Patrol Smart 7/52: Queensland's integrated surf life saving program

Wilks, Dawes and Williamson present research into Queensland's integrated lifesaving program

Abstract

Surf Life Saving Queensland (SLSQ) is a community-based organisation with more than 26,000 active volunteer members patrolling 65 beaches on weekends from September to April each year. Additional patrol coverage is provided on 41 beaches at other times of the year, especially school holidays, by SLSQ professional lifeguards. These beach patrols are further strengthened by support services that include inflatable rescue boats (IRBs), rescue water craft, jet rescue boats and helicopters. However, despite the efforts of lifesavers, 17 people drowned in unpatrolled areas of the Queensland coastline during the 2001–2002 season. This prompted SLSQ to develop their Frontline First initiative, a repositioning strategy aimed at focusing the organisation's collective energies and resources to support 'frontline' service delivery – the lifesavers – through building capacity and capability. A central element of Frontline First is the *Patrol Smart 7/52* program that aims to provide a more integrated lifesaving service across the State. This paper describes the *Patrol Smart 7/52* program, drawing on recent reviews to show how emergency services are managed.

Introduction

Surf Life Saving Queensland is very clear about its purpose. The organisation's vision is 'Zero Preventable Deaths and Injuries on Queensland Beaches'. Where SLSQ members patrol designated swimming areas that are clearly identified by red and yellow flags, the figures show that this vision is achievable. In truth, there has never been a Queensland case of a person drowning while swimming between the flags on a SLSQ club patrolled beach. On the other hand, all of the 17 drowning deaths recorded on the Queensland coastline during the 2001-2002 season occurred in unpatrolled areas (SLSQ, 2002). Table 1 shows that in the same time period SLSQ members provided a range of vital lifesaving services for the community.

| Table 1. SLSQ lifesaving actions during the 2001–2002 season	
Lives saved (rescues)	4,732
Resuscitations	33
First aid treatments	11,844
Marine stinger treatments	7,247
Preventative actions	152,503

In response to the arguably preventable deaths during the 2001–2002 season SLSQ embarked on a re-positioning strategy titled Frontline First aimed at focusing the organisation's collective energies and resources to support 'frontline' service delivery – the lifesavers – through building capacity and capability. Figure 1 presents the core elements of Frontline First (FLF).

Patrol Smart 7/52

A key component of the FLF strategy is *Patrol Smart 7/52*, described in the SLSQ Annual Report (SLSQ, 2002, p. 14) as 'the way of the future for Surf Life Saving services across the State'. *Patrol Smart 7/52* recognises that SLSQ has a vast collection of resources at its disposal and needs to use these resources effectively to ensure a 'total integrated service' across Queensland beaches. This requires a clear and shared vision on how to best service its 'customers'—the people who visit the beaches. In Queensland there are more than 30 million beach visitors each year. *Patrol Smart 7/52* therefore strives to be an innovative, integrated and 'smart' lifesaving service—24 hours a day, seven days a week, 52 weeks a year.

The *Patrol Smart 7/52* plan has 11 key strategies (SLSQ, 2004). These are:

- **Expand services** – expanding lifesaving services to popular beaches that are currently unpatrolled;
- **Sunrise to sunset patrols** – extending times of patrols at popular beaches to reduce drownings that occur in areas and times outside of standard patrol hours;
- **Integrated and co-ordinated services** – improving the integration and co-ordination of all lifesaving

FRONTLINE FIRST!!
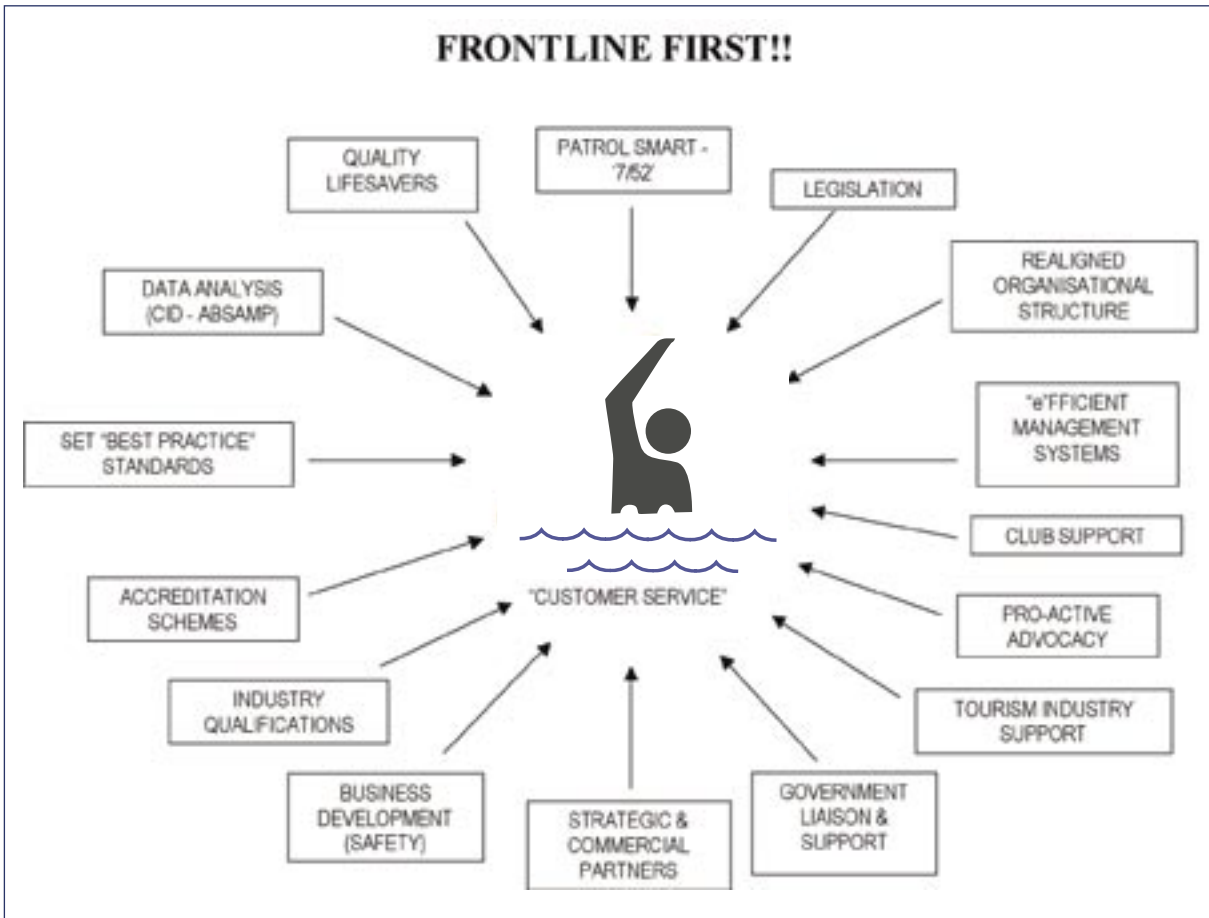
services, including clubs, lifeguards and support services;

- **Camera safety surveillance** – implementing camera technology to high-risk areas to enhance surveillance capabilities;

- **Westpac lifesaver helicopter rescue service patrols** – operating the most efficient and cost-effective aerial services delivery;

- **Jet rescue boat patrols** – operating the most efficient and cost-effective JRB services delivery;

- **Rescue water craft patrols** – expanding the number of RWC operations in co-ordination with other support services';

- P**ersonalised customer service** – increasing the interaction and improving face-to-face 'public relations' between lifesavers and beach-goers;

- **Central communications** – establishing state-of-the-art communication centres (SurfComs);

- **Innovation** – including research and development of new equipment, analyzing incidents, and adopting a beach management role to improve lifesaving service delivery; and

- **Develop better lifesavers** – providing for the education of future lifesavers, improving communication with members, increasing resources, involving lifesavers in the decision-making process, and increasing interaction of patrol personnel with external agencies.

Lifesaving services

Assessing the success of *Patrol Smart 7/52* in achieving its stated goals requires evaluation of lifesaving services objective performance. According to the current *SLSQ Annual Report (2004)* the seven drowning deaths in the 2003/2004 season was the lowest number in the past five years (see Figure 2) and continues an observable downward trend in fatalities. At the same time, there has been a significant increase in the number of preventative actions performed by lifesavers (Figure 3). A preventative action is defined as 'interceptions to prevent rescues or problems occurring' (Fenner, Leahy, Buhk & Dawes, 1999).
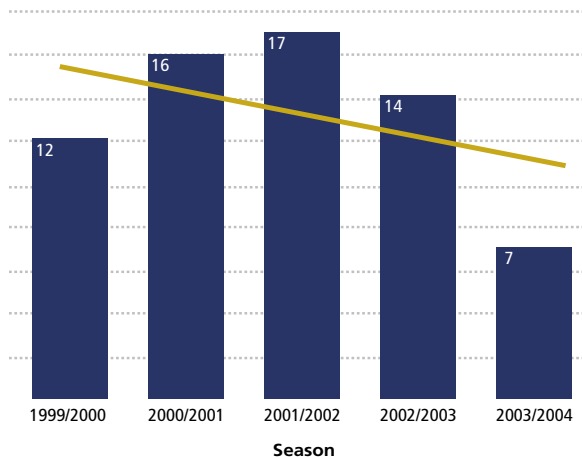

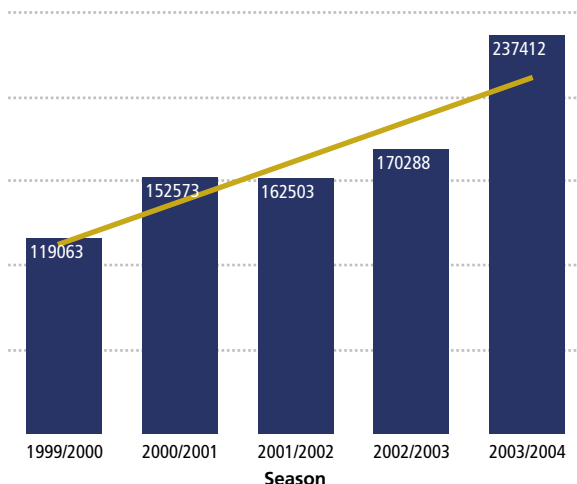*Figure 2. Queensland surf related drownings 1999–2004*

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Figure 3. Total preventative actions 1999–2004

Table 2 indicates SLSQ services are now reaching more people before they face difficulties in the surf; with a corresponding slight decrease in the overall number of rescues that are necessary. In particular, the expanded use of rescue water craft (jet skis) has resulted in greater beach coverage (28,387 nautical miles traveled in 2003/2004). Almost all of the 678 rescues conducted by the Rescue Water Craft Service were outside flag patrolled areas.

Table 2. SLSQ lifesaving actions during the 2003–2004 season	
Lives saved (rescues)	3,683
Resuscitations	80
First aid treatments	9,384
Marine stinger treatments	6,438
Spinal injury treatments	22
Preventative actions	237,412

A similar profile of service activity is revealed for the jet rescue boats, with 13,720 nautical miles covered during 2173 patrol hours with 258 successful rescues conducted. Finally, the Westpac Lifesaver Helicopter conducted 29 rescues and was involved in co-ordinating rescues with other services, responding to callouts from both police and the coast guard.

This wider service coverage provided by SLSQ during the 2003-2004 season is a key response to the challenges of *Patrol Smart 7/52*. Reviews have also been undertaken to determine the best way to extend coverage to unpatrolled Queensland beaches and to document the benefits of SLSQ professional lifeguard services by local government councils (Ernst & Young, 2004). These councils are increasingly seen as legally responsible for beach safety in their electorates (see Charrington, 2002; Fitzgerald & Harrison, 2003; Wilks & Davis, 2003). On the Gold Coast, for example, sunrise to sunset patrols were initially introduced in

response to incidents involving tourists who died while swimming in the surf during twilight hours.

The co-ordination of patrol and response activity has taken on a greater significance with the expansion of lifesaving services to include both volunteers and professionals on traditional beach patrol, and the use of support services like inflatable rescue boats, rescue water craft, jet rescue boats and helicopters. The SurfCom communications network is now operational on both the Gold and Sunshine Coasts. It includes a radio network, camera surveillance, Global Positioning System (GPS) tracking and an incident reporting system (see www.lifesaving.org.au/services/communications. cfm). During the period September 2003 to May 2004, for example, the Gold Coast SurfCom received up to 1000 calls per day.

Beach safety for tourists

Australian reviews continuously report that international visitors are a particular target group for water safety education and assistance, based on the numbers who experience problems related to aquatic activities (Australian Water Safety Council, 1998; Mackie, 1999; Wilks & Coory, 2000). Queensland has historically recorded the largest number of tourist drowning deaths (Australian Water Safety Council, 2000). For overseas tourists the key education issues in beach safety include:

• awareness of 'swimming between the flags';

• beach signage;

• recognition of Surf Life Savers (by uniform and the yellow and red colours worn);

• an appreciation of swimming only during daylight hours; and

• an understanding of what to do if they experience trouble (Pendergast, Wilks & Dawes, 2003).

All of these issues highlight the limited experience most tourists have when it comes to swimming safely in the surf (Wilks, Pendergast & Wood, 2003).

SLSQ has responded to the surf safety needs of tourists, both domestic and overseas visitors, through multi-lingual beach signage and the placement of surf safety

Jet skis facilitate fast response to surf emergencies

Helicopter rescue service in action

information in tourist accommodation venues. On the Gold Coast, daily guided beach walks are conducted by uniformed lifesavers for Japanese tourists. This visitor group was identified in the organisation's research program as requiring additional assistance due to their unfamiliarity with swimming in the surf (Wilks, Pendergast & Wood, 2003).

In partnership with Tourism Queensland, SLSQ has also contributed expert information to national visitor safety campaigns (Tourism Ministers Council, 2002) and taken a leadership role in the Queensland Government's Irukandji Jellyfish Response Taskforce. Risk management of marine stingers is especially important to protect tourists in tropical waters. In recognition of these contributions SLSQ was recently inducted into the Australian Tourism Hall of Fame, having won the State and National awards for General Tourism Services three years in succession (SLSQ, 2004).

Continuous evaluation and adjustment of lifesaving services

SLSQ research supports a focus on protecting visitors to the beach, as 79 percent of drowning deaths involve people who live more than 50 km from the beach, with 45 percent being international tourists and the remaining 34 percent being domestic tourists. This involves putting procedures in place to continuously improve lifesaving services to benefit all beachgoers. A key element of the *Patrol Smart 7/52* program is a series of targeted reviews that engage SLSQ stakeholders in evaluating and improving rescue services. A good example was the Helicopter Rescue Service review (O'Hara, De Groot & Wilks, 2002) which examined the full range of SLSQ lifesaving support services and resources.

In undertaking the helicopter review five stakeholder groups were identified for consultation. These groups were:

• internal stakeholders—those directly involved with SLSQ in a voluntary or professional capacity;

• external stakeholders—those who have a relationship at an administrative or operational level (for example, other community rescue service providers);

• government stakeholders—such as Police, Department of Emergency Services and Queensland Health, as well as local councils;

• sponsors actively involved in sponsoring some area in SLSQ; and

• the community—who have expectations about SLSQ services and who are the clients of *Frontline First.*

In the development of *Patrol Smart 7/52* some of the helicopter review findings are noteworthy. There were 18 face-to-face interviews conducted with internal stakeholders and 21 interviews with external and government stakeholders (combined in this summary). Figure 4 presents the overall levels of satisfaction reported for SLSQ Lifesaving Support Services.
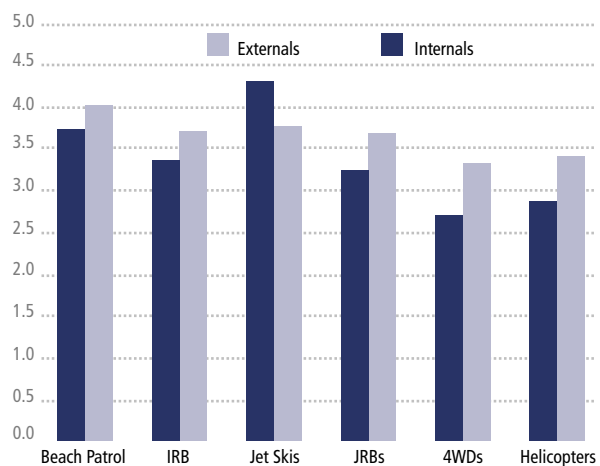

Figure 4. Mean levels fo satisfaction with support services by stakeholders

Internal stakeholders

On the rating scale of 5 = Excellent; 4 = Very Good; 3 = Satisfactory; 2 = Below Standard and 1 = Poor, internal stakeholders rated jet skis highest (very good to excellent), followed by beach patrols, IRBs (Inflatable Rescue Boats) and jet boats at between 'satisfactory to very good'. Four wheel drive vehicles and helicopters were rated between 'below standard to satisfactory'.

Allocation of money to SLSQ support services

Another way used to assess services was to ask stakeholders "If you had $100 to allocate toward SLSQ support services, how would you allocate that money? (whole dollars only)." Stakeholders were advised that training, uniforms, marketing and all administration should be assumed to be spread across the service areas. A total of 16 usable responses were obtained (one person allocated $100 across all services together while one person did not respond to the question).

Table 3. Allocation of money to SLSQ support services by internal stakeholders

Service	No money allocated	<$25	$26–$50	$51–$75	$76–$100	Average $ (mean)
Beach patrol	0	2	10	2	2	48
IRB	3	9	4	0	0	15
Water rescue craft	2	11	3	0	0	16
Jet rescue boats	5	11	0	0	0	5
4WDs	7	9	0	0	0	5
Helicopters	8	5	3	0	0	11

Table 4. Allocation of money to SLSQ support services by external stakeholders

Service	No money allocated	<$25	$26–$50	$51–$75	$76–$100	Average $ (mean)
Beach patrol	0	3	12	2	2	44
IRB	2	15	2	0	0	15
Water rescue craft	4	15	0	0	0	16
Jet rescue boats	9	10	0	0	0	10
4WDs	7	11	1	0	0	13
Helicopters	9	6	4	0	0	28

On beach resuscitations require highly trained beach patrol personnel

Table 3 shows that all respondents allocated at least some money to beach patrols, mostly in the $26–50 range, with an average of $48. The most frequent allocations were $40 (4) and $30 (3). Two respondents allocated all $100 of their money to beach patrols.

Rescue water craft were the next most popular choice for internal stakeholders with only two respondents not allocating funds. The majority of people nominated money in the 'less than or equal to $25' range. The most frequent allocations were $10 (4) and $20 (3), with the overall average for rescue water craft being $16.

For IRBs, three respondents declined to allocate funds. Of the 13 people who did allocate money, most nominated amounts in the 'less than or equal to $25' range. The most frequent allocation was $5 (4) and the overall average was $15.

Five of the 16 respondents did not allocate money for jet boats. Of the 11 people who did allocate funds, all were in the 'less than or equal to $25' range. The most frequent allocation was $5 (7) and the overall average for jet boats was $5.

Nine people allocated money to 4WD vehicles. The most frequent allocation was $5 (6), with the overall average being $5.

Half of the internal respondents (8/16) allocated money to helicopters. There were five allocations in the 'less than or equal to $25' range (two at $5; one at $10; one at $20 and one at $25) and three allocations in the '$26–$50 range' (one at $30; two at $40). The overall average for the eight people who allocated money to helicopters was $11.

In summary, responses to this question showed that all internal stakeholders supported beach patrols and were most likely to allocate funds to that SLSQ support service. On average, almost half the money available ($48 from a total of $100) was allocated to beach patrols. Most respondents also allocated money to rescue water craft and IRBs at about the same amount. There was less overall support for jet rescue boats (average $5), 4WDs (average $5) or helicopters (average $11).

Lifesaver beach patrols are strongly supported by internal and external stakeholders

External and government stakeholders

Figure 4 shows that external stakeholders gave higher ratings than internal stakeholders to all support services, with the exception of rescue water craft. External respondants rated all services between 'satisfactory and very good'. When asked to allocate their $100 toward SLSQ services, Table 4 shows that all respondents allocated at least some money to beach patrols, mostly in the $26–50 range, with an average of $44. The most frequent allocations were $30 (4), $40 (4) and $50 (3).

IRB's were the next most popular choice, with only two respondents not allocating funds. The majority of people nominated money in the 'less than or equal to $25' range. The most frequent allocation was $10 (7) and the overall average for IRBs was $15.

For rescue water craft services, four respondents declined to allocate any funds. Of the 14 people who did allocate money, most nominated the 'less than or equal to $25' range. The most frequent allocations were $10 (5) and $20 (5), with the overall average for rescue water craft being $16.

Nine of the 19 respondents did not allocate money for jet boats. Of the 10 people who did allocate funds, all were in the 'less than or equal to $25' range. The most frequent allocation was $10 (5) and the overall average for jet boats was $10.

Twelve people allocated money to 4WD vehicles and one person (not included in the analysis) allocated $20 to quad bikes. The most frequent allocation for 4WDs was $10 (7), with the overall average being $13.

Ten of the 19 respondents allocated money to helicopters. There were six allocations in the 'less than or equal to $25' range (one at $15; five at $20) and four allocations in the '$26-$50 range' (two at $30; two at $50). The overall average for the 10 people who allocated money to helicopters was $28.

In summary, responses to this question showed that external stakeholders supported beach patrols and were most likely to allocate funds to that SLSQ service. Most respondents also allocated money to IRBs and rescue water craft at about the same amount. There was less overall support for jet rescue boats, 4WDs or helicopters.

Perception and support of rescue services

From over 50 key stakeholder interviews undertaken for the helicopter report, it emerged that the SLSQ support services were viewed as two distinct groups. The first group includes beach patrols, IRBs and rescue water craft. These services were highly regarded, endorsed and supported by stakeholders. The second group includes jet boats, 4WD vehicles and helicopters. This group was considered second tier and received much less endorsement and support

from stakeholders. While all of the services examined make a significant contribution to saving lives, the evaluation process described, especially a willingness for stakeholders to allocate funds, provides a valuable insight into the grassroots support SLSQ might experience when reallocating resources or expanding its rescue services.

Interestingly, the wider community in Queensland is also most aware and supportive of the rescue services provided by SLSQ, particularly the highly visible and perhaps more well-established beach patrols. In a June 2000 report prepared for the Surf Life Saving Foundation, Marketshare investigated public perceptions and attitudes toward SLSQ. They found that awareness of the SLSQ services was very high, with the beach patrol being 99 percent and the Westpac Lifesaver Rescue Helicopter Service being 92 percent (Figure 5).
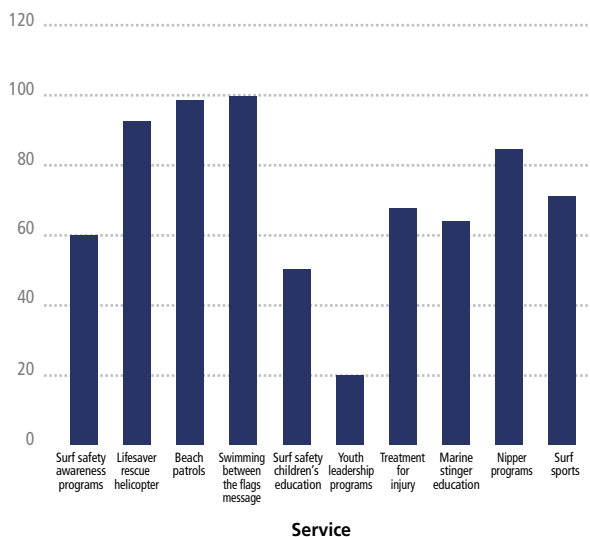
Figure 5. Community awareness of SLSQ services

Lifesavers need mobile communications, like 2-way radio to optimise quick response

Acknowledgments

Conclusion

While there are clearly some beach visitors, especially tourists, who require ongoing education and supervision in the surf (SLSQ, 2003) recent reviews suggest that the *Patrol Smart 7/52* strategies are being implemented effectively and are having a tangible impact by saving lives. In particular, the use of new technology and co-ordination of rescue services and resources is providing a wider protective coverage of Queensland beaches. The Australian Government has recently announced that 2007 will be officially known as the *Year of the Surf Lifesaver.* This provides SLSQ with an additional incentive to expand its successful rescue programs and further develop its leadership role in beach safety.

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Helicopters, jet rescue boats and jet skis were highly regarded, endorsed and supported by stakeholders

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