emergency Services AIIMS system.

of the maps where overlap occurs, indicating where ES can collaborate with Patient Transport to provide food and water in emergency situations. If program leads and managers analyze the maps together, they can identify additional areas where programs can collaborate, leading to greater synergy throughout the Red Cross.

Information Management

From the data collected on information management there were two main findings. We first found that the **current systems for data storage and sharing create barriers for interoperability** between different Red Cross programs. In our interviews 12 out of 15 employees had complaints about the current data management systems. Additionally, 6 out of 15 employees specifically reported issues with the compatibility of the two current volunteer management softwares. While the Red Cross is already searching for a new system to replace these two, the study suggests that improving system compatibility is crucial for the organization's success.

Secondly, 5 out of 15 staff members brought up that there is an **absence of a uniform storage process** both across and within programs, with one employee saying, "The problem is everyone uses different systems and has different ways of filing." This absence creates confusion and inefficiency when searching for or storing documents and information. Having a defined storage method will improve the management of documents and information within the organization creating a more organized and efficient Red Cross.

Networks

Our social network analysis explored the social network map seen in Figure 3 and 4; this map consists of nodes connected by edges. The edges that connect two nodes of the same size indicate horizontal communication while edges that connect two nodes of different sizes represent vertical communication. This analysis identified **limited horizontal communication channels between different programs** as the social connections between the Red Cross staff

we interviewed tended to be vertical. The blue network represents social connections between ES staff, whereas the other colors represent external programs to ES.

By isolating the communications of all ES staff members we were able to find that there is limited horizontal communication between their two inner-programs. Outside of the program leads there is only one staff member who has regular connections outside of their program. This can be seen in Figure 3 by the node that is circled in red. Direct communication between staff members in both programs would allow for more efficient operations and better coordination of actions taken relating to emergency activations.

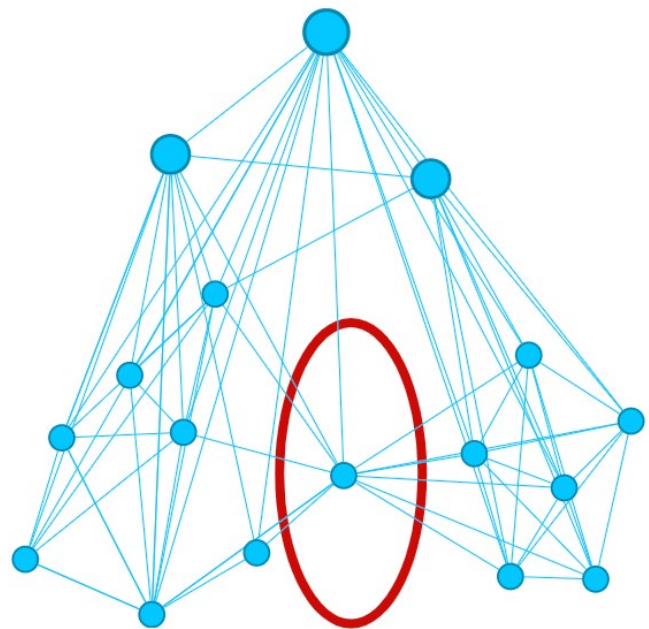


Figure 3: Emergency Services' social network map

We also analyzed the communication of ES staff members with other Red Cross programs. In Figure 4, we have isolated all Emergency Services staff and any other staff that they have a direct connection with. Outside of the Community Mobilisation team (orange), **Emergency Services has limited communication with staff from other programs**. Academic literature suggests that limited horizontal communication causes inefficiencies in operations (Cross et al, 2002).

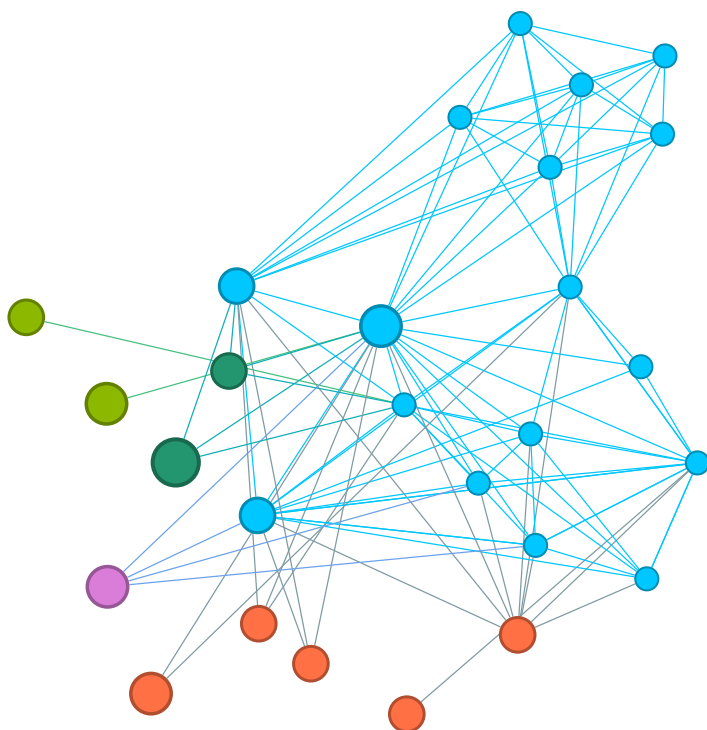


Figure 4: Emergency Services' external communication

Engagement

Engagement of employees or volunteers is a key factor in any organization as it allows for all members of a program to feel connected with the inner operations in the organization. ES program head and staff members mentioned the need for higher levels of engagement between staff, volunteers, and membership.

To increase cross-program collaboration, our findings suggest that Vic ES should **increase staff engagement opportunities with other program's staff**. By increasing engagement between staff, more opportunities for collaboration would present themselves. Additionally, our literature review supports the idea that higher engagement leads to stakeholders' trust towards the overall organization, as stated by Garnett and Kouzmin (2007). Thus, with the increased engagement staff would develop robust communication and coordination skills.

Recommendations

Based on our research and methodology, we recommended specific actions for each

component of SINE.

To improve **Synergy** within the Red Cross our first recommendation is to **develop mission statements** for each program and share them across the organization. As indicated in our literature review, creating clear goal statements and objectives can foster a common understanding of goals (Garnett and Kouzmin, 2007).

We recommend **using process maps to improve cross-program understanding** of daily operations. Based on our feedback from program leads and managers, having leads review these maps together, can help them identify additional areas where their programs can collaborate.

To improve synergy we also recommend **rotating employees across programs** to help them better understand the organizational goals and structure. Program heads mentioned that secondments deepen the understanding of the Red Cross and its programs. Our research shows that secondments increase productivity and organizational effectiveness while enhancing cross-program collaboration and understanding.

Based on our findings for **Information Management** we have developed two recommendations for the Red Cross. First, we recommend that Red Cross **consider software with the following characteristics in mind: automation, usability, and accessibility**. These characteristics, drafted directly from staff interviews, were developed to create a standard for information management systems. These characteristics address the main issues that the current system is causing; the inability to automate the transfer of documents and data, which was one of the biggest qualms mentioned by employees. Along with addressing the issues of the current software, a new software with these characteristics will improve user experience.

Part of integrating a new system should include the **production and promotion of a unified policy for storing information**. Having a unified policy for storing information will improve the management of documents and information within the Red Cross, leading to more organization both within and across programs. Providing a unified storage system allows for more collaboration and

sharing of documents across programs as people will know where to look when finding information on other programs.

Based on our ***Social Network Analysis***, to increase horizontal communication within and between programs we recommend **providing more in-person events and connection opportunities**, this will create more face-to-face interaction across programs. One of the ways that this can be achieved is by requiring employees to be in the office on certain days of the week. This will lead to more natural conversations thus creating more informal relationships between employees.

Due to the limited time that we had to map the communication channels within the Red Cross, we recommend that the **investigation of informal and formal social networks be continued**. This will allow for the construction of a complete social network map which will provide greater insight into the organization. In addition this will allow for the monitoring of progress as changes are made if the map is continuously updated.

To address ***Engagement*** of Emergency Services staff, we recommend **increasing the opportunities to engage** with volunteers and members in addition to staff from other programs. With more opportunities to engage, stakeholders would connect with the organization more frequently.

Engagement is only possible if other elements of SINE—shared goals, good information management and social networking—are in place. To promote higher levels of engagement, we suggest **acting on the previous recommendations and then monitoring whether cross program collaboration increases**.

In conclusion, the Red Cross has been instrumental in providing assistance to Australian communities during disasters, including bushfires, floods, and pandemics. This project aimed to evaluate the Red Cross' cross-program coordination and identify opportunities for improvement. Using the SINE framework, we were able to identify gaps and make recommendations to enhance program synergy, information management, social networks, and

organization-wide engagement. By implementing these recommendations, the Victorian Red Cross can continue to provide exceptional services to the people and communities of Victoria.

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Introduction



Today, the world experiences three times more disasters per year than in the 1970s and 1980s (FAO, 2021). As reported by the Food and Agricultural Organization of the United Nations (FAO), a worldwide increase in forest fires, floods, and other biological threats is endangering more populations (2021). With the increase of intensity and frequency of disasters occurring in Australia, “more than nine million people in Australia have been directly impacted by a disaster or extreme weather event in the past 30 years” (Deloitte, 2017). According to the Royal Commission on National Natural Disaster Arrangements (RCNDA) (2020), Australia experienced over half a dozen significant weather events over six months in 2020. The 2020 Black Summer bushfires burnt more than 24 million hectares and killed over 400 people from burns and smoke inhalation causing a number of animals and people to be displaced from their homes (ibid, 2020).

The Australian Red Cross (Red Cross) is a humanitarian organization that improves the lives of vulnerable people through the services they deliver and the promotion of humanitarian law.

Within the Victorian Red Cross, there are four major programs that serve the community and share common goals: Emergency Services program which provides response, services, programs, and resources before, during, and after

emergencies; Migrant Support program which assists new immigrants’ transition by helping them find jobs, homes, and lost family members; Community Programs, which include assistance for the homeless, elderly, and First Nations people; Community Mobilisation, prepares and coordinates volunteers and fundraising efforts throughout Australia for the Red Cross. Even though each program has its own role in providing support, all programs share the same Australian Red Cross goal. This commonality offers an opportunity for cross-program collaboration to improve efficiency and outcomes for people and communities, particularly in the face of the increasing frequency and severity of emergencies.

During any emergency, it is crucial that emergency management agencies communicate and coordinate their efforts effectively to ensure these efforts are not undermined nor cause unintended negative consequences. Coordination is not just essential in day-to-day activities, but it is crucial for service and response programs in times of crisis. One recent example that demonstrates the importance of effective coordination is described in the Inquiry into the 2019–20 Victorian Fire Season Phase 2 Summary Report. In this report, the Inspector-General for Emergency Management (IGEM) details community members having to “repeatedly tell their story and their



situation to multiple agencies, making them feel unheard, frustrated and cynical that anything would get done” (2020). Not only did the recipients of the care feel alienated, but health and medical, community service organizations, and church groups also “shared their frustration and anger about a lack of coordination and consultation between government and agencies” exemplifying the importance of sharing information amongst organizations (ibid, 2022). Emergency relief efforts were led by government and non-government organizations, including the Australian Red Cross (IGEM, 2020). These organizations, as well as program areas within Red Cross worked together during and after the disaster, providing aid and relief for communities devastated by bushfires (ibid, 2020).

The Victorian Red Cross is actively seeking to strengthen coordination across programs to better support the people and communities they work with. This project aimed to investigate opportunities for stronger coordination between its Emergency Services and other Red Cross programs. To accomplish this, the research had three objectives:

- 1** Develop a framework for analyzing coordination at the Victorian Red Cross
- 2** Apply the framework to describe the Red Cross' current system
- 3** Utilize the framework to make recommendations to address gaps and opportunities that emerge in the data

Each recommendation made to the Victorian Emergency Services program was framed in accordance with the applied framework.

Background



This section describes the context in which the Red Cross' Victorian branch operates, explains the general structure of programs within the Australian Red Cross, and identifies elements essential to program coordination within nonprofits.

The disaster context in Victoria, Australia

Victoria, Australia is no stranger to disasters. Over the last three years alone, Victorians have experienced major storms, floods, heat events, bushfires, an earthquake, and the COVID-19 pandemic. Australian Business Roundtable for Disaster Resilience & Safer Communities (2021) reports emergencies have a significant cost, to both people and communities and government. Disasters currently cost \$38 billion per year and could cost Australia \$73 billion per year by 2060. Infrastructure losses after every disaster are highly visible. What is far less obvious, but equally important, are the psychological and social impacts.

Whether it's a disaster, a pandemic, or a collective trauma incident, these events take a significant toll on those most at-risk (Dominey-Howes et al., 2016). Peoples' capacity to prepare and recover from compounding emergencies is being acutely tested. Research also shows the long-term economic impacts of disasters on people's mental health and wellbeing, may be as much as double the costs of replacing personal assets and that every \$1 invested in resilience before a disaster, will save between \$3 and \$8 on recovery (ibid., 2016).

Heat is the biggest killer in Australia. As seen in Figure 1, Victoria has experienced an increase in frequency of extreme heat events since the beginning of the 20th century. Climate experts believe these events will continue to rise and will have a profound impact on the state's way of life; this includes decreased rainfall, supercharged bushfires, overall health effects of heat, and the amount of food available (Australia's Bureau of Meteorology, 2018; Environment Victoria, 2019).

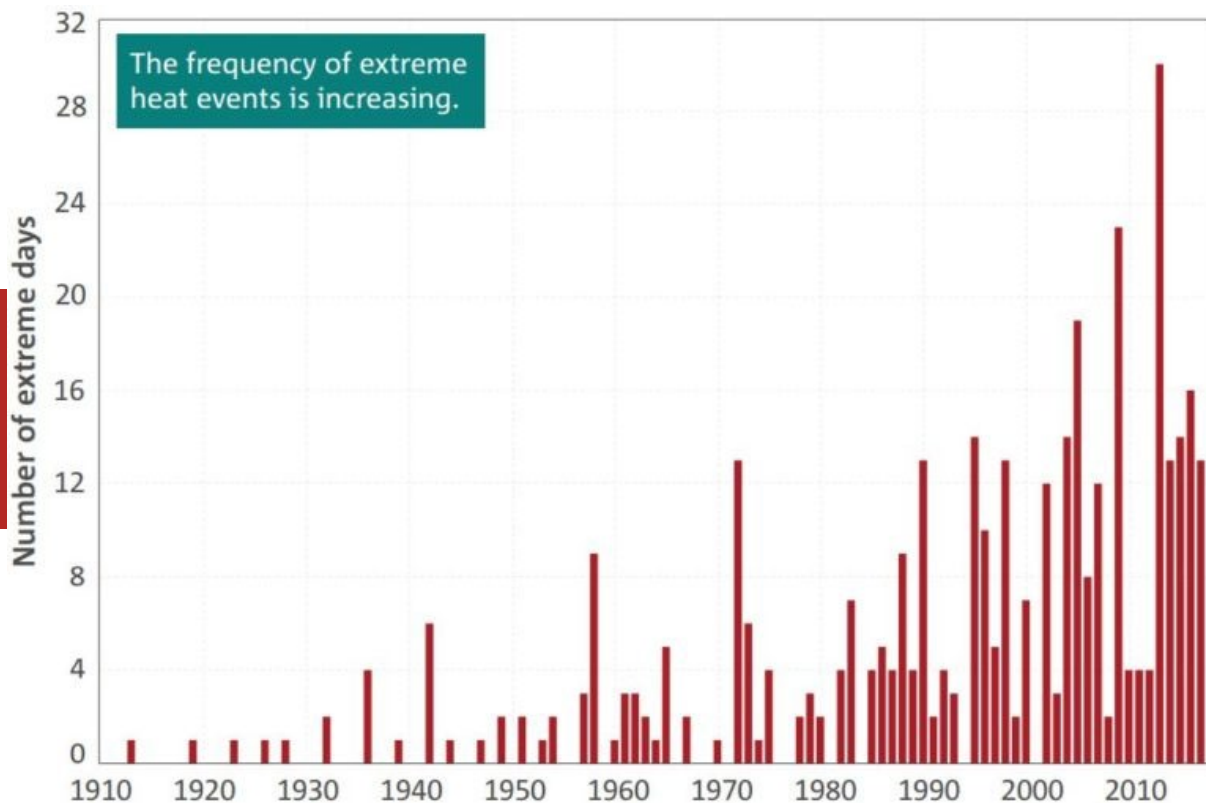


Figure 1: Frequency of extreme heat events in Victoria (Australia's Bureau of Meteorology, 2018)

Heat events and droughts increase bushfire risk, and in the summer of 2019-20, Victoria (and Australia) experienced the worst bushfires in its history. According to the Australian Government's National Emergency Management Agency (NEMA) (2022), there were over one hundred and fifty bushfires throughout Victoria during the Black Summer Bushfires, which burned over 326,000 hectares on its first day.

Black Summer caused overwhelming damage across the country. Tragically, 33 people lost their lives in the fires, while thousands more were affected by smoke inhalation and other impacts. By season's end, bushfires had burned a record 19 million hectares, destroyed more than 3,000 homes, displaced tens of thousands of people, and estimated to have killed billions of animals.

The Australian Red Cross played a significant role in supporting the people and communities affected by the Black Summer Bushfires. During the bushfires, over 49,710 people were supported at evacuation and relief centers and over the phone, 6,134 people received financial assistance to meet urgent needs, make repairs, cover funeral or hospital costs, find a safe place to live, recover and rebuild, over \$242m was raised with 98% of the funds raised disbursed; and More than 83,912 people have been assisted with recovery through 1-1 and group support, training and workshops, information and referrals (Red Cross, 2023).

As Victoria started the recovery from the Black Summer bushfires, the state was further impacted by the consequences of the COVID-19 pandemic that resulted in lock downs and economic and social consequences (Reuters, 2021). The Red Cross had a significant role in supporting people affected by the pandemic. According to ARC's Year in Review 2021 report, they supported over 70,000 people in isolation by providing residents with psychological first-aid phone calls and well-being kits. In Victoria alone, the Red Cross responded to over 44,000 requests for emergency food relief packs, and supported over 24,000 people through the Community Activation and Social Isolation Program (ibid, 2021).

Then, in October 2022, Victoria experienced heavy rain and flooding commencing that progressively impacted 63 of the 79 local government areas. Over 169 flood warnings were issued and it is estimated that around 34,000 homes had either been inundated or isolated from the floods. The Insurance Council of Australia (ICA, 2022) reported that the private and public sectors claimed over a billion dollars; by 2024, they also expect that at least another 1.5 billion dollars would be paid out.

Supporting people and communities that are more vulnerable before, during, and after disasters

Disasters do not affect everyone equally, and across Australia we need to prioritize an inclusive approach, so that marginalized people and those at risk can benefit in culturally safe, systematic and meaningful ways. Some individuals or communities face particular barriers to developing their own resilience. These may include barriers around their adaptive capacities—namely, knowledge, security, wellbeing and connection. This includes but is not limited to individuals or groups for whom English is not their first language or who are made vulnerable by migration, those who are impacted by the criminal justice system, people living with disability, people who are experiencing homelessness, people who experience physical and mental health concerns, people who are digitally excluded, and those who are financially disadvantaged. Aboriginal and Torres Strait Islander people may also be excluded from opportunities to strengthen their resilience. Many of these challenges are cross cutting. It is important that targeted approaches are developed in partnership with these groups to maximize opportunities to build resilience. This is particularly relevant, as we know that vulnerable groups are likely to experience the impacts of disasters more severely than those who have greater access to resources and strong social capital.

For example, a study of the impact of the 2010-11 floods on culturally and linguistically diverse communities in Brisbane concluded that



Figure 2: Australian Red Cross programs and responsibilities

“the absence of translated messages during the flood resulted in many culturally and linguistically diverse communities (CALD) not adequately taking heed of the warning messages, underestimating the risks to which they were exposed, and therefore not taking appropriate protective action” (Shepherd, 2014).

Recent migrants also may require additional support and aid, as they may have limited social support networks, and their possible lack of understanding of local resources, agencies, and services can increase risk. Since these factors can make it difficult for some to be connected and informed, the Red Cross provides support throughout the year through programs for migrant communities and culturally and linguistically diverse people.

Financial capacity is a significant factor in emergency preparedness. Boon (2013) found in a study on preparedness and vulnerability that “irrespective of disaster type, people with greater financial capacity were better prepared even in a slow onset event such as a drought”. Red Cross works to support employment opportunities to help people develop more financial stability year round in order to help these communities before, during, and after crises. Thus, the Red Cross not only helps in times of crisis, but it has developed various programs to help disadvantaged populations in Victorian communities on an ongoing basis.

Australian Red Cross programs ensure communities who may be vulnerable receive support

Australian Red Cross is one of the 192 National Red Cross and Red Crescent Societies globally which are uniquely positioned to work alongside their governments. Established as an autonomous entity under Royal Charter on 28 June 1941, Australian Red Cross act as auxiliary to the public authorities in the humanitarian field, responding to natural disasters and other domestic emergencies, and providing humanitarian services during armed conflict. A network of 27,000 staff, volunteers, and members across the country supports people and communities in emergency services, migration support, First Nations, justice, international disasters and crisis response, technology and the future of vulnerability, and international law. The Victorian Red Cross delivers programs through Emergency Services, Migrant Support, Community Programs, and International Disaster Relief (Figure 2). The organization’s goal is to “mobilize the power of humanity to bring people and communities together in times of need and build on community strengths to achieve outcomes” (Red Cross, 2023). A part of the Red Cross’ mission is to ensure vulnerable communities receive adequate and equal support through their 7 Fundamental Principles: Humanity, Impartiality, Neutrality, Independence, Voluntary Service, Unity, and Universality.

The **Emergency Services** program plays a major role in supporting the wellbeing of those affected during and after emergencies. The Red Cross emergency services program aims to ensure that people and communities are prepared and resilient to the increasing number of climate-related disasters and other emergencies. The Australian Red Cross provides support to people who may be affected by a range of events that include natural hazard risks, technological risks, and collective trauma events. Volunteers and staff work in a variety of places such as in relief/recovery centers, or in homes through outreach, in places of business or in public spaces.

As an auxiliary to the government in the humanitarian field, the Red Cross contributes to a wide spectrum of emergency management planning and activity, and invests resources to support its activities through the mobilization of volunteers, the support of staff members, the experience of previous emergencies both nationally and internationally, and through strategic partnerships.

Psychosocial support services are the foundation of Red Cross' work before, during and after emergencies. Activities within these programs include psychosocial support, psychological first aid, family reunification, psychoeducation, support for our personnel and psychosocial capacity building.

The **Migration Support** services goal is to "provide help and support to refugees, people seeking asylum, people in immigration detention and other people who are vulnerable as a result of migration" through a wide range of programs (Red Cross, 2023). The below describes two specific Migrant Support programs within the program.

Emergency Relief for Migrants (ERM) is specifically for "people with temporary visas, people seeking asylum, and those with uncertain visa status" (Red Cross, 2023). ERM assists migrants who do not have any form of income support or sufficient savings by providing them with basic needs such as food, water, and shelter (ibid, 2023).

Humanitarian Settlement Program (HSP) assists newly arrived migrants integrate into

Victorian life. The HSP partners with the Australian Government to help new migrant families to "set up their new homes, learn about their new communities, connect to local services like Medicare," and connect them to "schools and other community networks" (Red Cross, 2023). HSP also provides a bilingual case worker and offers English language instruction, skill development programs, and links to job and volunteering opportunities (ibid, 2023).

Community Programs (CP) support the homeless, elderly, isolated people, and the First Nations People populations within Victoria (Red Cross, 2023). CP has methods to build community interactions by connecting homeless people with a one-on-one volunteer; they also help homeless populations with their mental health by offering counseling and assistance in finding stable jobs (Red Cross, 2023). CP also improves the well-being of the elderly population by helping them be more independent while maintaining social connection, and assisting them to remain living in their local community (Red Cross, 2023). Companionship programs, daily check-ins, transport services, meal delivery, and medical emergency alarms are also offered.

The Red Cross' First Nations Peoples program is currently supporting Aboriginal and Torres Strait Islander populations in Australia by acting as a facilitator to define community needs (Red Cross, 2023). They use a place-based approach, meaning they build partnerships using trust and respect, which leads to empowering communities to develop long-term solutions (ibid, 2023).

The **International Disasters** program is coordinated at a national level to focus on working with the Asia-Pacific region's most disaster-prone countries. The Red Cross provides support in four different ways through this program, including core funding, institutional strengthening, disaster risk management, and influence and advocacy. Core funding covers the operating costs of local humanitarian organizations to promote long-term financial stability. Institutional strengthening focuses on promoting strong internal management for the long term. Disaster risk management provides technical support during natural disasters,

while influence and advocacy creates partnerships with other organizations to deliver stronger and unified relief efforts.

Community Mobilisation (CM) is unlike the other programs in the Red Cross because it does not do any work to directly provide aid to people. Instead, CM is an internal program of the Red Cross whose role includes assisting the other programs with volunteer and member management. This process involves the recruitment and placement of volunteers based on program needs; ensuring all volunteers are up to date with their compliance levels; and assisting the members with their role and updating them on all operations within the Victorian Red Cross.

Membership and volunteers play a vital role in the Red Cross

In addition to staff, Red Cross is supported by 20,000+ volunteers and members across the country. **Volunteers** provide a wide range of services including alleviating suffering, providing support during emergencies, and promoting social inclusion and community resilience. Emergency services volunteers provide emergency assistance during times of crisis. Volunteers are trained in psychosocial support (psychological first aid), emergency response, and other critical skills to ensure they can provide vital assistance to those affected by a crisis. Volunteers also aid with social inclusion and community resilience by providing physical and emotional support to vulnerable individuals and communities, promoting social justice and equality, and advocating for policies that help to build strong, resilient communities. Additionally, volunteers support day-to-day internal operations along with other roles.

Members play a vital role in the governance structure of the Red Cross. Members sit on the Australian Red Cross Society Board, fundraise, and represent the Red Cross in their local communities. Members vote in The Australian Red Cross Society Board which “governs the organization’s activities and ensures it acts in accordance with the Geneva Convention, the International Committee of the Red Cross (ICRC) regulations, the international

movement’s protocols, and the fundamental principles of the International Red Cross and Red Crescent movement.” (Red Cross). Along with the governing aspect, the membership plays a key role in fundraising across Australia where in the 2021-2022 FY \$807,000 was raised.

Why cross-program coordination is essential

Effective cross-program coordination is essential for meeting organization goals. But what are some of the factors essential to cross-program coordination? In this section, we review expert literature to create a research-based framework.

Hurricane Katrina, a Category 5 hurricane, decimated many of the Gulf Coast states in the southern United States in August of 2005 requiring a variety of government agencies and organizations in the U.S. to communicate at a national, state, and local level in an emergency scenario. The failure to prepare and respond adequately to the disaster was exemplified by the unclear command and control mechanisms, inadequate communication infrastructure, and insufficient resources (Garnett and Kouzmin, 2007; George W. Bush Administration, 2009). The coordination and communication breakdown during Hurricane Katrina revealed the need for effective coordination strategies (United States Senate, 2006). The inadequate coordination strategies led to insufficient evacuation warnings, increased deaths from inefficient search and rescue efforts, unequipped mass care and housing, and less money in aid provided to those in need (George W. Bush Administration, 2009). The lessons learned from this event highlight the importance of encouraging diverse forms of coordination including formal, external, and media-driven communications, as well as fostering transparency and trust between organizations. Coordination factors such as interpersonal influences, media relations, interorganizational networking, and technology can improve coordination and communication in nonprofit government auxiliaries (Garnett and Kouzmin, 2007). These factors can be applied to the Red Cross to better manage

their cross-program coordination throughout their programs.

Coordination in nonprofit disaster response organizations

Nonprofits operate differently as compared to for-profit organizations. As mentioned by Fromkin and Andre-Clark, nonprofits' strategies revolve around their values-driven dimension and the societal changes they are trying to make rather than around profits or efficiency (2013). Often, constraints that prioritize funding and investment can create silos and gaps in an organization as they inhibit a nonprofit to expand and bridge programs. Because organizations like the Red Cross often have limited funds and lean staffing, they have to be particularly efficient in the way they manage information and coordinate their people and programs (Hackler and Saxton, 2007).

Principles for exceptional collaboration

A review of strategies for communication and coordination at non-profit organizations reveals four key principles to enhance cross-program collaboration. These principles are: accessible channels for managing information; interconnected social networks; shared understanding of goals and operations within and across programs; and committed stakeholders.

Accessible channels for managing information

Effective communication is critical in maintaining operational efficiency within an organization. Effective communication is achieved by making sure all individuals have access to all information that they need.

According to Hackler and Saxton (2007), the strategic use of Information Technology (IT) can play a significant role in improving communication within nonprofit organizations. IT in nonprofit organizations allows for quicker and more efficient communication between volunteers, employees, and the communities they serve. Email, instant messaging, and social media platforms can be used to provide a secure and efficient way of sharing

information and updates, and have been linked to higher job satisfaction (Hackler and Saxton, 2007). In addition, IT can also improve the management of data and information within nonprofits, helping to ensure that everyone is working with the most up-to-date and accurate information (Perez, 2018). The ability to easily share and access data can allow for a better review of the internal operations of a nonprofit.

Jo Anne Schneider, an applied social scientist who studied nonprofit use of technology writes, "nonprofits that could not effectively use IT often lost out on funding opportunities because they had trouble meeting expectations for proposal quality and record-keeping systems that both private and governmental funders now expect" (Schneider, 2003). To overcome these challenges, they suggest that nonprofits should develop a clear IT strategy, build partnerships with technology experts, and leverage existing resources and technology platforms (Hackler and Saxton, 2007). With the right approach, nonprofits can fully leverage the potential of IT to improve their internal communication, improve funding opportunities, and achieve their goals more effectively (ibid, 2018). It is important to understand what platforms and databases the Red Cross uses in and across its programs.

Interconnected Social Networks

Maintaining open communication channels between all members within an organization is critical. Vertical and horizontal networks allow for communication between individuals at all levels within an organization. Social network analysis can be used as a tool to analyze connections within an organization.

A study by Sue and Battaglio, experts in organizational communication, explored vertical and horizontal communication channels through a Korean Workplace Panel Survey (2022). Vertical communication is the process of passing information through an employee's subordinates or superiors, while horizontal communication is the communication between employees in an equal hierarchical structure. This study showed that when organizations and supervisors were

able to provide substantial horizontal and vertical communication, collaboration in the workplace environment was vastly improved (ibid, 2022). While it is impractical to introduce new human resource management systems to the Red Cross, introducing some of the ideas and concepts into daily operations can be an effective tool in improving cross-program collaboration throughout the organization.

SNA is a method that involves analyzing interorganizational interactions and information-sharing patterns to identify opportunities for improved coordination within an organization. Cross et al. (2002) suggest four steps to take in order to complete an effective social network analysis:

1. **Identify the network of improvement:** Selecting the sample of individuals or groups, identifying the types of relationships to analyze, and defining the boundaries.
2. **Collect data:** This step involves the use of surveys, interviews, observations, or other methods to study key components that connect individuals or groups in the network.
3. **Analyze the data:** The key data above might be mapped or diagrammed to identify overlaps and gaps between programs and people, calculating metrics such as centrality or density, and identifying key players or subdivisions within the network.
4. **Interpret the results:** Identify patterns and or trends in the network, explore different relationship pairings, and finally use the finding to create informed strategies for collaboration based on the context of the issue.

Cross et al. (2002) compared the communication practices of organizations before and after the SNA process was applied to analyze their effects on a consulting firm. One such example involved a consulting firm commissioning an SNA to improve information-sharing strategies. As seen in Figure 3 pre-intervention, the firm was divided into two siloed project groups with an information

bottleneck. Post-intervention, after implementing the team's recommendations, the firm's structure changed, resulting in increased collaboration and efficiency. With mapping, Cross et al. (2002) was able to visually represent information-sharing patterns and create intervention opportunities to improve coordination throughout the firm.

The outside team's analysis led to three recommendations: the development of project tracking software managed by one person on each project group, the implementation of shared revenue sale goals, and the creation of new communication forums. Nine months later, a second SNA was conducted, which showed how the firm's structure had completely changed, as seen in the Post-Intervention knowledge map. The collaboration led to the removal of siloed project teams and improved project completion efficiency.

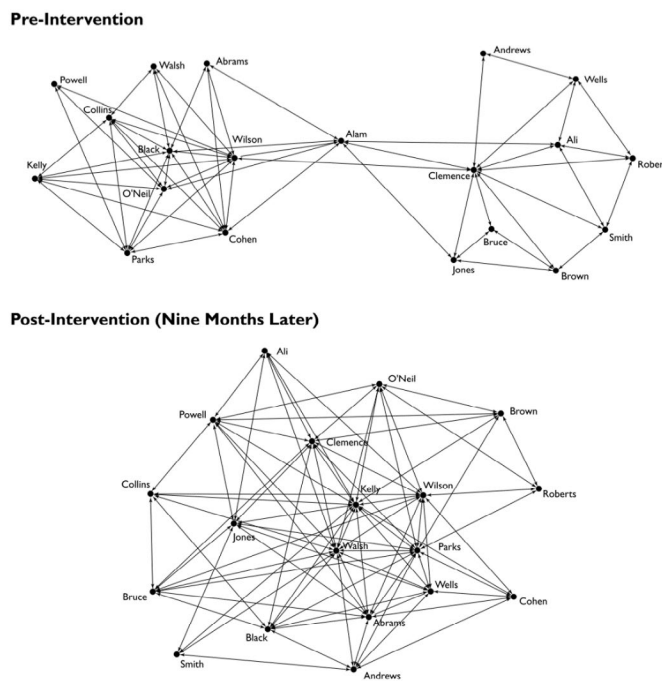


Figure 3: Information sharing network created by Cross et al. (2002) for a consulting firm

Shared understanding of goals and operations within and across programs

A shared understanding of the goals and operations of an organization allows for effective resource utilization. This is done by creating clear

goal statements and objectives, sharing the results of different programs both positive and negative, as well as sharing the operational strategies within each program (Garnett and Kouzmin, 2007). This can lead to more of an understanding of what happens in each program from an outsider's perspective and where people can work together to achieve common goals (United States Senate, 2006, p. 598). Additionally, understanding what other programs are responsible also increases trust in an organization (Garnett and Kouzmin, 2007).

When trying to improve coordination within an organization, Strategic Human Resource Management (SHRM) can be used to show how employees' daily practices align with an organization's strategies in order to fulfill the goals of the nonprofit (Guo et al., 2011). SHRM is "the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals" (Wright & McMahan, 1992, p. 298). Furthermore, it is a strategy used to link the development of people and employees to orient them with the goals of an organization. SHRM's main takeaways in improving a shared understanding of goals and operations are:

1. SHRM facilitates relationships amongst different levels within an organization (Sue and Battalio, 2022). This allows all employees to collaborate with one another and resolve conflicts between employees across departments (Reissner and Pagan, 2013).
2. Organizational culture is strengthened through proper internal communication. Employees become more engaged in their work once they are shown to have an influence on decision-making (Johansen and Sowa, 2019).

While it is impractical to introduce a new human resource management system to the Red Cross, introducing some of the ideas and concepts into daily operations can be an effective tool in improving cross-program collaboration throughout the organization. Creating a means to enhance cross-program collaboration within the Red Cross would further improve outcomes for people and

communities in Victoria.

Committed stakeholders

Engagement is the level of involvement, participation, and commitment of individuals within an organization and is a final component of coordination. It is essential for nonprofit organizations that rely on member donations and volunteer support. For the Red Cross engagement would refer to members, volunteers, and staff making an active effort to interact with each other. Effective engagement requires a deeper level of interaction and connection between individuals or groups. Alfers et al. (2016) suggest organizations should develop clear and compelling goals, provide training and support, recognize and reward volunteers, align values and goals, and provide meaningful opportunities for growth in order to facilitate proper engagement. By effectively engaging stakeholders in appropriate Red Cross operations, members, volunteers, and staff would not only receive more gratification for their work, but they would also operate at a higher level.

In sum, the goals and activities of Red Cross programs, how people communicate within and across them through social networks and technology, and how engaged they are, and collaborating with programs is what constitutes proper "coordination".

Methodology and Findings



This project assessed coordination of programs, volunteers, and members within the Victorian Red Cross using a systems analysis framework. Systems analysis examines the function of each unit within an organization as an inter-connected part of the broader organization to provide recommendations for improvement. It involves taking a detailed look at the individual processes within each program, finding out how these function and who is responsible within each, and determining where there is overlap with other programs to identify gaps and opportunities in their communication and coordination processes.

Our systems analysis of the Victorian Red Cross's cross-program coordination consisted of three main objectives: 1) developing a framework for analyzing coordination at the Victorian Red Cross, 2) applying this framework to describe Red Cross' current system, and 3) utilizing the framework to make recommendations to address gaps and opportunities that emerge in the data.

Below we provide a roadmap to track the steps taken throughout the project (Figure 4).

Objective 1: Develop a framework for analyzing coordination at the Red Cross

The first project objective was to create a framework, drawing on systems analysis, to analyze cross-program coordination at the Victorian Red Cross. Based on our review of literature and preliminary discussions with the Red Cross leadership, we developed a framework that allowed us to systematically assess the Red Cross' coordination. During these conversations, Red Cross leadership expressed interest in an ultimate set of recommendations that include values and characteristics the organization could apply as they seek to improve their coordination efforts.

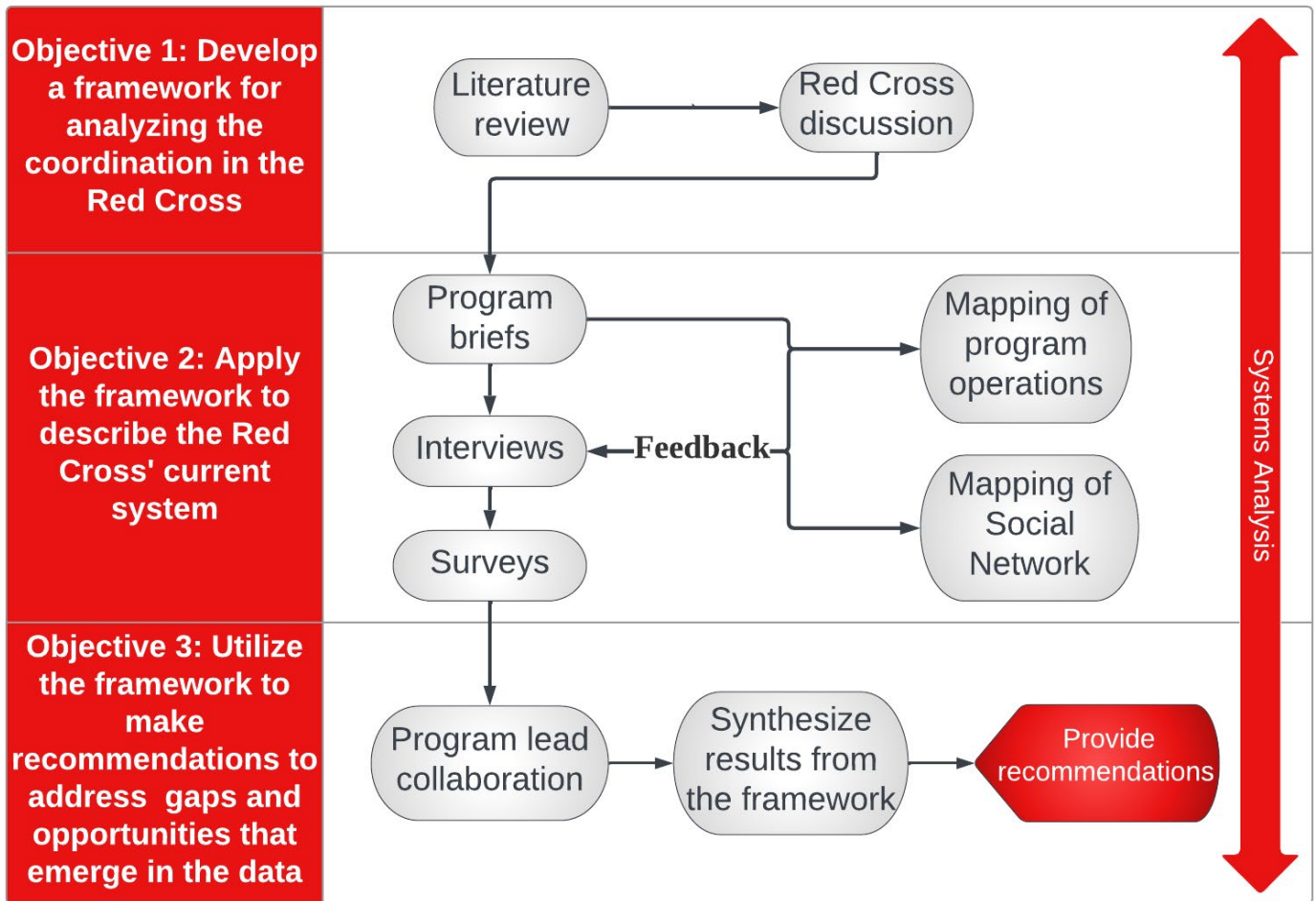


Figure 4: Project overview roadmap

The framework we developed to analyze cross-program coordination at the Red Cross is the SINE framework. By creating the framework SINE, we were able to break apart the Red Cross' coordination efforts (Figure 5). The framework allowed the team to identify appropriate methods to take for each element within SINE.

Our literature review revealed four major principles that lead to exceptional coordination: accessible channels for managing information, interconnected social networks, a shared understanding of goals and operations across programs, and committed stakeholders. Our team refined these principles into four components of coordination that we utilized to explore the Red Cross' cross-program collaboration: Synergy between programs, Information Management, Network Analysis, and Engagement.

Synergy is the collaboration of two or more entities to produce a combined effect greater than the sum of their separate efforts. As discussed,

a shared understanding of goals and operations across organizations allows for more effective utilization of resources. Additionally, the building of trust throughout the organization comes as a result of sharing the operational strategies within each program (Garnett and Kouzmin, 2007), this is a critical concept in an organization like the Red Cross which has a wide range of program offerings. Effective synergy between multiple, or even all of the programs, will lead to more effective reach.

One method to improve cross-program collaboration in an organization is to make information easier to obtain and accessible to a wider range of employees. **Information management** is an approach to organizing and sharing pieces of data, documents, and knowledge. There are many different techniques used for information management including but not limited to the advancement of an organization's IT skeleton. Ensuring all collaborators within a

The SINE Framework

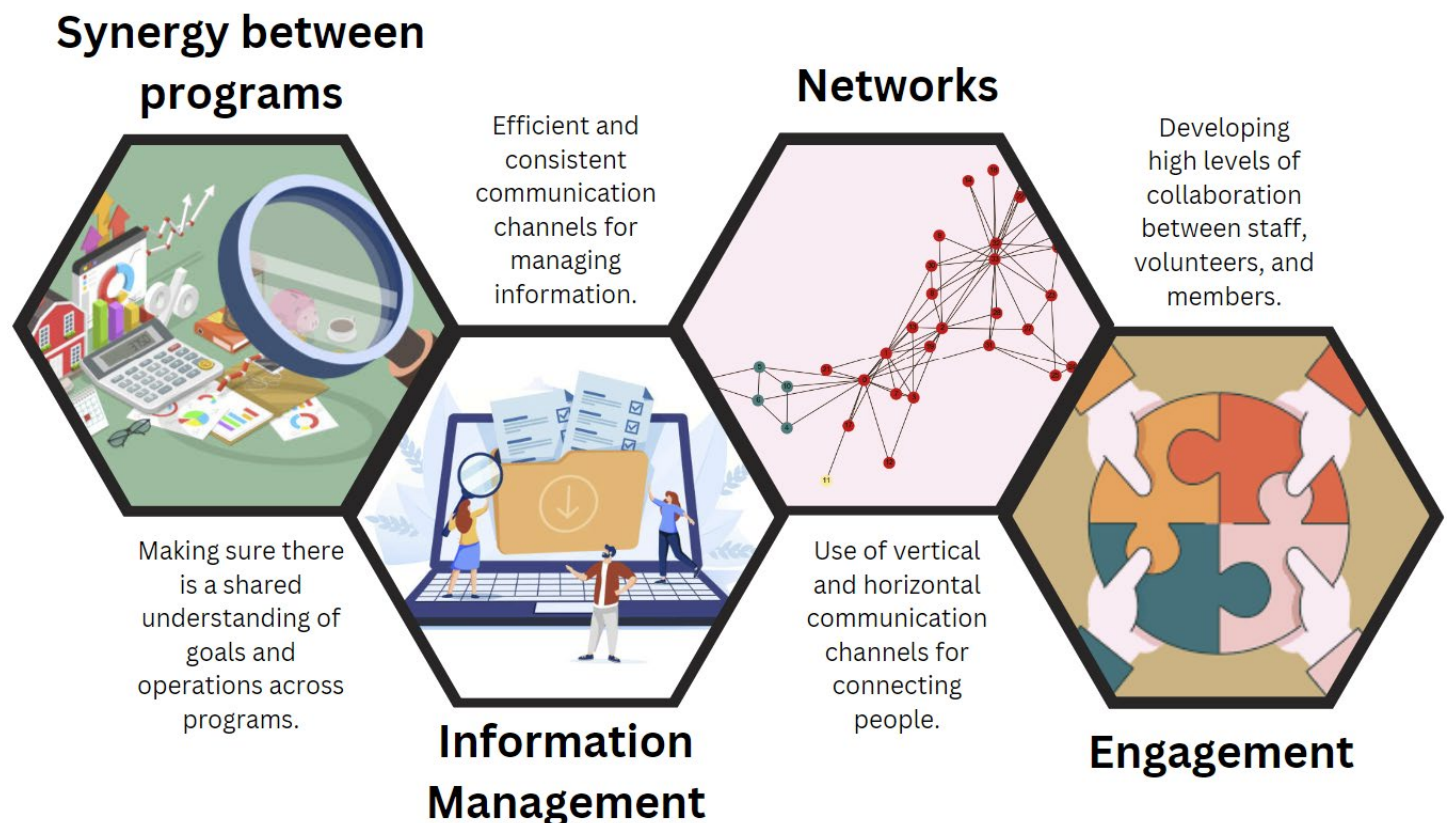


Figure 5: The SINE Framework, a tool for assessing cross-program collaboration

space are using the most updated information and having an organized and clear manner to facilitate interactions or store information is essential to an organization's success (Hackler and Saxton, 2007; Perez, 2018).

Understanding how information flows throughout an organization along with the constraints and sinks of knowledge is critical to identifying the gaps in coordination. **Network Analysis** is the analysis of the vertical and horizontal lines of communication in order to determine the nuances of how an organization's structure affects its ability to distribute information. Sue and Battaglio suggested having interconnected social networks across all hierarchical levels of an organization leads to more effective information sharing and utilization of resources (2022). By analyzing each informal and formal line of communication within an organization a social network map can be created to show the silos, sinks of knowledge, and structure of an organization in a visual medium.

Engagement of employees or volunteers is a key factor in any group or organization. Facilitating proper engagement in nonprofits is important because it allows for all of the members of a program to feel connected with the inner operations in the organization (Alfers et al., 2016). Examples of this include keeping staff, volunteers, and members in the loop about important decisions, organizational structure, and process changes. An organization with an engaged group of staff, members, and volunteers will operate with higher capabilities and be able to provide a wider range of support.

Through SINE, the team was able to analyze the Red Cross' interoperability throughout the organization. As a result, SINE can be used as a vehicle to translate our methodology, findings, and recommendations succinctly throughout this report.

Objective 2: Apply the SINE framework to analyze the Red Cross' current system

Our second objective was to apply the SINE framework by separately analyzing each of the four

components of SINE (Synergy between programs, Information Management, Network Analysis, and Engagement) to gain a deeper understanding of the Victorian Red Cross and coordination strategies. We used a variety of data collection and analysis procedures to address each component in SINE. These methods included attending program briefs and operational meetings, conducting interviews, surveys, and a jamboard activity, and completing various mapping techniques to analyze the processes and social networks. By completing each of these methods, our team was able to gain an increased full understanding of the Red Cross' cross-program collaboration efforts.

Synergy between programs

As previously mentioned, synergy between programs involves a deeper understanding of all programs and trust with peers across the organization. In this section the different methods used and the results obtained regarding synergy will be discussed.

Methods

One feature of synergy between programs in an organization is a staff with an in-depth understanding of each program's goals and roles. To explore this, we ourselves sought a deeper understanding of each program and their daily operations. To grasp the operations and to help increase the synergy for the Red Cross employees and volunteers we used several data collection methods to create in depth process maps for each of the Red Cross programs.

Process mapping is a valuable tool that depicts an organization's core services and steps to complete any given task. To create a process map useful for understanding the Victorian Red Cross's program operations, our team analyzed each program's people, their organizational mechanism, process guidance information, actions to complete its goals, and the communities served. This analysis was completed by collecting data from program briefs, operational meetings, interviews, and a survey.

During our time in Australia, we attended **briefs** presented by leads for each Victorian Red Cross program. In these briefs, the leads of each program gave us insight into what their program does and how they function. Throughout these briefs we had the opportunity to ask clarifying questions to better understand the programs' goals, activities, and structure.

Additionally, to gain a better understanding of the Red Cross' operations, we attended a variety of **operational meetings**. These meetings included a Zone meeting where we were able to witness how members and the Red Cross communicate with staff (Figure 6 shows one of our team members attending a zone meeting); a Regional Volunteer meeting at Castlemaine where we noted how volunteers and the Red Cross staff communicate; and a tour of the State Control Center to better understand how the Victorian Government operates during an emergency and what role the Red Cross facilitates. Both the information from the program briefs and operational meetings were used in conjunction with the follow-up interviews with staff and volunteers to create process maps visualizing the activities and processes of each program.

Interviews were conducted in order to gather information in accordance with each point of SINE. We contacted each program lead and Red Cross employees for interviews. Once an individual agreed to an interview, we sent the interviewee a Pre-Interview email outlining the details of their interview. At the start of every interview, participants were read the Informed Consent Form (Appendix A) to ensure their rights were being addressed before, during, and after the interview.

Table 1, shows some of the questions asked pertaining to the synergy of the Red Cross and the subsequent programs. These questions gauged the understanding of goals and operations within an individual's own program as well as other programs. It also questioned whether employees felt that knowledge of the other programs' activities and operations was important. These questions about goals, operations, and shared understanding of other programs all lead to responses which focus on the current synergy of the Red Cross.

While in Australia we worked with Red Cross leadership to create a survey that was sent out to volunteers, members, and staff. The overall goal of the survey was to collect more data points on how each person involved with the Red Cross



Figure 6: A team member attending a zone meeting in Romsey, Victoria

Do you have a program mission statement? Is it possible for you to share it with us?
What would you say the role and goal of the other programs are? (Community Programs, Emergency Services, Migrant Support Programs, Community Mobilisation)
Do you have any common goals with any of the other programs mentioned before?
On a scale of 1 to 10 with 1 being no knowledge and 10 being extremely knowledgeable, how aware are you of the other program's day-to-day activities? /Why do you think this is?

Table 1: Interview questions to address *Synergy between programs*

feels about the information they receive, how they receive it, their understanding of the Red Cross as a whole, and individual opinions on how to improve the Red Cross. To do this we created surveys using Microsoft Forms, a few example questions can be seen in Table 2.

To have a better understanding of how to improve synergy we asked volunteers questions that dealt with their understanding of the Red Cross and how they feel about the amount of information they receive. For members we asked questions regarding their role as a member and their knowledge of the Red Cross' strategies. Staff, we purely asked quantitative questions where we asked them to rank their knowledge of other programs and what they had to offer since we asked them more in depth questions during the interview process.

Once each of these data collection methods was complete the team created a process map for each of the services the Red Cross provides within Victoria. Figure 7 is an example of a process map that was created about the Telecross program which is run by the Community Programs team. This map was given to the Community Programs team where they analyzed and provided feedback on what was missed and should be added to make this more accurate. Due to privacy concerns, we had to blur out these maps.

The several process maps created served two major roles in helping improve the synergy of the Red Cross. First, by constantly updating the

maps based on several rounds of review from staff we were able to create maps that could be shared via the Red Cross' Sharepoint helping staff, volunteers, and members gain a deeper understanding of the daily operations of each program. The process maps also served as a valuable tool in helping our team and the Red Cross understand the overlap in programs. In our recommendations we further discuss how the overlap can be leveraged to improve the efficiency of emergency response.

Findings

During our investigation, the interviews and process maps proved to be valuable in analyzing the current synergy within the Red Cross. The interviews provided us with several unique perspectives on the volunteers' and employees' understanding of the other programs, where the process maps visually showed us the overlap in programs. With twelve responses from the survey, as such we could not make any definitive conclusions based on this method.

During our interview process, we found that **the aim of the Red Cross organization is widely recognized, but there is room for improvement in understanding each program in greater depth.** All 15 employees we interviewed demonstrated a good grasp of the Red Cross goals and values, which include using the power of humanity to provide aid to people and the fundamental principles of humanity,

Volunteers: How aware are you of the strategic direction and planning of your program (VIC ES, CP, CM, and MSP)?
Members: How clear is your role as a member?
Staff: How knowledgeable are you of other programs' operations?

Table 2: Survey questions to address *Synergy between programs*

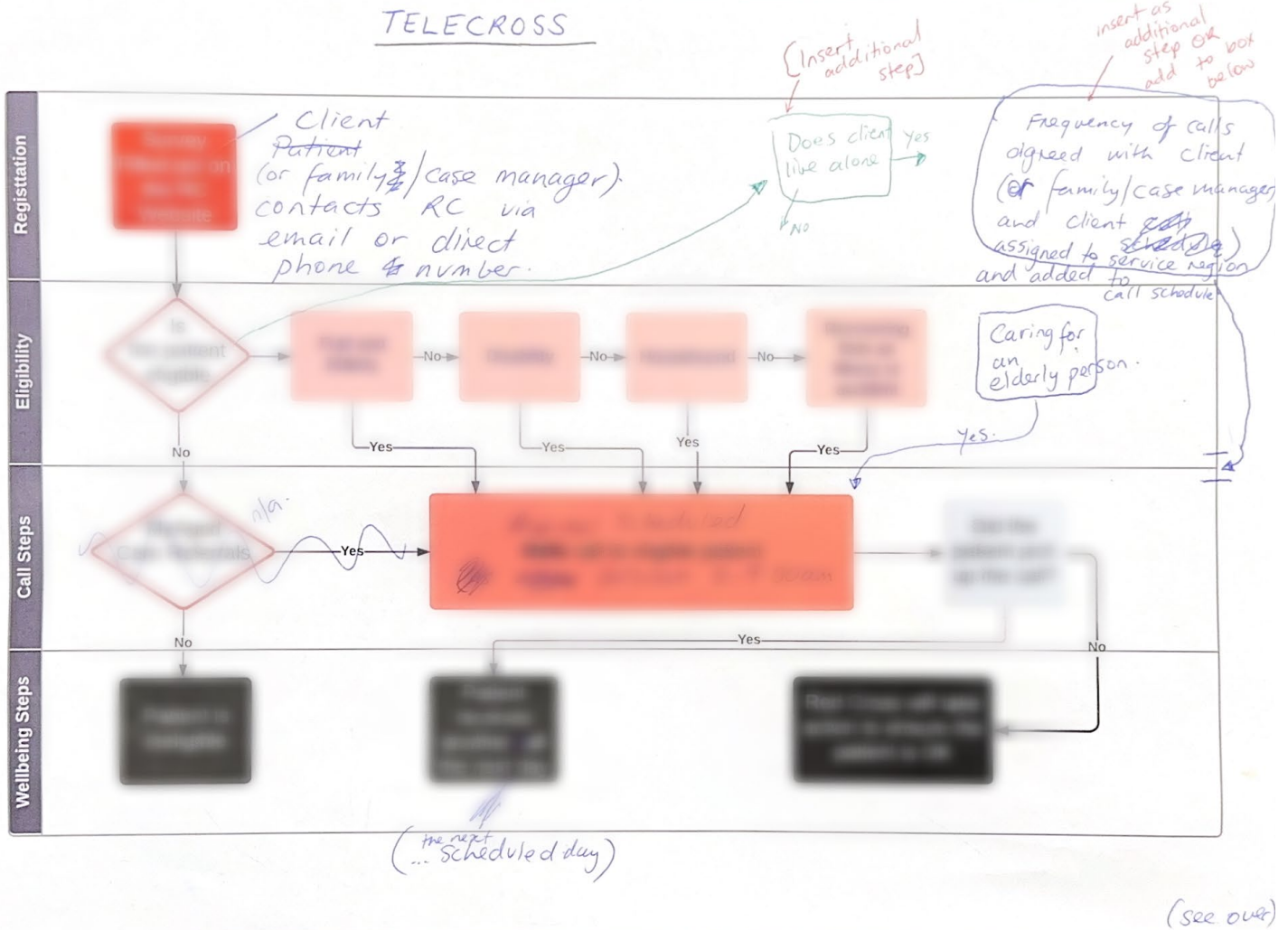


Figure 7: Preliminary process map for the Telecross program, showing mark-up by Community Program lead

independence, unity, voluntary service, neutrality, universality, and impartiality. However, our interview responses to the question: What would you say the role and goal of the other programs are? shows about half of Red Cross employees and volunteers have an in-depth understanding of the other programs. The data presented in Table 3 displays the quantity of individuals who offered us an enhanced comprehension of each program (including their own program) operating under the Red Cross organization.

Although most Red Cross employees can provide basic information about the other programs, when asked to rate their awareness of the programs' day-to-day activities on a scale of 1 to 10, with 1 indicating no knowledge and 10 indicating extensive knowledge, the average response was 4.1/10. This score suggests that Red Cross employees would benefit from receiving more detailed information on each program's specific offerings to the Victoria community. The responses overall indicate that

8/16 interviewees had an in depth understanding of Community Program
12/16 interviewees had an in depth understanding of Emergency Services
7/16 interviewees had a in depth understanding of Migrant Support program
7/16 interviewees had an in-depth understanding of the Community Mobilisation team

Table 3: Understanding of other programs responses

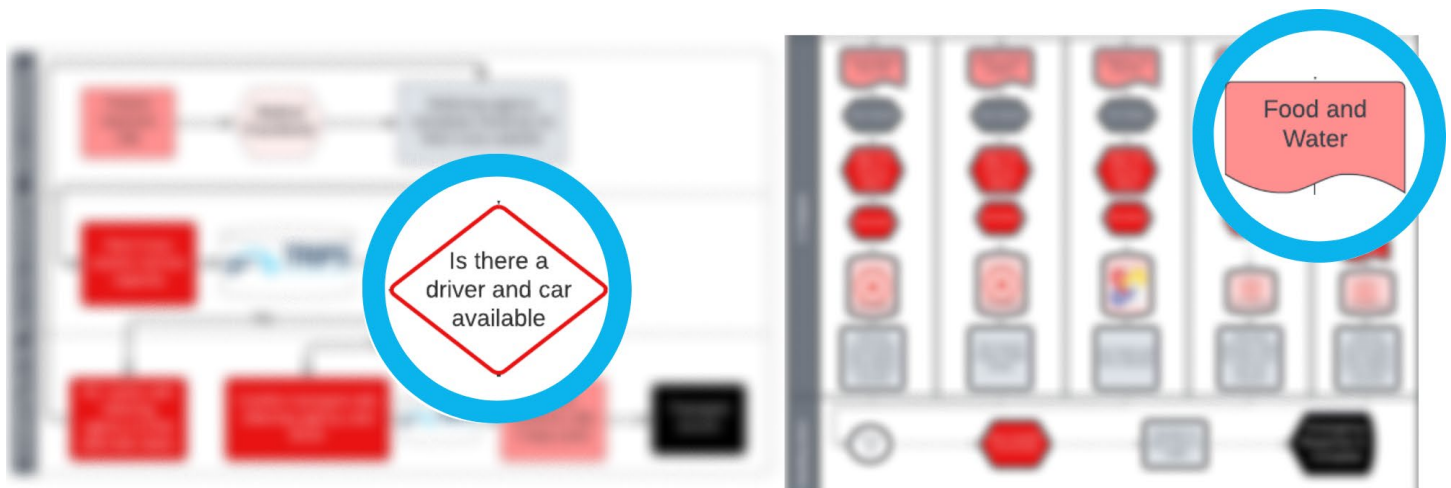


Figure 8: Patient Transport process map (left) overlap opportunity with Emergency Services process map (right)

while the organization's overarching goals are well-understood, there is room for improvement in developing a deeper understanding of each program's unique contributions.

By analyzing the process maps we created from our interviews, attendance at operational meetings, and internal documents, we have identified overlaps **in program operations that need to be strengthened**. In Figure 8, we present process maps for the Patient Transport program under Community Programs and a portion of the Australian Inter-service Incident Management System (AIIMS) from the ES program. The blue circles in Figure 8 highlight two sections of the maps where overlap occurs, indicating where ES can collaborate with Patient Transport to provide food and water in emergency situations. Further investigation revealed that emergency services had previously used Patient Transport to distribute emergency food and water, but no official protocol exists for when Patient Transport should be utilized. By identifying such areas of overlap and missing protocols, it becomes clear how reinforcing program overlaps can enhance the Red Cross's agility and lead to better outcomes for people.

Information Management

One method to improve cross-program collaboration in an organization is to make information more accessible to employees (Hackler

and Saxton, 2007). Information management is an approach to organizing and sharing pieces of data, documents, and knowledge. There are many different techniques used for information management including but not limited to the advancement of an organization's IT skeleton.

As discussed, having accessible channels for information management is crucial to operational efficiency within an organization. This section discusses the methods used to understand the following characteristics about the information management strategies used by the Red Cross: what software is being used, what information is stored on these software, who has access to different information, and what opinions stakeholders had on how to improve the current systems in place. By collecting and analyzing each of these concepts we were able to give some simple but useful recommendations for improving information management.

Methods

To analyze the information management within programs at Victorian Red Cross, our team developed survey and interview questions to get employee, member, and volunteer insight into the IT software used. We also compared the several process maps created to understand how and when the different IT software and information management strategies were being applied.

Have you or do you use any software to help you communicate in your operations?
How does your team share documents, data, or other information for your daily operations? (What, where is it stored, who has access)
Are the software you use helpful in keeping information organized? / Do you find these software helpful in completing your task?

Table 4: Sample of interview questions to address *Information Management*

Volunteers: How would you rate the ease of accessing information?
Members: What type of information do you have access to as a member?
Staff: How effective is your team's information storage?

Table 5: Sample of survey questions to address *Information Management*

Interviews were used in order to meet our goals of understanding the information management systems. We developed focused questions to grasp the three concepts stated above. Table 4 visualizes a list of sample questions pertaining to information management.

We also used a **survey** to help inform us on how information management affects staff, volunteers, and members. A sample of these questions can be seen in Table 5.

We used responses from both the survey and interviews to supplement our understanding of the IT systems currently in place at the Red Cross developed through the process mapping activity described above. These **process maps** were used to visualize the current state of how accessible information is in the Red Cross, by showing the different software used in each program along with who has access to the information stored in them. These maps were created based on initial interview findings as well as program briefs. Figure 9 is an example of two process maps that we created for Migrant Support programs' hardship support and Community programs' community visitor scheme showing the two different ways the Client Care Management (C.C.M.) Software is used. To provide recommendations for how to improve information management, the process maps created were analyzed to see the different software and how it is applied throughout each program.

Findings

At the end of data collection, results from the interviews, surveys, and process maps were analyzed through the lens of information management. We took data pertaining to the systematic organizational systems utilized by the Red Cross to determine where there are inefficiencies and opportunities for improvement. From this data we were able to develop three key findings. The first being that **the current Red Cross data management systems create barriers for interoperability**. This is a finding developed primarily from staff interviews where we found a majority of staff had some issue with the current data management systems being used. We further found that 12/15 employees that were interviewed stated they had an issue with the systems used for storing data. In addition, we found that 6/15 employees interviewed had specific issues with REDS, the VIC ES volunteer management system, and Mavis/Pivotal, the organization-wide volunteer management system. From the interviews it was determined that there is a gap in the compatibility between the two systems mentioned before.

The major issue described was the inability for software to automate data transfers between each other. There were examples where employees would have to update the same information in one and then copy the exact same information into another. If this process was automated it would save time and release staff for other matters.

Red Cross is currently reviewing and updating its technology, however, this research provides a fundamental and important example of the way that systems need to work better together and as such is a fundamental part of this project. Given interview sample sizes, we are not able to make an organization-wide claim regarding systems. However, due to the frequency of comments about data management systems throughout the interviews, we believe they warrant inclusion.

From our interview and survey data we also found that **evidence indicates there is no uniform policy or process for storing documents and data**. This theme was identified through staff interviews where 5/15 interviewees stated that there is no defined storage or filing system for documents, both across programs and even within programs. Employees had different perspectives on where this issue could be stemming from as well as what made this issue difficult to work around. One staff member stated, “The problem is everyone uses different systems and has different ways of filing in Document Hub.” This further supports the claim that there is no uniform filing system both within and across programs. Another staff member said, “New systems come into place without any training ... it’s too late to do the training after you implement the new system because people, by that stage, have their own way of using it.” This staff member said that upon implementation of new software packages within the Red Cross, there is training on how to use the software but no training on expectations for information management. This

issue of not having defined storage processes can create issues when looking for documents, data, or other information pertaining to a program. A defined storage system, utilized properly, would create greater organization, as well save time for employees.

Our final finding comes from the process maps that were created from the program briefs, and further edited through information received from interviews. These maps showed that the same software has different uses across programs. This shows that even though programs do have separate jobs and operations, they still use the same software to manage and store data. This further backs up the first two findings as it shows that there are overlaps in technology, however, if there is not proper information management then it can create confusion and disorganization between programs. Figure 9 is an example of two process maps that we created for Migrant Support Programs’ Hardship Support and Community Programs’ Community Visitor Scheme showing the two different ways the Client Care Management (C.C.M.) software is used.

Networks

In any organization, social networks are crucial to organizational management and communication. In order to analyze the many networks of communication in the Red Cross we used a social network analysis (SNA) methodology. This approach, as described in our background, reveals communication networks and

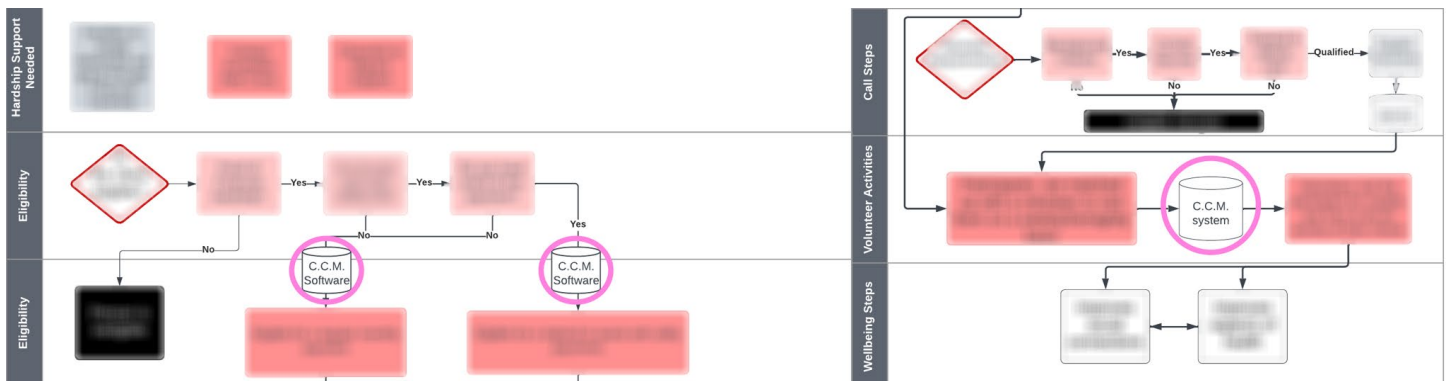


Figure 9: Process maps for Community Visitor Scheme (left) and Hardship Support (right). The C.C.M system is highlighted by a pink circle to show the overlap in its use.

How often do you meet with your team?

Does your program collaborate with any other program within the Red Cross?

How often do you meet with individuals in other programs?

On a scale of 1 to 10 with 1 being the worst and 10 being the best, how would you rank your team's coordination?

Table 6: Interview questions to address *Networks*

identifies overlap or areas in need of improved connection across all programs. This process will consist of interviews, a jamboard activity, and a social network map which employs the responses from the previous interview and jamboard. The social network map is the key component of this method as it allows for an opportunity to see siloed branches and areas for improved communication networks. The goal of the SNA is to provide unique recommendations based on our analysis to make the Red Cross have more interconnected networks, therefore, creating improved interoperability across all programs.

Methods

Drawing on previously gained knowledge from the first objective, we created and continuously updated a **social network map** of the Victorian Red Cross. Social network mapping uses visual tools to portray the sources, flows, constraints, and sinks of knowledge in a sample of individuals,

groups, or teams (Liebowitz, 2005). We used our interview process and jamboard activity to discuss different meeting schedules, communication methods, and project roles to supplement the creation of our social network map.

In order to analyze the social networks within the Red Cross we used the same **interview** opportunities presented in the previous section, but asked different questions that pertained to the respondents' social networks within the Red Cross (Table 6).

As a final step in each interview, we conducted a **Jamboard activity** to gain a further understanding of each staff member's network. In this activity (Appendix E), each participant was asked whom they coordinate with, what information they share, how they share it, why they share it, and the desired outcome of the interaction. Figure 10 shows an example of the jamboard activity results for a program lead. For each person interviewed we showed them maps similar to the one below



Figure 10: Jamboard activity with VIC ES program lead

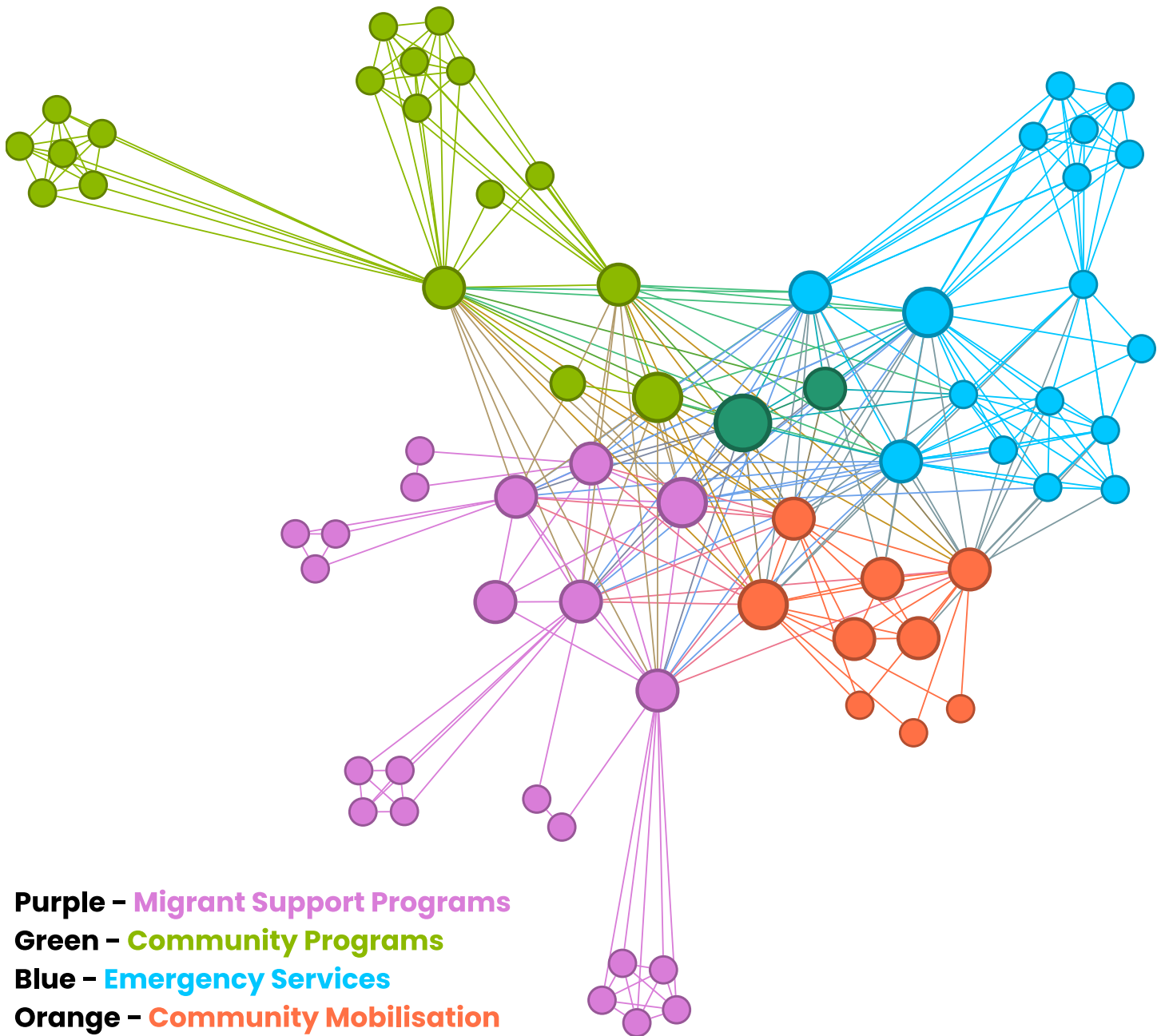


Figure 11: Social network map generated from jamboard activity

Volunteers: How do you contact other volunteers and members?

Members: What methods do you use to contact the Red Cross?

Staff: How would you rate your team's collaboration with other programs within the ARC?

Table 7: Survey questions to address *Network Analysis*

for each program and asked them to point out who they communicate to, why they communicate, what they share, and how they share information.

After obtaining this information from the interviews and jamboard activity we created multiple maps to show different communication methods, including: daily communication, official recurring meetings, structural hierarchy, and recommended communication channels. Using the methods SNA discussed earlier in the paper we plan on giving several recommendations that will create more communication channels between the siloed programs.

By **surveying** volunteers, members, and staff we were able to reach a large sample of these groups quickly. This portion of the survey will ask questions about the current social networks that the volunteers, members, and staff are a part of. Understanding these social networks will allow us to further add to our SNA map. The questions we will ask in order to gain an understanding of this are reflected in Table 7.

Findings

After having collected data through the jamboard activities and then constructing the social network maps, we were able to perform social network analysis. By filtering our data by certain attributes we were able to create many visual maps of the social connections within the Red Cross. After analyzing these maps we were able to identify areas of improvement. These findings are centered on the Emergency Services program as this is where the bulk of our data is from and therefore the strongest assertions can be made.

The social network map seen in Figure 11 consists of nodes connected by edges. Each node represents an individual within the Red Cross. The size of a node represents that person's position with a larger node indicating a higher position. Each

node is connected to other nodes by edges. These edges represent a place where communication both informal and formal is occurring between two staff members. Edges that connect two nodes of the same size indicate horizontal communication while edges that connect two nodes of different sizes represent vertical communication.

By isolating the communications of all ES staff members we were able to find that **there is limited horizontal communication between their Recovery and Preparedness program and the Operations and Capability program.** Outside of the program leads there is only one staff member who has regular connections outside of their program. This can be seen in Figure 12 by the node that is circled in red. Direct communication between staff members in both programs will allow for increased operational efficiency especially during emergencies.

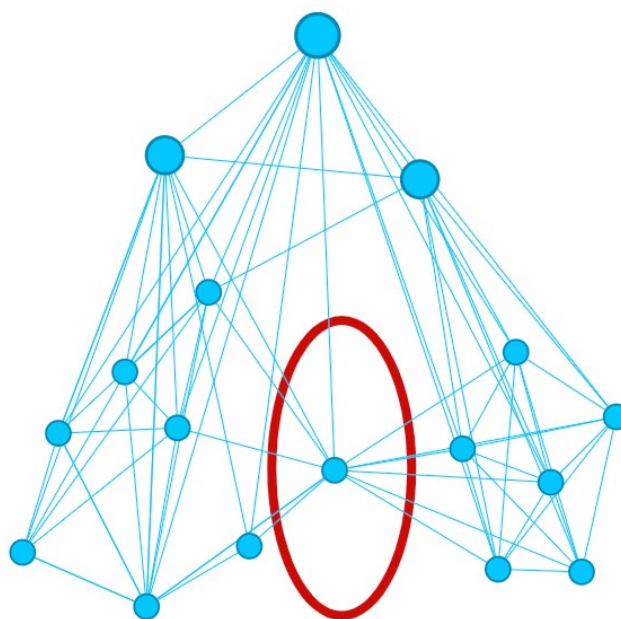


Figure 12: Emergency Services' social network map

The other area we looked at was the communication of ES staff members with other Red Cross programs. In Figure 13 we have isolated all Emergency Services staff and any other staff that they have a direct connection with. **Outside of the Community Mobilisation program, Emergency Services has limited contact with other staff.** Academic literature suggests that limited horizontal communication causes inefficiencies in operations.

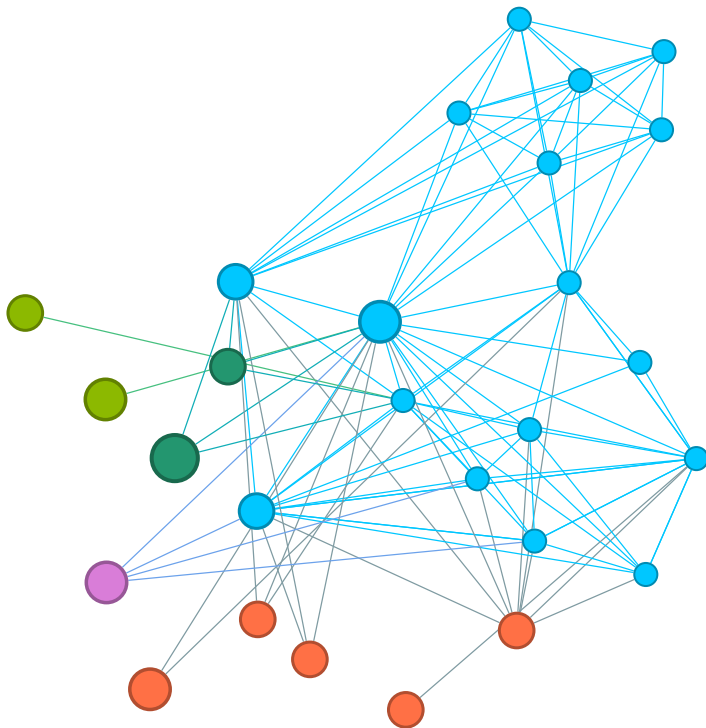


Figure 13: Emergency Services' external communication

A specific area of improved communication is between Emergency Services and Migrant Support Program. As both ES and MSP are focused on providing support to people and communities in need, there is an opportunity for stronger collaboration before emergencies that drive better outcomes and more efficient use of resources. By coordinating resources across both programs, Emergency Services will be able to improve its reach into culturally and linguistically diverse communities—particularly relevant before an emergency. Sharing and utilizing specialist knowledge and connection to community within the MSP team during an emergency could have a significant impact on the ability of a community

to access the support it needs quickly, and better support recovery.

Engagement

Facilitating proper engagement in a nonprofit organization is critical as it ensures the stakeholders are perpetually acting towards a final goal. In the Red Cross, ensuring all staff, volunteers, and members are equally engaged is critical to their overall operations. Connecting every aspect to the organization's overall goal is what keeps individuals at nonprofits (Alfes et al., 2016). Through interviews, a survey, and attending operations meetings, the team was able to measure engagement in the Red Cross and offer possible opportunities for improvement.

Methods

Interviews were the first strategy applied to measure employee and volunteer engagement. Our team asked several questions to collect data on how people felt about more cross-program collaboration and ways to improve it. Table 7, provides several examples of the engagement questions we asked to gauge staff and volunteers' view on increased engagement.

A **survey** was used to measure engagement of volunteers and members. These are two groups of people who both value feeling engaged, and improve the overall organization when they are engaged. Engagement for these groups revolves around knowing organizational decisions and movements, process updates, and program updates. To gauge the awareness of these topics for the volunteers and members we asked them questions like the ones in Table 8.

This method proved to be extremely simple and effective, giving us a wide variety of answers. We also received some directions on staff and volunteers preferred strategies in improving cross-program engagement.

By attending **operational meetings** the team was able to gain an understanding of how Red Cross engages at all levels of operations whether it be between volunteers or membership. In these meetings we were able to observe and note what

Do you see opportunities for building relationships with other programs? (Would sharing information, resources, and communicating more often improve your work?)

What do you think the Red Cross should do to ensure that there is more coordination between programs? (How should these be implemented?)

Do you believe you would benefit from a better understanding of other programs?

Table 8: Interview questions to address *Engagement*

Volunteers: Have you received the training and equipment you need to perform your volunteer work?

Volunteers: Are you aware of how other Victorian programs work with other communities? (includes MSP, ES, CP)

Members: How does the Red Cross contact you?

Table 9: Survey questions to address *Engagement*

type of information non-staff members receive and how they interact with Red Cross staff. We were able to see how frequent these meetings occurred and what staff, volunteers, and members shared during these meetings. Through these concepts, the team was able to see an in-person medium of how staff engage with volunteers and members.

Findings

Engagement drives every organization, especially the Red Cross. Engagement refers to the interactions between individuals and the quality behind them. With stronger engagement, individuals would develop robust communication and coordination skills, further creating opportunities for cross-program collaboration between Vic ES and other Red Cross programs. Through interviews, surveys, and attending a volunteer conference and Zone meeting, we were able to measure Vic ES' engagement. Two major findings were uncovered as a result of dissecting engagement at Vic ES.

First, **higher levels of engagement between staff, volunteers, and membership is needed.** More opportunities should be created to facilitate stronger engagement between volunteers and Vic ES staff. As mentioned by a Vic ES staff member in an interview, "We've got 1000 volunteers... but when there's an emergency we can usually only get... 80 to 150 [volunteers] to

help" this requires further investigation regarding engagement ensure reach is maximized. When surveyed "What other information would allow you to undertake your volunteer work more effectively?" one volunteer answered, "More collaboration between Emergency Service and volunteer branch work" which demonstrates a willingness to improve collaboration between staff and volunteers. On the other hand, people who volunteer for Vic ES tend to feel siloed. One volunteer noted through an interview, "For a little while I wasn't doing quite as much, because, again, no one really knew who I was" revealing opportunities to improve connection volunteer activities. In sum, volunteers perform a critical role in ES, and facilitating higher engagement could benefit the outcomes for the people of Victoria.

This feeling was not unique to volunteers, with membership also reporting similar sentiment. Information gathered at a Zone Meeting in Romsey identified a legacy of change in volunteer and member roles and responsibilities that continue to be raised. Improved engagement and collaboration could potentially address these issues over time. The Red Cross continues to be an advocate for engagement throughout their organization, noting that more can be done to connect members to Vic ES as a whole.

Engagement is a lot more than the interaction between staff and volunteers and staff and members, but it should also include

the interactions between staff themselves. **With increased staff engagement, cross-program collaboration would improve.** The limited engagement between Red Cross programs creates opportunities for improvement. In our interview, one staff member said, “[It’s] challenging communicating with other programs especially if you don’t know who the best person to speak with is.”, therefore, furthering the idea that with stronger engagement, staff would be able to navigate the organizational ladder and not solely rely on program leads for information. Additionally, 14/15 employees say there are opportunities to build relationships with the other programs. Currently, it appears that each program typically operates in silos, noting there are opportunities to collaborate. By increasing the engagement between programs, more opportunities for cross-program collaboration present themselves. This increase in cross program collaboration supports information sharing, and ultimately the coordination of programs in an emergency, that would improve the outcomes of people and communities.

Objective 3: Utilize SINE to make recommendations to address gaps and opportunities that emerge in the data

Our third objective was to identify challenges and opportunities in current coordination strategies and develop recommendations for increasing the effectiveness of coordination between Vic ES and the Red Cross. Through a systems analysis approach of the information collected through the first two objectives we were able to identify gaps and opportunities for improvement in accordance with our framework.

Using SINE, we conducted a **systems analysis** on the Red Cross. This consisted of us using survey data, interview responses, and maps to take a deep dive into how the Red Cross operates on a smaller program level as well as a large system level. Using the results we have gathered, we were able to create advanced process maps that highlighted connections across programs. This, then resulted in a much broader and general analysis of the Victorian Red Cross as

a whole, leading to a greater understanding of the internal operations.

As we started to see more connections throughout the four programs we were then able to provide recommendations on where we see major issues or overlap in programs. This process involved separating the information and data into the four frameworks to identify areas for improvement.

After we understood the coordination networks and possible opportunities, we were able to draw out recommendations that were discussed with our liaison and the other program leads. While identifying possible solutions for the communication shortcomings, having a **group discussion** with the Victorian Red Cross program leads was pivotal in promoting improvement. In this discussion, the four leads of each program were present to have an open dialogue about our findings. Additionally, we were able to point out opportunities across communication frameworks within each program and across all four programs. Discussing this with the team leads allowed them to provide their input and possible solutions from an internal perspective. This discussion was valuable as these solutions were something we had yet to consider when developing our solutions. The discussion allowed the leads to see firsthand where the issues are arising and provided an opportunity to be part of the problem-solving process.

After the discussion with the team leads, all possible solutions were compared. Looking at them side by side allowed for a decision to be made on which solution would be best fitting for this organization as well as be most effective.

Recommendations



Based on our research and our findings described above, we recommended specific actions for each component of SINE. These recommendations were created to compliment the ongoing change process within the Red Cross and drive improvements that ultimately benefit the people and communities of Victoria.

Recommendations for Synergy between programs

Our proposed recommendations to enhance program synergy are centered on fostering a common understanding of goals and operations across all programs. We suggest that the Red Cross take the first step towards achieving this goal by **developing and promoting mission statements for each program**. Our research highlights that clear goal statements can boost resource utilization across programs (Garnett and Kouzmin, 2007). The evidence supports the idea that by creating a clear mission statement, volunteers, members, and staff can enhance their understanding of each program's benefits.

We collaborated extensively with program managers and leads to develop our process maps—receiving valuable feedback throughout the process. In our interviews one program head even remarked, “These would 100% would help simplify it down, making it easier for other programs to look at and understand.” Additionally, some program heads expressed their enthusiasm for the maps, stating that they would be incredibly practical not only within their own teams, but also for other teams. Since the process maps show the flow of steps in a simple visual medium it can help employees and volunteers understand the nuances of each program. As a result, we recommend that **the Red Cross utilize these process maps to improve cross-program understanding of daily operations**. Evidence indicates that sharing the process maps (Appendices G-N) with all staff, volunteers, and members can facilitate a greater understanding of the daily operations of other programs.

Additionally, we recommend **the use of process maps to enhance interoperability**

during emergency scenarios. Our findings indicate that process maps can be used to identify areas of overlap between programs, thereby facilitating cross-program collaboration. Our analysis identified specific operations of overlap, such as patient transport and ES (Figure 8). Furthermore, if the Red Cross were to promote the use of process maps and encourage program leads and managers to analyze them together, they could identify additional areas where their programs can collaborate. By identifying overlaps and similarities between programs, staff can gain a better understanding of where they can work together, leading to greater synergy throughout the Red Cross.

Our final recommendation is to **promote the cycling of employees through different programs to gain a more well-rounded understanding of the organizational goals and structure**. During our interview process some program heads mentioned staff greatly benefited from secondments and opportunities to engage in cross program projects. They also added that this gives staff a deeper understanding of the Red Cross and how it operates within each program. Our background research tells us, “organizations need to implement new secondments otherwise we will continue to leave an opportunity to increase productivity and organizational effectiveness on the table” (Renshaw and Holland, 2013). This background research along with the interview response make our team confident that the Red Cross encouraging secondments will increase employee's understanding of the organization as a whole.

Recommendations for Information Management

We have formulated two recommendations for enhancing the Red Cross' information management systems. The first pertains to the system itself, while the second relates to the organization's information storage methods.

First, we recommend that Red Cross consider software with the following characteristics in mind: automation, usability, and accessibility.

These characteristics, drafted directly from staff interviews, were developed to create a standard for information management systems. These characteristics address the main issues that the current system is causing; the inability to automate the transfer of documents and data, which was one of the biggest qualms mentioned by employees. Along with addressing the issues of the current software, a new software with these characteristics will improve user experience.

Along with the above, part of integrating a new system should include the production and promotion of a unified policy for storing information. Having a unified policy for storing information will improve the management of documents and information within the Red Cross, leading to more organization both within and across programs. Providing a unified storage system allows for more collaboration and sharing of documents across programs as people will know where and what to look for when finding information on other programs.

Recommendations for Networks

Social network analysis revealed that the Red Cross should increase social connectedness. The social network maps identified limited horizontal communication channels between different programs. To address this, we have developed recommendations aimed at enhancing communication opportunities within the organization and establishing methods for monitoring progress.

Our first recommendation is to **provide more in-person events and connection opportunities**. This will create more face-to-face interaction across programs. One of the ways that this can be achieved is by requiring employees to be in the office on certain days of the week. Through our research, we were able to identify that remote work has led to a loss of important opportunities to create personal relationships throughout programs (Bromfield, 2022). This will lead to more natural conversations thus creating more informal relationships between employees. Informal relationships can foster collaboration

by providing a more comfortable and open work environment where ideas can be shared more freely, and employees can feel more comfortable asking for help or feedback.

Due to the limited time that we had to map the communication channels within the Red Cross, we recommend that **the investigation of informal and formal lines of communication be continued**. This will allow for the construction of a complete social network map which will provide greater insight into the organization. In addition, this will allow for the monitoring of progress as changes are made if the map is continuously updated.

Recommendations for Engagement

To strengthen engagement, we recommend **Vic ES increase opportunities to engage with volunteers, members, and staff from other programs**. Based on our findings, with an increase in engagement, stakeholders' trust towards the overall organization would increase (Garnett and Kouzmin, 2007). As a result, this would lead to more of an understanding of the program nuances and create opportunities where people can work together to achieve common goals.

With engagement being the last pillar of SINE, it ends up acting as the culmination of all the previous pillars. Synergy between programs, Information Management, and Networks all coincide with one another to strengthen engagement throughout the Red Cross. Our literature review tells us that making information more available, increasing operational strategies, and making social networks more interconnected will cause further engagement of members, staff, and volunteers. With that being said, we recommend **Vic ES monitor the previous recommendations provided in the other frameworks as they aim to promote higher engagement**.

Conclusion



The aim of these recommendations is to support and strengthen cross-program collaboration between Vic ES and Victorian programs. Our analysis had several limitations. First, we were only able to interview 15 out of the 70 staff members through the Victorian branch with seven of those interviews being ES staff. As we noted in our recommendations, this limited view of the Red Cross made the network maps incomplete, with the exception of the Emergency Services team. While in Australia, we created a survey for staff, volunteers, and members to provide quantitative and qualitative data from multiple sources. Given the receipt of 12 responses it does not allow for the use of this data. However, we did gather comments, stories and views on engagement, which we were able to utilize.

We were able to conduct analysis of information received through program briefings, attendance of operational meetings, conducting interviews, delivering a survey, and the creation of maps all within the context of SINE. We used findings from each of these methods to develop practical recommendations the Red Cross can apply. We believe the Red Cross can use the work from this project to improve cross program collaboration between Vic ES and the other Red Cross programs to better the outcomes for the people of Victoria in emergency scenarios.



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Appendix A: Informed Consent Form

This Informed Consent Form is to ensure that your rights are being addressed and acknowledged before, during, and after the interview.

Consent Form to Participate in Interview and Mapping Activity

You have been asked to participate in an interview sponsored by the Australian Red Cross Victorian Emergency Services in collaboration with Worcester Polytechnic Institute. The purpose of this interview is to try and understand the methods of communication and coordination used amongst Victorian Red Cross programs to identify opportunities to improve ARC outcomes. We are interviewing staff from various programs about your goals, what your work entails, whether and how you coordinate and share info with other programs, and your suggestions for improvement. We will publish our findings in a report to the RC and post our report on our university website as well as give a presentation to heads of the VIC Red Cross programs. The information learned in the interview will be used to improve and address the coordination methods being used by the Victorian Red Cross. You can choose whether or not to participate in the interview and stop at any time.

The interview will approximately take 1 hour with an additional 15-minute Jamboard activity. At the end of this interview, you are asked to participate in a Google Jamboard activity alongside the interviewers that illustrate our questions. Further instructions will be given to complete the Jamboard activity after all interview questions have been addressed. Although the interview will be tape-recorded, your voice recording will not be published, however, the information you provide will be extracted and used to analyze the Victorian Red Cross. Any publication or presentation of the data will not identify you. There are no right or wrong answers to the interview questions. We hope you can be honest even when your responses may not be in agreement with the rest of the Victorian Red Cross.

There are no risks associated with these studies. Benefits to research participants and others: There are no direct benefits to you for participating, however, by providing us with this feedback we will be proposing our findings for implementation towards the benefactor, the Australian Red Cross.

By signing below I understand this information and agree to participate fully under the conditions stated above:

Study Participant Signature

Date: _____

Study Participant Name (Please Print)

Date: _____

Signature of the Person who explained this study

Investigators: Antone Mello, Bryce Curtin, Dante Amicarella, Owen Krause

Faculty Members: Stephen McCauley, Lorraine Higgins

Contact Information: gr-RC-MelD23@wpi.edu, mccauley@wpi.edu, ldh@wpi.edu

Appendix B: Pre-Interview Email Format

Subject line: WPI Student Research Interview Confirmation

Attach Appendix A to email

Hello _____,

Thank you for agreeing to be interviewed. Attached to this email is an Informed Consent Form, please feel free to read this, however, we will review the details prior to the start of the interview.

The scheduling details for your interview is as follows:

Date:

Time:

Location:

If this time works for you we will send out a calendar invite out tomorrow.

If you have any questions prior to the interview please let us know. If you need any accommodations for or prior to the interview email the investigators at gr-RC-MeID@wpi.edu. We look forward to speaking with you soon.

Cheers,

WPI

Research Team

Appendix C: Staff Interviews

Engagement

1. How long have you worked at the Red Cross?
 - a. *If less than 5 years:* What did you do before you came to the Red Cross?
 - b. *If more than 5 years:* What keeps you at the Red Cross?
2. What inspired you to work for the Red Cross?

Program Goals

3. How would you describe the main goal or role of your program?
4. Do you have a program mission statement—is it possible for you to share it with us?
5. Where do you see your program goals overlapping with the other Victorian Red Cross programs?

Program Roles

6. What do your daily operations include?
 - a. Can you describe some of these operations?
 - b. Who are the other employees with similar daily operation(s)?
 - c. Are there set roles within your program?
 - d. Would you say you're a part of a team?
 - i. *If yes:* who is on this team?

Process Implementation / Communication Strategies

7. Have you or do you use any software to help you communicate in your operations?
 - a. If yes: What are they?
 - b. If it is a software we are unfamiliar with: What does this software do?
 - c. Are these softwares helpful in keeping information organized?
 - d. Do you find these softwares helpful in completing the tasks you are assigned?
8. How often do you meet with your team?
 - a. What form do these meetings take (Zoom/In-Person)?
 - b. How often do they occur?
 - c. Who is responsible for organizing them?
 - d. Who is reporting during them?
 - e. Are these meetings recurring or are they scheduled based on need?
 - f. What information is discussed during them?
9. How does your team share documents, data, or other information for your daily operations?
 - a. If disclosable, what information and records do you keep?
 - b. Where is this information stored?
 - c. Who has access to this data and information?
10. When your work is finished what do you do with it (published in a newsletter, mass email, etc.)?
 - a. Where does it go?
 - b. Who reviews it?
 - c. Is there training you went through to submit work?
11. Who do you go to if there is an issue while working?

Communication Preferences

12. On a scale of 1 to 10 with 1 being the worst and 10 being the best, how would you rank your team's coordination?
 - a. What factors contributed to this score?
13. If you could improve your team's coordination in your program, where would that be and what would you do?
14. Are the Softwares you use helpful in completing your task and keeping information organized?
15. Do you see opportunities for building relationships with other programs?
 - a. Would sharing information, resources, and communicating more often improve your work?
16. What communication methods would make your work easier?
17. What do you think the Red Cross should do to ensure that there is more coordination between programs?
 - a. *If solution:*
 - i. How would you go about implementing or promoting this communication change?
18. Do you believe communicating with other programs would improve yours or make your job easier?

Understanding of Other Programs

1. What would you say the role and goal of the other programs are?
 - a. Community Programs?
 - b. Emergency Response?
 - c. Migrant Support Programs?
 - d. Community Mobilization?
2. On a scale of 1 to 10 with 1 being no knowledge and 10 being extremely knowledgeable, how aware are you of the other program's day-to-day activities?
 - a. Why do you think this is?
 - b. Do you believe you would benefit from a better understanding of other programs?
3. Do you have any common goals with any of the other programs mentioned before?
 - a. *If yes:*
 - i. What are the points of connection between the programs?
 - ii. Is communication with other programs more difficult, the same, or easier than communicating with your own program?
 - iii. What would make this process easier?
 - b. *If no:*
 - i. Do you believe communicating with other programs would improve yours or make your job easier?

Appendix D: Program Head Interviews

Engagement

1. How long have you worked at the Red Cross?
 - a. *If less than 5 years:* What did you do before you came to the Red Cross?
 - b. *If more than 5 years:* What keeps you at the Red Cross?
2. What inspired you to work for the Red Cross?

Program Goals

3. How would you describe the main goal or role of your program?
4. Do you have a program mission statement—is it possible for you to share it with us?
5. Where do you see your program goals overlapping with the other Victorian Red Cross programs?

Program Roles

6. What do your daily operations include?
 - a. Can you describe some of these operations?
 - b. Are there set roles within your program?
 - c. Would you say you're part of a team(s)?
 - i. *If yes:* who is on this team(s)?

Process Implementation / Communication Strategies

7. Have you or do you use any software to help you communicate in your operations?
 - a. *If yes:* What are they?
 - b. If it is a software we are unfamiliar with: What does this software do?
 - c. Are these softwares helpful in keeping information organized?
 - d. Do you find these softwares helpful in completing the tasks you are assigned?
8. How often do you meet with your team?
 - a. What form do these meetings take (Zoom/In-Person)?
 - b. How often do they occur?
 - c. Who is responsible for organizing them?
 - d. Who is reporting during them?
 - e. Are these meetings recurring or are they scheduled based on need?
 - f. What information is discussed during them?
9. How does your team share documents, data, or other information for your daily operations?
 - a. If disclosable, what information and records do you keep?
 - b. Where is this information stored?
 - c. Who has access to this data and information?
10. How do you organize the work of the people in your program?
11. How often do you interact with the people who work under you?
 - a. Informal conversations?
 - b. Official meetings/briefs?
12. How often do you meet with other program heads?
 - a. What do these meetings look like (Online / Face-to-Face)?
13. How often do you meet with individuals in other programs that are not the heads?
14. Does your program collaborate with any other program within the Red Cross?

- a. What is the reason for this collaboration?
 - b. What is your program's role?
 - c. What strategies are implemented to interact with the other program in this collaboration?
15. When your work is finished what do you do with it (published in a newsletter, mass email, etc.)?
- a. Where does it go?
 - b. Who reviews it?
 - c. Is there training you went through to submit work?
16. Who do you go to if there is an issue while working?

Communication Preferences / Opinions

17. On a scale from 1 to 10 with 1 being terrible to 10 being excellent, how successful or functional is the communication within this program?
- a. *If greater than 6:*
 - i. Why do you believe your team's communication is successful?
 - ii. Do you believe everyone in your team, on average, would rate the communication equally?
 - iii. What factors make you believe that your team does not have quality internal communication?
 - b. *If less than 6:*
 - i. What aspects of team communication would you like to improve?
18. Can you give an example of a time when lack of coordination or info sharing may have created challenges in your work?
- a. *If yes:*
 - i. What do you believe the problem was?
 - ii. Why do you think this?
 - b. *If no:*
 - i. What do you wish you knew more about if anything at all?
 - ii. How would this help you and your program operate?
19. If you could improve your team's coordination in your program, where would that be and what would you do?
20. Are the softwares you use helpful in completing your task and keeping information organized?
21. Do you see opportunities for building relationships with other programs?
- a. Would sharing information, resources, and communicating more often improve your work?
22. What communication methods would make your work easier?
23. What do you think the Red Cross should do to ensure that there is more coordination between programs?
- a. *If solution:*
 - i. How would you go about implementing or promoting this communication change?
24. Do you believe communicating with other programs would improve yours or make your job easier?

Understanding of Other Programs

25. What would you say the role and goal of the other programs are?
- a. Community Programs?
 - b. Emergency Response?
 - c. Migrant Programs?
 - d. Community Mobilization?
26. On a scale of 1 to 10 with 1 being no knowledge and 10 being extremely knowledgeable, how aware are you of the other program's day-to-day activities?
- a. Why do you think this is? /
 - b. Do you believe you would benefit from a better understanding of other programs?

27. Do you have any common goals with any of the other programs mentioned before?

a. *If yes:*

- i. What are the points of connection between the programs?
- ii. Is communication with other programs more difficult, the same, or easier than communicating with your own program?
- iii. What would make this process easier?

b. *If no:*

- i. Do you believe communicating with other programs would improve yours or make your job easier?

Appendix E: Victorian Red Cross Volunteer Interviews

Engagement

1. How long have you volunteered at the Red Cross?
 - a. *If less than 5 years:* What did you do before you came to the Red Cross?
 - b. *If more than 5 years:* What keeps you at the Red Cross?
2. What inspired you to volunteer for the Red Cross?

Program Goals

3. Do you have a program mission statement—is it possible for you to share it with us?
4. How would you describe the main goal of your program?

Program Roles

5. What is your current volunteering role?
 - a. Can you describe this role(s)?
 - b. Who is your volunteer role leader?
 - c. Who are the other employees working or volunteering in this role(s)?
 - d. How are the teams made?

Program Implementation / Communication Strategies

6. Have you or do you use any software to help you communicate with your operations?
 - a. *If yes:* What are they?
 - b. *If it is a software we are unfamiliar with:* What does this software do?
 - c. Are these softwares helpful in keeping information organized?
 - d. Do you find these softwares helpful in completing the tasks you are assigned?
7. When volunteering, how often do you meet with your team?
 - a. What form do these meetings take (Zoom/In-Person)?
 - b. How often do they occur?
 - c. Who is responsible for organizing them?
 - d. Who is reporting during them?
 - e. Are these meetings recurring or are they scheduled based on need?
 - f. What information is discussed during them?
8. How does your team share documents, data, or other information for your daily operations?
 - a. If disclosable, what information and records do you keep? Where?
9. What type of information does the Red Cross share with you?
10. How do Red Cross employees contact you?
 - a. How often does this occur?
11. What happens when you are finished with your role?
 - a. Is there any formal process?
 - b. Was there any official training for this process?
12. Who do you go to if there is an issue while volunteering?

Communication Preferences / Opinions

13. Have you or do you use any software to help you communicate in your operations?
 - a. *If yes:* What are they?
 - b. *If it is a software we are unfamiliar with:* What does this software do?
 - c. Are these softwares helpful in keeping information organized?
 - d. Do you find these softwares helpful in completing the tasks you are assigned?
14. On a scale of 1 to 10 with 1 being the worst and 10 being the best, how would you rank your team's coordination?
 - a. What factors contributed to this score?
15. If you could improve your team's coordination in your program, where would that be and what would you do?
16. What communication methods would make volunteering easier?
17. On a scale of 1 to 10 with 1 being you have no idea what the ARC employees are expecting of you and 10 being your expectations are perfectly laid out; how would you rate this process?
 - a. *If below a 6:* What are the issues that lead to this score? Is there anything you like about the process?
 - b. *6 or higher:* What factors do you like about the system that lead to this score? Is there anything you don't like about the system?
18. What type of information does the Red Cross share with you?
 - a. On a scale of 1 to 10 with 1 being you have little to no information and 10 being you have enough information to complete your job, how would you rate how much information is shared with you?
 - i. Is this information valuable?
 - ii. Is there any other information you would like the Red Cross to provide to improve this score?

Engagement / Closer

19. Do you feel valued by the Red Cross?
 - a. Why do you feel this way?
 - b. *If not:* What can the Red Cross do to make you feel valued?
 - c. *If yes:* Would you say the other volunteers/members feel this way?

Appendix F: Jamboard Mapping Activity

Welcome ARC Employees!

Purpose of mapping activity:

To visualize an individuals/teams coordination strategies, process, and workflow.

Instructions for mapping activity:

1. In the top-most middle part of your screen, you will see 7 frames. Click through them to see the 5 different hierarchies programs and State leads. The 2nd frame is an example.

2. How to use Jamboard:

- Jamboard is an digital interactive whiteboard that allows employees to collaborate with one another.
- Post it notes:
 - See left column, select sticky note with 2 lines in it.
 - Click and drag the sticky note next to or around the individual you are communicating with
 - Enter the following information on the sticky note:
 - Your name
 - Who you coordinate with
 - What information you share
 - How you share that information
 - Why you share that information
 - Desired outcome of interaction

Emergency Services

