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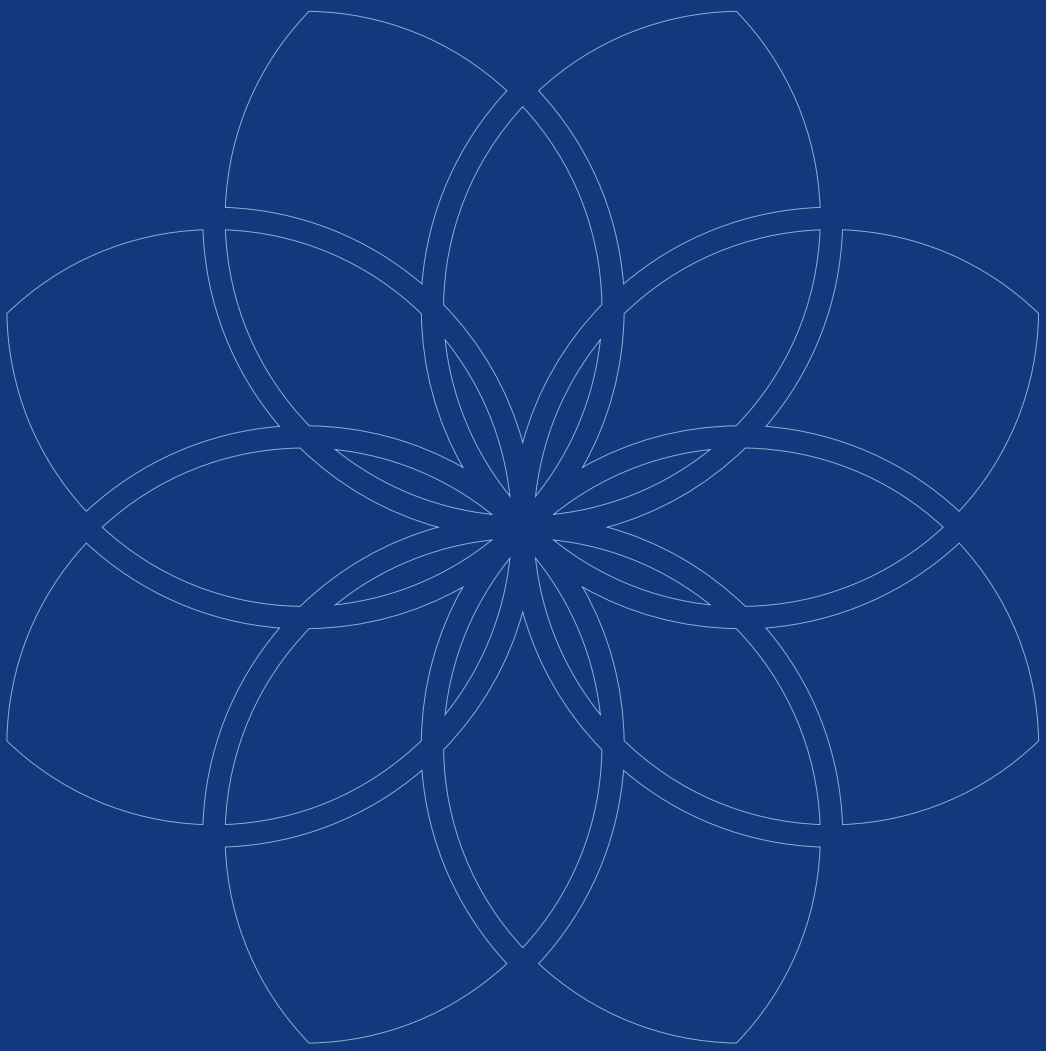
Benefits realisation and break even analysis of services provided by the Gippsland Centre Against Sexual Assault

2016



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Glossary

ABS	Australian Bureau of Statistics
ACSSA	Australian Centre for the Study of Sexual Assault
ADHD	Attention deficit hyperactivity disorder
BOCSAR	Bureau of Crime Statistics and Research
CASA	Centre Against Sexual Assault
CBT	Cognitive Behavioural Therapy
DALY	Disability Adjusted Life Year
GCASA	Gippsland Centre Against Sexual Assault
LGA	Local Government Area
MHDCD	Mental Health and Cognitive Disability in the Criminal Justice System
NSW	New South Wales
PC	Productivity Commission
PTSD	Post-Traumatic Stress Disorder
SABTS	Sexually Abusive Behaviours Treatment Service
SASS	Sexual Assault Support Services
VSLY	Value of a Statistical Life Year

Executive Summary

Gippsland Centre Against Sexual Assault (GCASA) aims to enhance safety and quality of life throughout the Gippsland region of Victoria, Australia, by reducing the incidence and impact of sexual assault.

Approximately 17% of Australian women have experienced some form of sexual assault since the age of 15, and 0.7% of Victorian women experienced sexual assault in 2011-12 (Australian Bureau of Statistics (ABS) 2012). There were 7,173 sexual assault offences across Australia in 2013 14, a 19.5% increase from 2012-13 (ABS 2014). Sexual violence is more likely to be perpetrated by a known person (an intimate partner) and the risk of sexual violence in adulthood doubled for women who had experienced sexual abuse as a child (Australian Institute of Family Studies 2004).

Core GCASA services include:

- Sexual Assault Support Services (SASS) – Support to people who have experienced sexual assault, their families, carers and other support networks. This support typically includes advocacy and counselling services
- Sexually Abusive Behaviours Treatment Service (SABTS) – Assessment and treatment for children with problematic sexual behaviours, and to young people with harmful sexual behaviour
- Prevention and education programs, which focus on community-based education and development
- Consultancy and professional training for workers in other organisations and community groups.

SASS provides counselling, advocacy and other supports for people who have experienced sexual assault. The potential impacts people experience include: mental health impacts, physical health impacts, social impacts and financial impacts. Common mental health impacts are associated with anxiety symptoms, in particular post-traumatic stress disorder (PTSD). Potential physical comorbidities include sexually transmitted disease, reproductive problems, drug and alcohol abuse, eating disorders and sleep problems. Social impacts relate to how the person is received in treatment and social situations, which may lead to "secondary victimisation". Financial impacts may result from trauma symptoms, in terms of level formal education attained and poor employment outcomes. By assisting people, SASS aims to reduce the duration and severity of these symptoms.

SABTS focuses on addressing sexually harmful behaviours in children and young people through a systems lens, working within the social network of the referred person. Interventions target sexualised behaviour in the context of early intervention, and aim to enable the child/young person to "get back on track" with normative adolescent development. The sexualised behaviours may be an indication that they are experiencing stress, psychological and emotional problems, or dysfunctional family or home life. SABTS is part of a holistic service response to children and young people that may also require interaction with courts, criminal justice and child protection services.

Economic evaluation

GCASA has commissioned Deloitte Access Economics to undertake an economic evaluation of the services it provides to the community. The economic evaluation focuses on three of the core services described above – SASS, SABTS and prevention and education services. It is assumed that the consultancy and professional development services contribute to these outcomes and facilitate the achievement of outcomes in other communities.

A benefits realisation approach was taken to measure the value of GCASA services to their clients and the local community. This included:

- Measuring and valuing the impact of services on SASS clients' mental health outcomes
- Measuring and valuing the impact of services on SASS clients' workplace productivity
- Determining the breakeven value of SABTS and prevention and education programs, to demonstrate the potential value to society of services that may prevent sexual assault.[1]

In both the SASS and SABTS programs, clients are defined as long, medium and short term based on the number of hours of support that they receive, which may then be considered a measure of the severity of the impacts. There are three groupings, which were used to describe the potential impacts of GCASA services on clients, relative to their needs and trajectory for recovery:

[1] No quantitative evidence was available to estimate the contribution of SABTS to client outcomes (and the likelihood of avoiding future sexual offending). A breakeven analysis was therefore conducted to identify the required rate of effectiveness of the service to achieve a positive return on investment, for government and society.

- Short term clients: less than ten hours of support (within three months). These clients may experience anxiety and depression, but are generally in good mental health and have fewer co occurring factors that would create complexity in treatment.[2]
- Medium term clients: between ten and thirty hours of support (within six to nine months). These clients typically experience more complex mental health issues.
- Long term clients: more than thirty hours of support (which may occur over a period of years). These clients experience more severe symptoms (such as complex post-traumatic stress disorder and dissociative disorders).

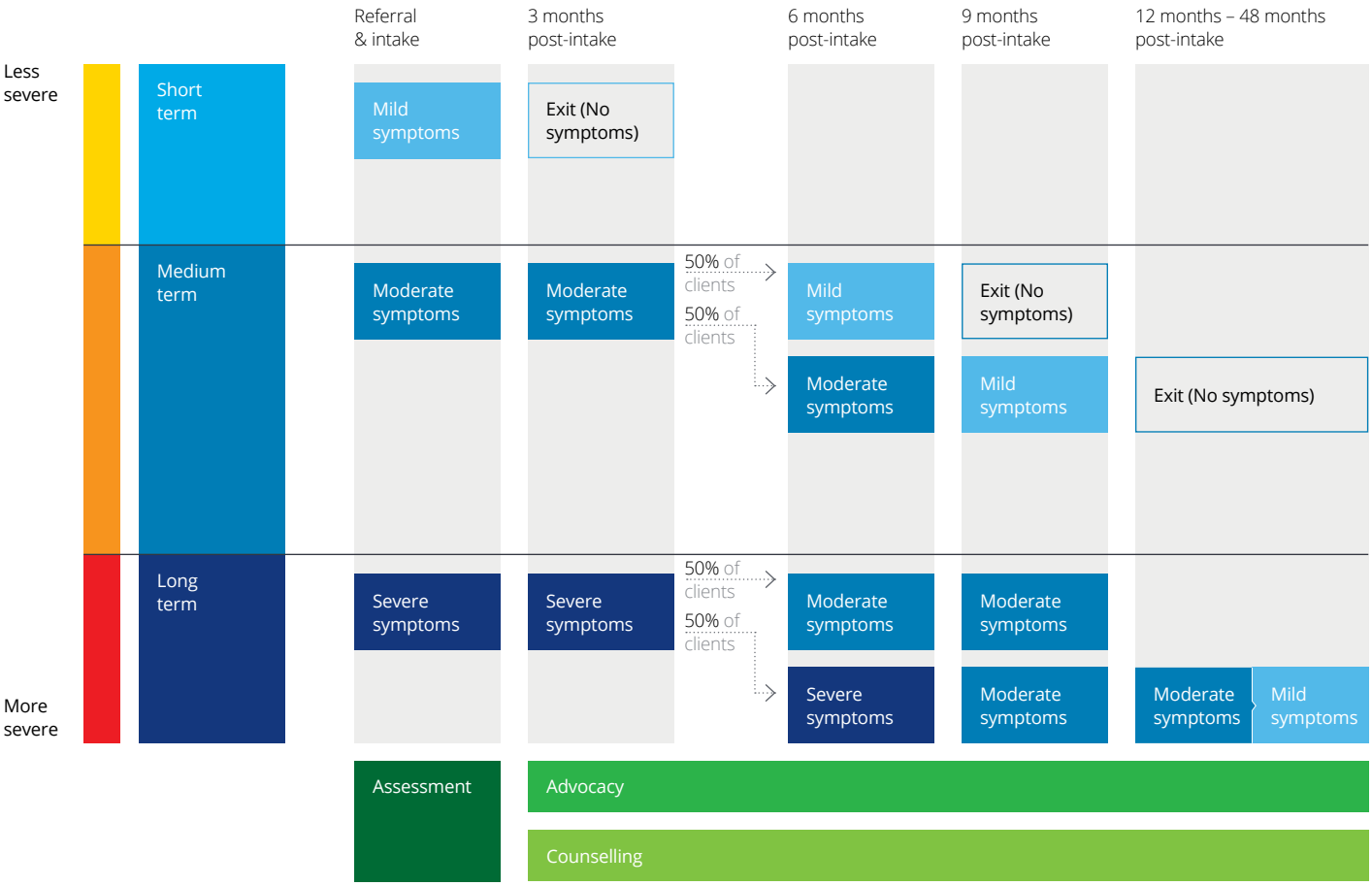
SASS

The impacts of SASS were estimated by comparing outcomes for people who receive GCASA services to a scenario in which the same group did not receive these supports. The client severity groupings (short, medium and long term) were used to value the gains achieved for clients through accessing GCASA services. That is, the difference in mental health state after receiving GCASA services, compared with before, and the flow on impacts of this on their productivity in the workplace.

Client impacts were considered from a holistic perspective, for each of the groupings of symptom severity (short, medium and long term). The assumed symptom trajectories for SASS clients are outlined in Figure I (with GCASA services) and Figure ii (without GCASA services). The primary difference between these trajectories is that recovery is delayed in the absence of SASS.

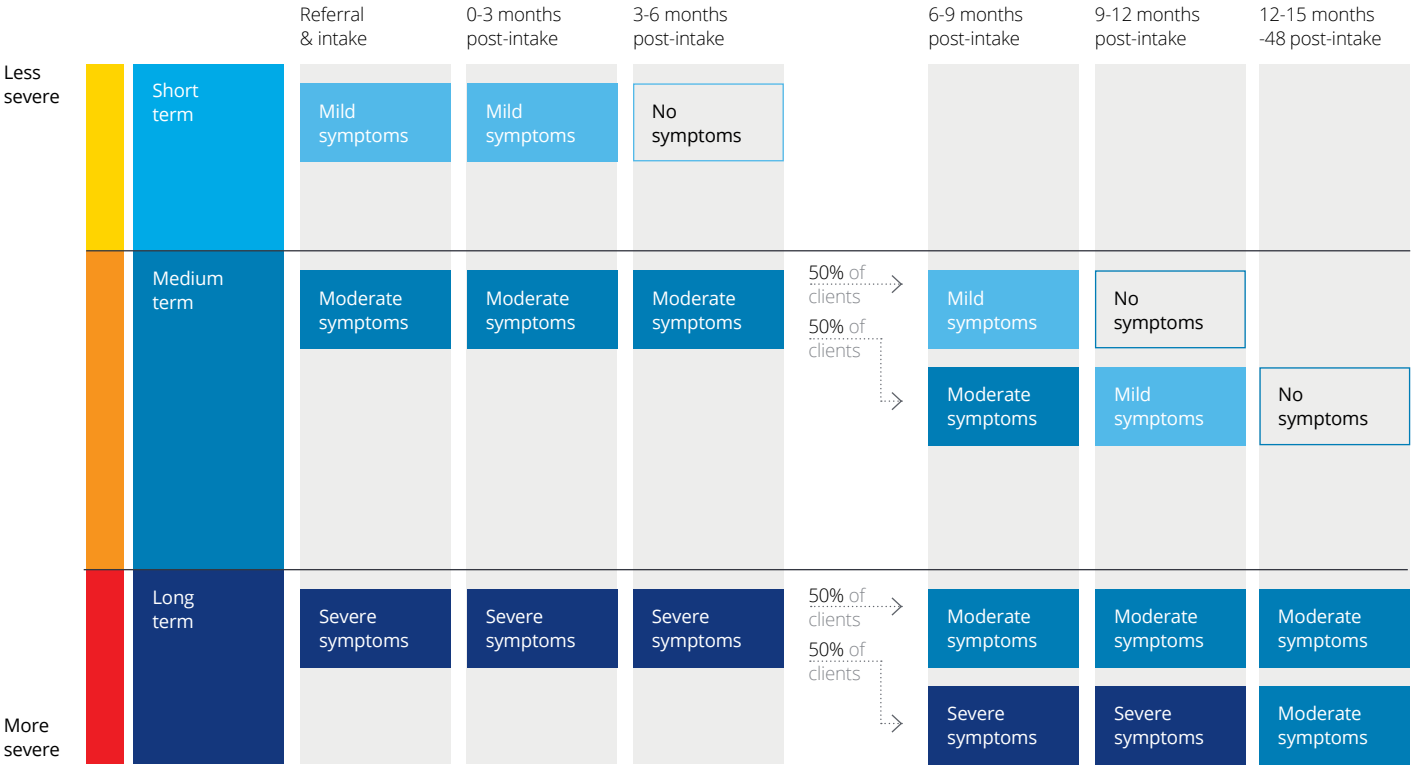
[2] Such factors may include the strength of relationships with friends and family, homelessness, drug and alcohol addiction and previous experience of sexual assault.

Figure i: Assumed symptom levels for GCASA SASS clients



Source: Developed by Deloitte Access Economics with advice from GCASA

Figure ii: Assumed symptom levels for clients in the absence of GCASA SASS



Source: Developed by Deloitte Access Economics with advice from GCASA

The total estimated value of mental health impacts for SASS was $2.74 million, for 682 clients in 2014-15. This estimate reflects the value of improved health outcomes for clients that result from GCASA services, based on the quality of life gains from shortened duration of symptomatology.[3]

In addition, a total value of productivity impacts was estimated at $321,000 in 2014-15, as a result of reducing the duration of symptoms by three months for an estimated 160 short and medium term clients who were employed. This is a conservative estimate, as there may also be longer term productivity impacts in terms of future employment outcomes and impacts on informal carers.

Total socioeconomic benefits for GCASA SASS were estimated to be $3.06 million in 2014-15, compared with costs of $1.24 million. The estimated benefit-cost ratio is 2.47. That is, for every dollar spent, an estimated $2.47 is returned to society in benefits.

A breakeven analysis was conducted to demonstrate the benefits of SABTS and prevention and education programs. Potential benefits to society include the avoided individual, social and economic cost impacts of a sexual assault that may be prevented as a result of participation in SABTS.[4] The contributions of prevention and education services are also considered in valuing these benefits.

[3] The calculation of mental health impacts uses the disability weights for anxiety, which it was assumed (and confirmed with clinicians) would broadly capture the experience of people following a sexual assault, noting that diagnoses may vary among clients. Anxiety is widely referenced in the literature as a common response to a traumatic experience such as sexual assault. Anxiety disability weights were multiplied by the statistical value of a life year to estimate the value of GCASA SASS.

[4] SABTS is only one aspect of a holistic service response and, given the long term nature of potential benefits, it is difficult to isolate the impacts of SABTS from child protection, family intervention, criminal justice and other mental health services. However, SABTS may play an important role in young people's recovery from a compromised early childhood that has resulted in a change to the expected developmental trajectory. Hence SABTS intervention may impact on community safety

The breakeven analysis indicates the necessary rate of effectiveness of SABTS, prevention and education programs in terms of reducing the propensity of clients to commit future sexual offences. GCASA SABTS cost per case is estimated to be $8,690 per client, meaning that:

- Based on criminal justice costs only (Baldry 2012) an avoided sexual assault would result in benefits of $2,778 per offence, the success rate of the SABTS program would need to be very high (more than three avoided assaults per client – without discounting future benefits).
- Based on a wider scope of analysis (Dubourg 2005) which includes individual impacts on the victim, lost output and health service utilisation, costs of $25,952 would be avoided per avoided assault, and the success rate (the rate of avoided assaults) would only need to be 33% (without discounting future benefits).

The findings of this analysis demonstrate the cost effectiveness of GCASA SASS and SABTS, particularly given that estimates of benefits were conservative. SASS demonstrates a strong return on investment, with a BCR of 2.47. While it is difficult to be conclusive about the efficacy of SABTS and prevention and education programs, the large scope for potential gains where these programs are successful in their aims of avoiding future sexual assaults provides a strong rationale for ongoing investment and more detailed evaluation.

1

Background

1.1 Gippsland Centre Against Sexual Assault

Gippsland Centre Against Sexual Assault (GCASA) aims to enhance safety and quality of life throughout the Gippsland region of Victoria, Australia, by reducing the incidence and impact of sexual assault. Comprehensive services are provided, free of charge, across four areas:

- Support to people who have experienced sexual assault, their families, carers and other support networks. This support typically includes advocacy and counselling services
- Assessment and treatment for children demonstrating problematic sexual behaviours, and to young people who are demonstrating harmful sexual behaviour
- Prevention of sexual assault through the provision of community-based education and awareness programs
- Consultancy and professional training for workers in other organisations and community groups, to increase professional knowledge about the incidence, causes and effects of sexual assault, and to develop skills in responding sensitively to people's needs and concerns.

These activities contribute to GCASA's vision of creating a community that is free of sexual assault and violence.

In Victoria there are 16 Centres Against Sexual Assault (CASA), which are funded by the Victorian Government to provide a range of sexual assault prevention and support services. GCASA provides services across the Gippsland region, which extends from Bunyip River to the New South Wales (NSW) border at Mallacoota, and from the Great Divide to the sea, including Phillip Island. The primary offices are in Morwell and in Bairnsdale, with outreach services provided to communities living in Orbost, Sale, Leongatha and Warragul.

1.2 Purpose and Approach

GCASA has commissioned Deloitte Access Economics to undertake an economic evaluation of the services it provides, using a benefits realisation approach. A break-even analysis, then, demonstrates the net value of GCASA services to the community, based on the number of clients receiving services per annum. A comparison is made between per-case costs and the estimated value of services.

1.3 Structure of this report

This report is structured as follows:

- **Section 2** discusses the prevalence and impacts of sexual assault
- **Section 3** outline the services provided by GCASA, and client demographics
- **Section 4** summarises the evidence base for GCASA services
- **Section 5** includes the benefits realisation and break-even analysis.

2

Prevalence and impacts of sexual assault in Australia – findings from a literature scan

The literature scan strategy is described in Appendix A.

2.1 Prevalence

The Australian Bureau of Statistics (ABS) 2012 Personal Safety Survey found that 17.1% of women had experienced sexual violence (defined as sexual assaults and sexual threats) since the age of 15, and that 1% of women over 18 had experienced sexual violence in the 12 months prior to completing the survey. Of men surveyed, 4% had experienced sexual assault since the age of 15, and 0.4% had experienced sexual assault in the 12 months prior to completing the survey (ABS 2012). Both men and women were more likely to experience sexual violence that was perpetrated by a known person, rather than a stranger.

Table 2.1 summarises reported experiences of sexual assault within the 12 months prior to completing the survey in 2012 (per 100,000) population and as a percentage of population. Rates of experiencing sexual assault were fairly consistent across jurisdictions – Victoria reported the lowest proportion (0.7% of women), and the Australian Capital Territory the highest (1.8%). The statistics for men were not disaggregated at jurisdictional level due to low numbers. Sexual assault is a very under reported crime, and thus it is likely these figures are underestimated.

Table 2.1: Women who had experienced sexual assault in the 12 months prior to interview by jurisdiction, 2012

	Per 100,000 population	% of total population
Males^	***37.0**	***0.4**
Females		
New South Wales	30.8	1.1
Victoria	*16.0	*0.7
Queensland	*20.7	*1.2
South Australia	*6.3	*1.0
Western Australia	*8.9	*1.0
Tasmania	*1.8	*0.9
Northern Territory	*0.7	*1.1
Australian Capital Territory	2.6	1.8
Total females	**87.8**	**1.0**

Source: ABS 2012

*These estimates have a relative standard error of 25% to 50% and should be used with caution

^ Due to the relatively small number of males who had experienced sexual assault during the last 12 months, the estimate for males should be used with caution. It was not possible to provide the same breakdown of experience of sexual assault for males as for females as the estimates are subject to very high relative standard errors and are considered too unreliable for general use.

The Australian component of the *International Violence Against Women Survey*[5] also suggested that sexual violence is more likely to be perpetrated by a known person (an intimate partner) and that the risk of sexual violence in adulthood doubled for women who had experienced sexual abuse as a child. This report found that:

- 12% of women reported sexual violence by an intimate partner over their lifetimes and 6% reported rape perpetrated by an intimate partner
- 18% of women reported sexual abuse before the age of 16
- 1% of women reported rape perpetrated by a stranger (Australian Institute of Family Studies 2004).

International research estimates the prevalence of sexual assault involving female victims, ranging from 15% to 51% (Masho, Odor, and Adera 2005, S. E. Ullman and Siegel 1993, Elliott, Mok, and Briere 2004, Randall and Haskell 1995). This significant variation in prevalence reflects that sexual assault is associated with stigma, shame and trauma and is thus a vastly underreported crime (DeGue et al. 2012).

ABS (2014) reported that there were 7,173 sexual assault offences across Australia in 2013 14, a 19.5% increase on the previous year. This rate of increase was fairly consistent across each jurisdiction, with lower rates of increase in South Australia and Victoria.

The offender rate per 100,000 of population aged 10 years and over is lowest in the Australian Capital Territory and highest in the Northern Territory. In 2013-14, Victoria had an offender rate of 30.9 per 100,000 of population. On average across Australia, the sexual assault offender rate per 100,000 of population was 41.9 (ABS 2014). The rate of sexual assault reported in the 2012 Personal Safety Survey was 87.8 per 100,000 for women and 37 per 100,000 for men, reflecting the low rate of reporting of sexual assault to police and proceeding to court.

In the Gippsland region, there are six local government areas (LGAs). For each of these LGAs, Victoria Police publishes rates of various crimes each financial year. These statistics report rape, sex (non-rape) and assault. These numbers per 100,000 population are reported in the table below. While it is difficult to compare these results to 2012 Personal Safety Survey due to the different crimes that were reported, rates of sexual assault crimes are quite high in some regions. The City of Latrobe in particular experienced high rates of rape and assault in 2013-14.

Table 2.2: Rate of rape, sex (non-rape) and assault in Gippsland by LGA for 2013-14

LGA	Rape	Sex (non-rape)	Assault
Bass Coast Shire	87.1	254.8	1,351.2
Shire of Baw Baw	59.7	247.8	931.3
Shire of East Gippsland	20.7	138.2	1,626.2
City of Latrobe	101.6	242.4	2,241.2
South Gippsland Shire	21.5	143.2	619.4
Shire of Wellington	54.3	285.9	1,460.3

Source: Victoria Police 2013-14 Crime Statistics

[5] The International Violence Against Women Survey interviewed 6,677 women aged between 18 and 69 years over the phone between December 2002 and June 2003 (see Australian Institute of Family Studies 2004).

A 2004 briefing by the Australian Centre for the Study of Sexual Assault (ACSSA) within the Australian Institute of Family Studies, reported that in Victoria, there was no clear differentiation between urban and rural rates of sexual assault (ACSSA 2004).

Approximately 17% of Australian women have experienced some form of sexual assault since the age of 15, and 0.7% of Victorian women experienced sexual assault in 2011-12 (ABS 2012). There were 7,173 sexual assault offences across Australia in 2013 14, a 19.5% increase from 2012-13 (ABS 2014). Sexual violence is more likely to be perpetrated by a known person (an intimate partner) and that the risk of sexual violence in adulthood doubled for women who had experienced sexual abuse as a child (Australian Institute of Family Studies 2004).

2.2 The impacts of sexual assault on people

Marx (2005) describes sexual assault as a life-altering event with "pernicious effects" that continue to be experienced long after the incident. This can include a broad range of negative mental health effects (psychological and emotional), physical health effects, social and financial impacts. The impact of sexual assault on mental health has been extensively studied. These impacts can include:

- Post-traumatic stress disorder (van der Kolk 2000, Fisher 2001, Orth, Montada, and Maercker 2006, Clum, Calhoun, and Kimerling 2000, S. Ullman and Filipas 2001b, Miller et al. 2015, Chivers-Wilson 2006)
- Depression (van der Kolk 2000, Clum, Calhoun, and Kimerling 2000, Acierno et al. 2002, Fuller 2015)
- Depersonalisation and dissociation (van der Kolk 2000, Fisher 2001)
- Fear and/or anxiety (Fisher 2001, Miller et al. 2015, Fuller 2015)
- Sexual distress (S. E. Ullman and Siegel 1993)
- Poor body image (R. Campbell and Raja 1999)
- Suicidal ideation and attempted suicide (Brener et al. 1999, Stepakoff 1998).
- The literature also reports a broad range of physical health effects associated with sexual assault, which include:
- Sexually transmitted diseases (Sarkar and Sarkar 2005)
- Gynaecological or reproductive problems (R. Campbell and Raja 1999, Frayne et al. 1999)
- Drug and alcohol abuse (T. M. Davis and Wood 1999)
- Eating disorders (Crome and McCabe 1995)
- Sleep problems (Crome and McCabe 1995)
- Hypertension (Cloutier, Martin, and Poole 2002)
- High cholesterol (Cloutier, Martin, and Poole 2002)
- Obesity (Cloutier, Martin, and Poole 2002)
- Heart attack (Frayne et al. 1999).

Physical health effects may also be described in more general terms. Sadler et al. (2000) found an increased risk of "chronic health problems", and Surís et al. (2008) refer to "poor physical functioning" as a potential impact of sexual assault (Suris and Lind 2008, Sadler et al. 2000).

Social impacts may be caused as a result of 'secondary victimisation'. This refers to negative experiences with the criminal justice system and with health service providers (Ahrens 2006), and receiving harmful or negative responses from family, friends and society more broadly (Davis and Brickman 1996). There may also be significant impacts on the relationships and social lives of people who experienced sexual assault, related to the mental health impacts described above (Crome and McCabe 1995).

The **financial impacts** of sexual assault, for individuals and society, are significant. The economic costs of intimate partner violence, of which sexual assault is a part, was estimated to be $8.1 billion in 2002-03, which would equate to $10.9 billion today (Access Economics 2004).

US studies suggest that sexual abuse of children may have a negative impact on their educational attainment (Macmillan 2000), later job performance (Anda and Fleisher 2004) and earnings (Macmillan 2000). MacMillan found that people had reduced income in adulthood as a result of victimisation in adolescence, with a lifetime income loss estimated at $241,600 (Macmillan 2000).

No Australian-based studies estimating productivity losses associated with sexual assault were identified in this literature review. Hilton et al. (2010) considered the financial impact of psychological distress. This study surveyed more than 60,000 full-time employees from 58 large companies, estimating the total cost of lost productivity due to psychological distress at $5.9 billion in 2010.

The impacts on people who have experienced sexual assault include: mental health impacts, physical health impacts, social impacts and financial impacts. Common mental health impacts are associated with anxiety symptoms, in particular PTSD. Potential physical comorbidities include sexually transmitted disease, reproductive problems, drug and alcohol abuse, eating disorders and sleep problems. Social impacts relate to how people who experience sexual assault are received in treatment and social situations, which may lead to "secondary victimisation", and financial impacts may result from trauma symptoms, in terms of poor employment outcomes.

2.3 The impacts of childhood trauma in relation to children with problem sexual behaviours

DHHS (2010) highlights the key issues associated with children and young people who display sexually harmful behaviours:

- Family stressors – children with sexualised behaviours are more likely to come from families with stress factors such as family violence, poverty, substance abuse, mental illness or a history of abuse. Deprived environments lack important protective factors and are associated with attachment problems in children (Friedrich 2007, Pithers et al. 1998b, Staiger et al. 2005)
- Psychological and emotional problems are common for children with problem sexual behaviours, with anxiety and withdrawal featuring alongside behavioural problems, often extending back over several years.
- Trauma – exposure to chronic trauma may have long-term pervasive effects on a child's development and may lead to serious developmental and psychological problems for children and later in their adult lives. Van der Kolk (2005) identified the following developmental effects of childhood trauma:
  - Disturbances in memory and attention – dissociation, sleep disturbances and intrusive re-experiencing of trauma through flashbacks or nightmares
  - Disturbances in interpersonal relationships – lessened abilities to trust, re-victimisation, victimising others, lessened ability to cooperate and play, and negotiate relationships with others such as caregivers, peers and marital partners
  - Increased anxiety disorders and personality disorders (van der Kolk 2003)
  - Attachment – Disruptions in attachment relationships are common and are likely to increase when maltreatment is prolonged. Children's responses are likely to mimic their parents' (Streeck-Fischer & van der Kolk 2000)
  - Learning difficulties – Children with problem sexual behaviours are more likely to have either slightly lower IQs or specific learning difficulties (between 28% and 88% of clients experience these issues). Experiences of ongoing sexual abuse or violence may impact on a child's ability to concentrate and may lead to learning difficulties. Attention deficit hyperactivity disorder (ADHD) is commonly diagnosed within this group (Pithers et al. 1998, Staiger et al. 2005).

Problem sexual behaviours in children and young people may be an indication that they are experiencing stress, psychological and emotional problems, or trauma. This may be linked to their family or home life. Chronic trauma is associated with a range of developmental issues, such as problems with memory, attention, interpersonal relationships, attachment and learning. Children exposed to trauma may also experience greater incidence of anxiety disorders and personality disorders.

3

Gippsland Centre Against Sexual Assault services

3.1 Overview of GCASA services

The work undertaken by GCASA aims to alleviate the impacts of sexual assault for people who have experienced sexual assault and their families.[6] The delivery of these services is organised into three areas:

- SASS, which includes crisis care, advocacy and counselling services
- SABTS
- Prevention and education services.

These services are described in detail below.

3.2 Sexual assault support services (SASS)

3.2.1 SASS description and client pathways

The SASS program incorporates crisis care, advocacy and counselling services. The crisis care client pathway is summarised in Figure 3.1. The non-crisis care client pathway is summarised in Figure 3.1. In an initial consultation, people discuss their experiences and aims for recovery with a counsellor. If required, they then join the waiting list to receive short to long-term counselling services.

Typically the waiting period is four to six weeks, after which time clients receive regular counselling to help them achieve their recovery goals. Services are tailored to the needs of the individual and there is no "one size fits all" approach, as clients may not require all of the services available.

Figure 3.1: SASS client pathway for crisis response

*Referred services may include housing, employment and legal advocacy

Source: Developed by Deloitte Access Economics with advice from GCASA

[6] These services typically include: Crisis Care; Advocacy; Counselling and Support; Provision of information and Resources; Therapeutic Treatment Services; Education and Training; State-wide Workforce Development, Sexual Assault Prevention Programs; and Research Projects.

Figure 3.2: SASS client pathway for non-crisis response

*Referred services may include housing, employment and legal advocacy

Source: Developed by Deloitte Access Economics with advice from GCASA

Crisis care is a free, confidential 24 hours crisis service for people who recently experienced sexual assault. This service utilised a 'crisis intervention model' that includes three main elements:

Counselling at the time of crisis to assist in primary response healing to lessen long term trauma

- Support and advocacy in making decisions related to police reporting and collection of forensic evidence
- Co-ordinating the response by police, the Department of Health and Human Services, the Victorian Institute of Forensic Medicine service and the Victorian Forensic Paediatric Medical Service to ensure the health and medical needs of the person are met.

GCASA provides **advocacy services** to assist adults, children and young people and their families with access to information, ensuring their legal and medical rights are met. Support is provided in the decisions they make. This can include:

- Legal options, health concerns and safety
- Coordinating crisis care
- Liaising with police, justice, child protection and other services on behalf of people as needed
- Referrals to other services
- Information about a range of community services.

GCASA offers confidential crisis, medium and long-term **counselling services.** These services are offered to female and male children, young people and as well as (non offending) family members, carers and significant others.

GCASA clients may present with mental health issues related to their assault (such as anxiety, depression and post-traumatic stress disorder (PTSD)[7] as outlined in section 2). Counsellors at GCASA use evidence informed approaches, which include cognitive behaviour therapy (CBT), behaviour therapy, acceptance and commitment therapy, group work, play therapy and art therapies. Treatment is tailored to the needs of the individual.

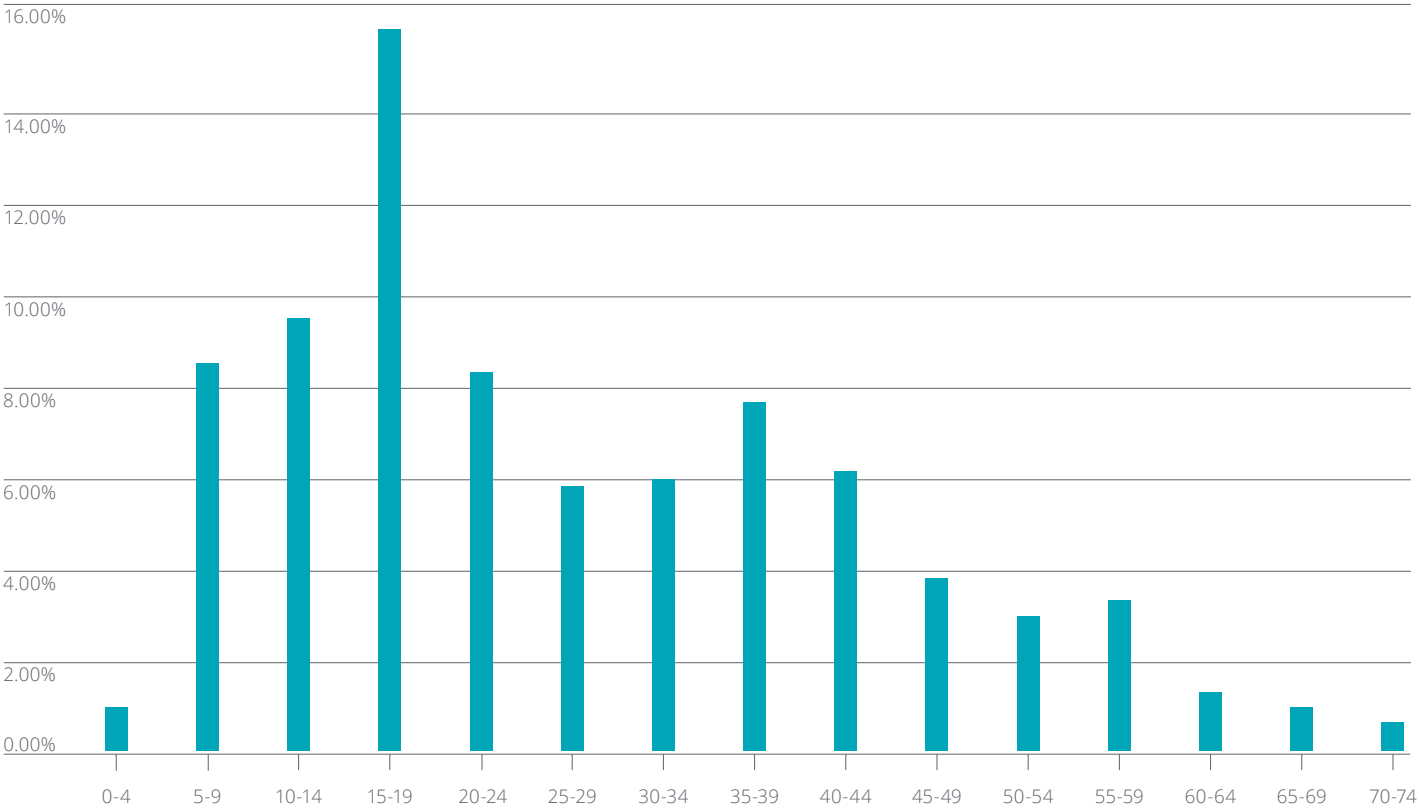
[7] Clients with more serious conditions such as psychosis, or significant drug and alcohol issues are typically referred to other services that can provide more intensive supports.

3.2.2 SASS client demographics

In 2013-14, 615 clients participated in the SASS program. Key characteristics of the client group include:

- 76% (n=503) female
- 15% of clients were aged between 15 and 19 years old (Chart 3.1 shows the age distribution of SASS clients in 2013 14)
- 7.5% identified as Indigenous
- The majority of clients lived in the La Trobe Local Government Area (LGA), with large proportions of clients also living in the East Gippsland and Baw Baw LGAs. These characteristics were broadly consistent in the two years prior to 2013-14.

Chart 3.1: Age distribution of SASS clients 2013-14



Source: Client data provided by GCASA

Note: For 20% (n=123) of clients their age was not reported.

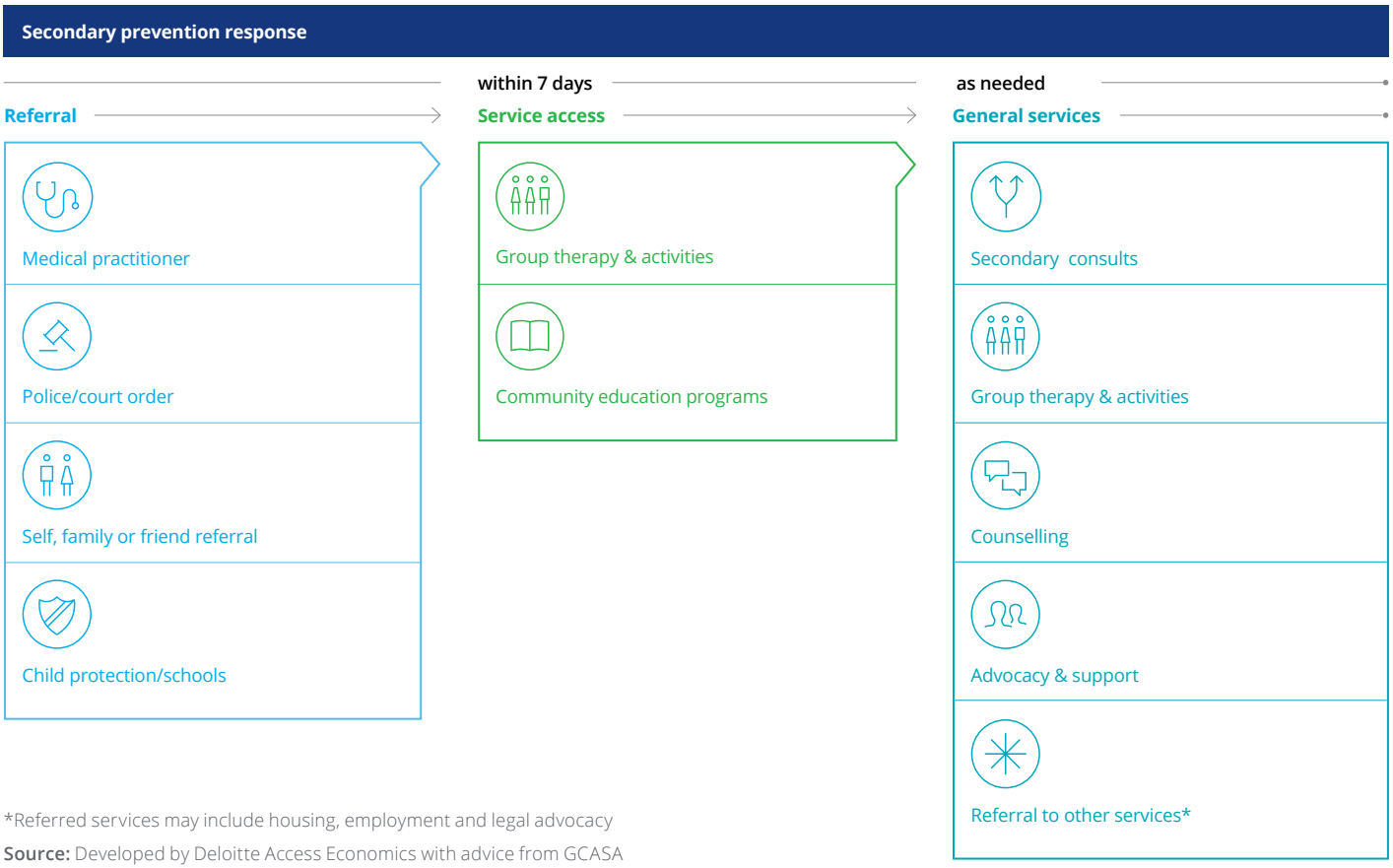
3.3 Sexually abusive behaviours treatment services (SABTS)

3.3.1 SABTS description and client pathways

SABTS targets children and young people (aged under 15 years) with problem sexual behaviours and sexually abusive behaviours. GCASA liaises with the courts, Victoria Police, Child Protection and Juvenile Justice to provide care for children receiving these services.

Once referred to the SABTS program, typically through a court order, GCASA works with the clients' families, schools and communities to implement an intervention framework. This may include counselling services, and participation in education programs as required. Client pathways for this program are summarised in Figure 3.3. The actual services provided are tailored to the needs of the individual as clients may not require all of the services indicated.

Figure 3.3: SABTS client pathway



*Referred services may include housing, employment and legal advocacy

Source: Developed by Deloitte Access Economics with advice from GCASA

3.3.2 SABTS client demographics

In 2013-14, 70 clients participated in the SABTS program at GCASA.
Key characteristics included:

- 81% (n=57) of clients were male
- 12% identified as Aboriginal and Torres Strait Islander
- LGA of residence was similar to that observed in the SASS cohort (predominantly La Trobe LGA, followed by East Gippsland and Baw Baw.

These characteristics were broadly consistent in the two years prior to 2013-14.

3.4 Prevention, Education and other initiatives

GCASA sexual assault prevention and education programs focus on the prevention of sexual violence and support participants to develop respectful relationships. There are a range of prevention and education programs, including the primary and secondary school-based programs, "Sexual Assault Prevention Program in Secondary Schools," "Love Bites" and "Feeling Safe Together". These programs have been conducted in schools across the Gippsland region.

GCASA also develops and delivers tailored training packages for community education and secondary consultation (i.e. programs for other sexual assault service providers), such as the CASA Forum Community Education Package.

Other GCASA initiatives include workforce training programs and research.

- Workforce training programs focus on training in foundations of the work as well as advanced skills
- Collaborative research projects, presentation of research at conferences and publication of research.

4

The evidence base for GCASA services

4.1 The evidence base for advocacy

People who have experienced sexual assault typically have extensive post-assault needs, and may turn to multiple formal social systems for assistance. Research in this space suggests that approximately 26% to 40% of people report the assault to the police and pursue prosecution through the criminal justice system, 27% to 40% seek medical care and medical forensic examinations, and 16% to 60% obtain mental health services (Ullman 1996a, Ullman 1996b, Ullman and Filipas 2001a) How these services treat and interact with people who experienced sexual assault can have a significant impact on recovery. The literature indicates that if people do not receive services they require or are treated insensitively, these systems can magnify feelings of powerlessness, shame and guilt. This 'secondary victimisation' can have a very negative impact on victims' psychological wellbeing (Campbell and Raja 1999, Campbell 2006, Campbell and Raja 2005).

Literature on the impact of advocacy services measures effectiveness in a range of ways. Some studies (Wilson and Klein 2005, Gilson 1997) conducted program evaluations using external or objective criteria, such as resource availability or client usage rates, while others (Wasco 2004, Zweig and Burt 2007) employed more subjective effectiveness measures such as people's perceptions. Both of these types of research have reiterated the positive impacts of advocacy services for people who have experienced sexual assault.

Campbell et al. (2006) used a naturalistic quasi-experimental design to examine whether people who have experienced sexual assault and received the assistance of rape victim advocates had more positive experiences with the legal and medical systems compared to those who did not work with advocates (Campbell 2006). 81 people were interviewed in two urban hospitals about the services they received from legal and medical professionals and how they were treated during these interactions. People who had the assistance of an advocate were significantly more likely to have police reports taken and were less likely to have a negative experience with police officers. People who worked with an advocate during their emergency department care received more medical services, including emergency contraception and sexually transmitted disease prophylaxis, reported significantly fewer negative interpersonal interactions with medical system personnel, and reported less distress from their medical contact experiences. People who receive advocate support experienced less psychological distress, physical health struggles, sexual risk-taking behaviours, self-blame, guilt and depression.

4.2 The evidence base for counselling

The literature suggests that a degree of psychological distress is very common following a traumatic event. Traumatised people are likely to experience emotional upset, increased anxiety and sleep and appetite disturbance (Australian Centre for Posttraumatic Mental Health 2007). GCASA's flexible approach to counselling focuses on assisting clients to move from maladaptive to adaptive recovery strategies to cope with their psychological distress. Maladaptive approaches to dealing with anxiety may include avoidance strategies such as staying at home, social withdrawal, disengagement and substance abuse. These behaviours are typically associated with longer recovery times and higher levels of depression, anxiety, fear and PTSD (Gutner et al. 2006, Frazier, Mortensen, and Steward 2005). Conversely, adaptive strategies such as expressing emotions, seeking social support and reducing stress have been found to be related to faster recovery and less depression, anxiety, fear and PTSD (Gutner et al. 2006, Frazier, Mortensen, and Steward 2005).

Counselling tailored to an individual's particular needs enables people to move from maladaptive to adaptive recovery approaches is supported by the literature on a broad range of health conditions relevant to sexual assault, such as anxiety, depression and PTSD. Nakimuli-Mpungu et al. (2013) considered the impact of counselling of adults with mental distress in post-conflict settings. This research found that in comparison to non-participants, participants had faster reduction in depression scores during the 6-month follow-up period and faster reduction in post-traumatic stress scores during the 3-month follow-up period (Nakimuli -Mpungu et al. 2013).

Sherman (1998) conducted a meta-analysis of results from controlled, clinical trials of psychotherapeutic treatments for posttraumatic stress disorder (PTSD). These treatments included behavioural, cognitive and psychodynamic treatments in group and individual settings. This meta-analysis found that the impact of psychotherapy on PTSD was significant when measured immediately after treatment and at follow-up. Effect sizes for target symptoms of PTSD and general psychological symptoms (intrusion, avoidance, hyperarousal, anxiety, and depression) were also significant (Sherman 1998)

Foa et al. (1991) considered the impact of counselling approaches on people who had experienced sexual assault. This study randomly assigned people with posttraumatic stress disorder to one of four treatments: stress inoculation training (SIT), prolonged exposure (PE), supportive counselling (SC), or wait-list control (WL). All approaches produced improvement on all measures immediately post treatment and at follow-up, particularly for patients who received SIT.

The Australian Psychological Society (2010) conducted a comprehensive literature review of the evidence for various diagnoses and therapies. Evidence is ranked, with Level I being the strongest, most robust evidence. Level I evidence was reported to support the use of CBT to treat PTSD and other anxiety disorders.

4.3 The evidence base for SABTS

The model of care implemented by GCASA is intended to address problem sexual behaviour among children and young people. This is achieved by supporting adults in the child/young person's care giving environment, educational setting and social networks to:

- Effectively respond to the behaviours
- Provide intensive and consistent clinical intervention to the child/young person, focusing on psychosexual development, age appropriate relationship skills and increasing stress management capacity
- Advocate for the child/young person within the legal and child protection context
- Provide trauma counselling to address recent and non-recent interpersonal trauma.

The evidence base for therapy and support services that target children and young people is less developed than the evidence base regarding adult interventions (although it is recognised by practitioners that there is crossover in terms of general approaches). The Australian Psychological Society (2010) reported "Level I" evidence for the use of CBT and family therapy for treatment of conduct and oppositional defiant disorder, attention deficit and hyperactivity disorder, depression and generalised anxiety in children and adolescents. No studies were found that directly provided evidence of the effectiveness of any type of therapy for PTSD in children and young people.

4.4 The evidence base for prevention and education

Sexual assault primary prevention attempts to target the complex and systematic causes of this crime. Key social factors identified in the literature include gender inequality, social norms about gender roles, violence and sexual behaviour (Evans 2009, R. Davis, Fujie Parks, and Cohen 2006, Michau et al. 2015). Education programs run by GCASA focus on these issues. The complexity and interconnectivity of these issues makes it difficult to isolate the impact of a particular program (Quadara and Wall 2012). Furthermore, there may be difficult to observe and measure ripple effects that contribute to the impact of a particular intervention (Trickett 2009).

While risk factors for sexual assault have been the focus of existing research, there is limited evidence on how to best challenge these and instigate long-term change to decrease sexual assault (Banyard, Moynihan, and Plante 2007). What evaluation exists has focused on capturing the experiences and insights of "participants, survivors, perpetrators, educators and those delivering services rather than considering broader change" (R. Davis, Fujie Parks, and Cohen 2006).

Given the ambiguity of the impact of these programs, these impacts were not directly valued, however they were considered in the breakeven analysis.

5

Valuing GCASA services

5.1 Approach to the economic evaluation

A benefits realisation approach was taken to measure the value of GCASA services to their clients and the local community. This included:

- Measuring and valuing the impact of services on SASS clients' mental health outcomes (section 5.2, see also discussion of approach in Appendix B)
- Measuring and valuing the impact of services on SASS clients' productivity (in the workforce – see section 5.2.2)
- Determining the breakeven value of SABTS and prevention and education programs (see section 5.3), to demonstrate the potential value to society of services that may prevent sexual assault.[8]

These estimates are based on the reviewed evidence base for GCASA services, which is presented in section 4.

In both the SASS and SABTS programs, clients are defined as long, medium and short term based on the number of hours of support that they receive, which may then be considered a measure of the severity of their condition. There are three groupings:

- Short term clients: less than ten hours of support (within three months). Clients who receive short term support may experience anxiety and depression, but are generally in good mental health and have fewer co occurring factors that would create complexity in treatment[9]
- Medium term clients: between ten and thirty hours of support (generally within six to nine months). Clients who receive medium term support typically experience more serious mental health issues
- Long term clients: more than thirty hours of support (which may occur over a period of years). These clients often experience more severe symptoms (such as dissociative disorder).

These groupings are used to describe the potential impacts of GCASA services on clients, relative to their needs and trajectory for recovery.

5.2 SASS

5.2.1 Valuing the mental health impacts of SASS

The impact of SASS was estimated by comparing outcomes for people who receive GCASA services to a scenario in which the same group did not receive these supports. The client severity groupings (short, medium and long term, as described in section 5.1) were used in the SASS analysis to measure the gains achieved for clients through accessing GCASA services. That is, the difference in mental health state after receiving GCASA services, compared with before, and the flow on impacts of this on their productivity in the workplace. These impacts were assumed based on the findings of the literature scan described in sections 4.1 and 4.2.

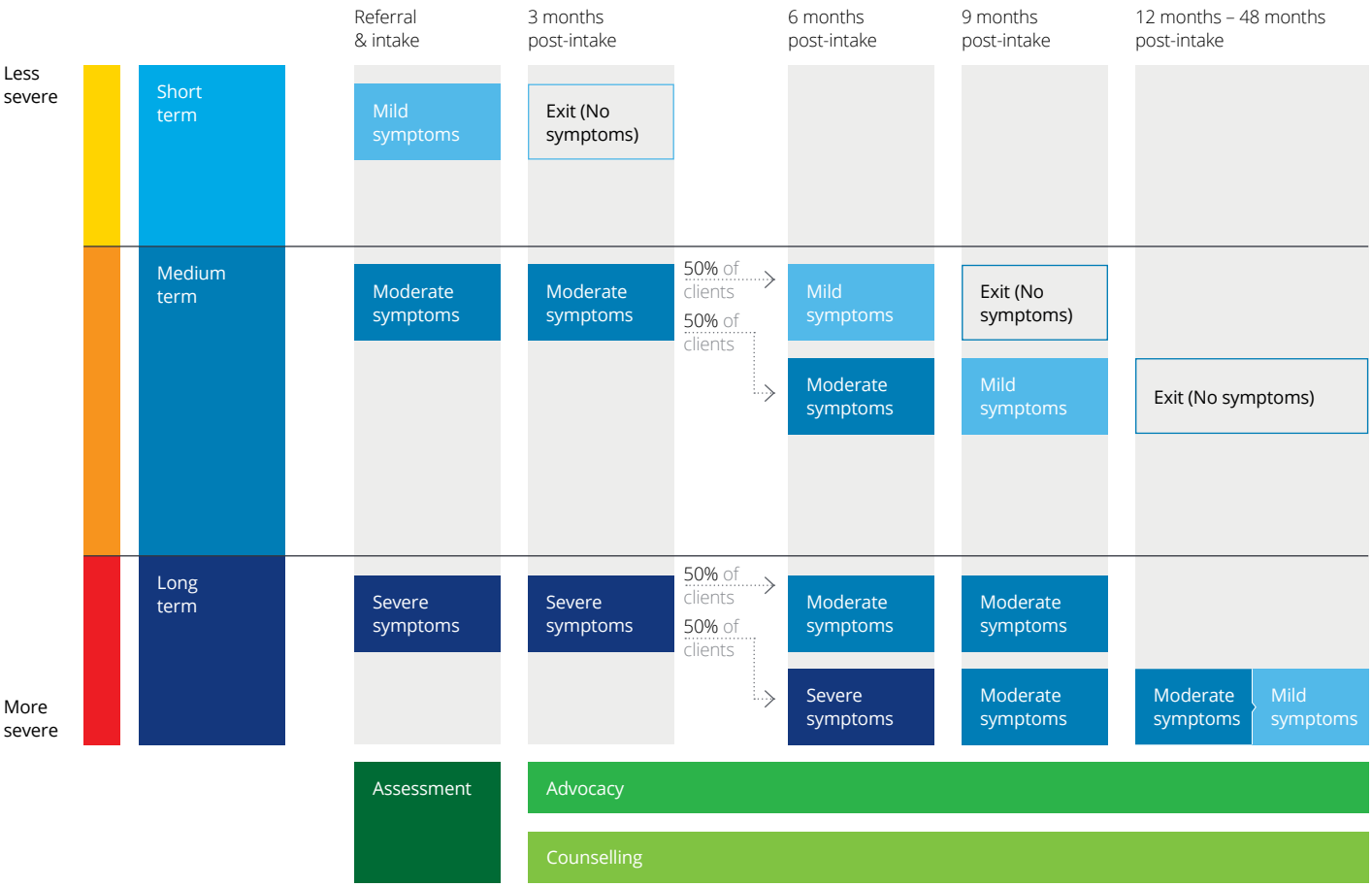
Client impacts were considered from a holistic perspective, for each of the groupings of symptom severity (short, medium and long term). The assumed symptom trajectories for SASS clients are outlined in Figure 5.1 (with GCASA services) and Figure 5.2 (without GCASA services). The primary difference between these trajectories is that recovery is delayed in the absence of SASS.

This approach focuses on addressing the morbidity associated with sexual assault, rather than the mortality. However, it is noted that sexual assault may be associated with increased risk of suicide (Brener et al. 1999, Stepakoff 1998), which may be countered to some degree by support services such as SASS. GCASA staff noted that suicidal ideation was a significant presenting issue among clients. However, no robust evidence was available to support this conclusion or inform cost modelling. As such, mortality impacts have been conservatively excluded.

[8] No evidence was available to estimate the contribution of SABTS to client outcomes (and the likelihood of avoiding future offending). A breakeven analysis was therefore conducted to identify the required rate of effectiveness of the service to achieve a positive return on investment, for government and society.

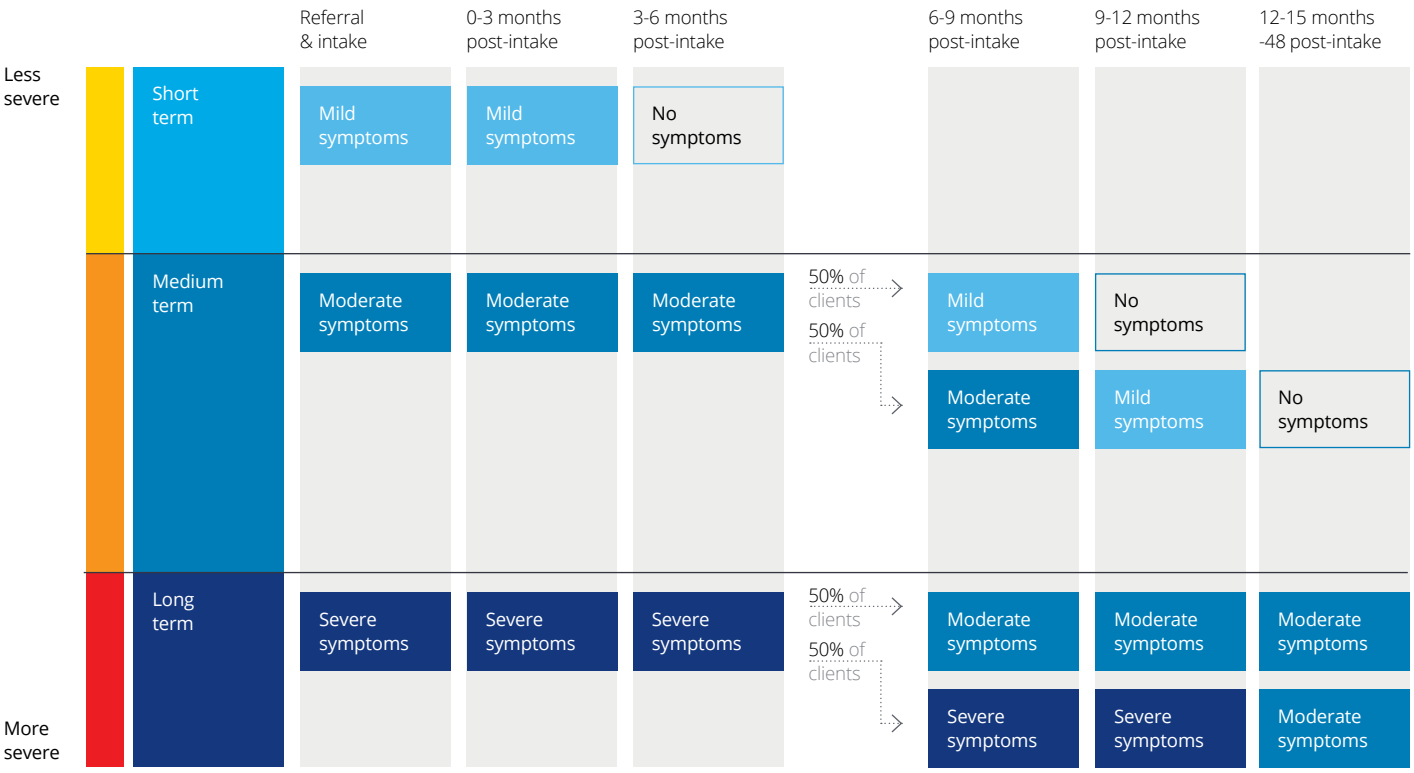
[9] Such factors may include the strength of relationships with friends and family, homelessness, drug and alcohol addiction and previous experience of sexual assault.

Figure 5.1: Assumed symptom levels for GCASA SASS clients



Source: Developed by Deloitte Access Economics with advice from GCASA

Figure 5.2: Assumed symptom levels for clients in the absence of GCASA SASS



Source: Developed by Deloitte Access Economics with advice from GCASA

The total estimated value of mental health impacts for SASS was **$2.74 million**, for 682 clients. This estimate reflects the value of improved health outcomes for clients that result from GCASA services, based on the quality of life gains from shortened duration of symptomatology.[10] This includes estimates of total value to:

- 465 short term clients of $0.63 million in 2014-15, by reducing the duration of mild symptoms by three months
- 155 medium term clients of $1.05 million in 2014-15, by reducing the duration of mild and moderate symptoms by three months (as indicated in Figure 5.1 and Figure 5.2)
- 62 long term clients of $1.06 million by reducing the duration of severe and moderate symptoms (as indicated in Figure 5.1 and Figure 5.2).

Appendix C provides additional detail about these calculations.

[10] The calculation of mental health impacts uses the disability weights for anxiety, which it was assumed (and confirmed with clinicians) would broadly capture the experience of people following a sexual assault, noting that diagnoses may vary among clients. Anxiety is widely referenced in the literature as a common response to a traumatic experience such as sexual assault. Anxiety disability weights were multiplied by the statistical value of a life year to estimate the value of GCASA SASS.

5.2.2 Valuing the productivity impacts of SASS

PTSD and other anxiety disorders are associated with reduced productivity at work. This includes:

- Absences in the course of seeking treatment
- Absenteeism and "presenteeism" as a result of suffering symptoms (i.e. being less engaged with work).[11]

There may also be impacts on informal carers, who are absent from paid employment while caring for the individual.

To the extent that the GCASA SASS is able to reduce the duration and/or severity of symptoms among clients, this may be expected to have beneficial productivity impacts for clients and informal carers. Doran's (2013) rapid review of "the evidence on the costs and impacts on the economy and productivity due to mental ill health" provides the following overview of an Australian study (Waghorn et al. 2005) which considered the impacts of anxiety disorder on workplace productivity:

> Waghorn et al. (2005) used population survey data to ascertain patterns of disability, labour force participation, employment and work performance among people with anxiety disorders in comparison to people without. There is evidence that when anxiety is treated previously impaired work performance can be restored... proportionally more people with anxiety disorders were not in the labour force; fewer people with anxiety disorders were employed... more people with anxiety received government pensions or allowances as their principle source of income; 59% with anxiety disorders reported receiving treatment while 40.9% did not.

Estimated beneficial productivity impacts are shown in Table 5.1. On the basis that a sexual assault may have triggered anxiety symptoms that were not previously present, beneficial productivity impacts are estimated for the reduction of duration of symptoms for short term and medium term clients, as a result of GCASA SASS. It is assumed that long term clients would not have been employed prior to seeking support.

No studies were found that estimated the costs of anxiety symptoms on workplace productivity, hence an approximation was made for depression. Beyondblue and UNSW (2015) conducted a systematic review of reviews of work and depression/anxiety conditions and reported that "the total workplace cost for depression over one year is estimated to be $8,025 per affected individual". This was applied to the assumed number of employed GCASA SASS clients to estimate total beneficial productivity impacts.

Table 5.1: Estimated beneficial productivity impacts of GCASA SASS, 2014-15

Client severity	No. employed clients (assumed)	Value of impact per individual ($ per annum)	Reduced duration of symptoms	Total estimated value for GCASA SASS clients ($)
Short term	120	8,025	3 months	240,750
Medium term	40	8,025	3 months	80,250
Long term	0	n/a	n/a	0
Total estimated value for clients aged 15 and over	**160**			**321,000**

Note: GCASA does not report employment status for clients. Approximately 300 of GCASA's 682 SASS clients were of "working age" (aged 15 and over). The ABS (2015) reported that 58.3% of Victoria's female population was in the labour force, with 6.6% of these unemployed (seasonally adjusted figures). Applying this to the GCASA SASS clients gives approximately 160 employed clients. The allocation of these between short term and medium term clients was done on a pro rata basis, determined from the overall proportions of short and medium term clients. Average weekly earnings for women in Victoria were reported by the ABS to be $842.80 in November 2014 (seasonally adjusted, total earnings including full and part time workers). Reduced duration for both short and medium term clients is expected to be 3 months, as per the symptom trajectories shown in Figure 5.1 and Figure 5.2.

[11] Hilton et al. (2010) found that symptoms such as fatigue, impaired attention, decreased concentration and poor memory can affect employee performance, and that treatment of disorders improves worker productivity.

It is also important to highlight the longer term employment impacts for people with an experience of sexual assault, as a result of developmental issues relating to long term exposure to trauma (as described in terms of the evidence base for SABTS in section 4.3). Macmillan (2000) found evidence for reduced income in adulthood as a result of victimisation in adolescence, with a lifetime income loss (per client) estimated at $241,600 (see discussion in section 2.2).

GCASA does not report whether an informal carer is present for clients, and hence the potential productivity losses among this group have been conservatively excluded.

5.2.3 Summary of economic evaluation of SASS

A comparison of the costs and estimated benefits of the GCASA SASS is presented in Table 5.2.

Table 5.2: Estimated benefits and costs of the GCASA SASS, 2014-15

Client severity	No. clients	Mental health impacts ($m)	Productivity impacts ($m)	Total estimated impact ($m)	Total cost of service delivery* ($m)
Short term	465	0.63	0.24	0.88	
Medium term	155	1.05	0.08	1.13	
Long term	62	1.05	0	1.05	
All clients	**682**	**2.74**	**0.32**	**3.06**	**1.24**

Source: GCASA (cost data) and Deloitte Access Economics estimates. *Costs include all reported costs that are allocated to the program by GCASA, including management, office and professional services (such as counselling and advocacy) costs.

Total socioeconomic benefits for GCASA SASS were estimated to be $3.06 million in 2014-15, compared with costs of $1.24 million. The estimated benefit-cost ratio is 2.47. That is, for every dollar spent, an estimated $2.47 is returned to society in benefits.

5.3 A breakeven analysis of SABTS, prevention and education

5.3.1 The intended future benefits to society of SABTS, prevention and education services

Potential benefits to society include:

- Benefits to the avoided individual (ie. the child/young person or adult that has not been sexually assaulted)
- Social and economic cost impacts of a sexual assault that may be prevented as a result of participation in SABTS.

SABTS is only one aspect of a holistic service response to children and young people who display problem sexual behaviour. Given the long term nature of potential benefits, it is difficult to isolate the impacts of SABTS from services such as child protection, family intervention, criminal justice and other mental health services. However, as reflected in the evidence base discussed in section 4.3, SABTS may play an important role in clients' recovery from chronic trauma, and hence impact community safety outcomes. The contributions of prevention and education services are also considered in valuing these benefits.

In 2012, Baldry et al conducted a study of lifelong institutional costs of homelessness for vulnerable groups (Baldry 2012). This study developed pathway costings using the Mental Health and Cognitive Disability in the Criminal Justice System (MHDCD) dataset. This dataset contains data on lifelong interventions and interactions with all criminal justice and some human services agencies that are available for a cohort of 2,731 people who had been in prison in New South Wales and for whom MHDCD diagnoses were known. Baldry calculated the average cost per charge, based on the number of adjournments per person charged for each cost, and cost per criminal finalisation (data from the Bureau of Crime Statistics and Research (BOCSAR) and the Productivity Commission (PC) inflated to current values).

The average costs for aggravated and non-aggravated sexual assault are presented in Table 5.3. These are divided into court costs and legal costs. In 2014 dollars, it was estimated that on average a sexual assault case incurs $1,490 in court costs and $1,288 in legal costs.

Table 5.3: Average cost per sexual assault case in the Children's and Local Courts, NSW, 2014

LGA	Court costs ($)	Legal costs ($)	Total costs ($)
Aggravated sexual assault	1,486	1,337	2,823
Non-aggravated sexual assault	1,573	1,066	2,639
Total	**1,490**	**1,288**	**2,778**

Source: (Baldry 2012)

Research from the United Kingdom (Dubourg 2005) also considered the broader costs to the individual, including the impact on the victim, lost output, health services and the criminal justice system. In 2014 Australian dollars, these estimated costs equated to $25,952 per assault. The calculation is shown in Table 5.4.

Table 5.4: Costs per sexual offence, UK

Impact	2005 (£)	2014 (£)	2014 ($)
Impact on victim	22,754	28,898	18,783
Lost output	4,430	5,626	3,657
Health services	916	1,163	756
Criminal justice system	3,298	4,188	2,722
Average total cost	**31,438**	**39,926**	**25,952**

Source: Dubourg 2005

The Baldry and Dubourg estimates vary in their scope but are remarkably closely aligned in their estimates of criminal justice system costs ($2,778 vs. $2,772), given that they are conducted in different jurisdictions and at different time points. For the purposes of the breakeven analysis in section 5.3.2, comparisons are made with both estimates.

5.3.2 Breakeven analysis of SABTS, prevention and education

The purpose of the breakeven analysis is to indicate the necessary rate of effectiveness of SABTS, prevention and education services in terms of reducing the propensity of clients to commit future sexual offences. The analysis is based on the estimated costs per offence presented in section 5.3.1.

GCASA reported costs for SABTS in 2014-15 of approximately $0.5 million, for 57 clients, a mean cost of $8,680 per client.[12]

- Based on Baldry's analysis (criminal justice costs only) that an avoided sexual assault would result in benefits of $2,778 per offence, the success rate of the SABTS program would need to be very high (more than three avoided assaults per client)
- Based on Dubourg's wider analysis that costs of $25,952 could be avoided per avoided assault, the success rate (e.g. the rate of avoided assaults) of SABTS would need to be much lower, at 33%.

5.4 Conclusion

The findings of this analysis demonstrate the cost effectiveness of GCASA SASS and SABTS, particularly given that estimates of benefits were conservative. SASS demonstrates a strong return on investment, with a BCR of 2.47. While it is difficult to be conclusive about the efficacy of SABTS, prevention and education programs, the large scope for potential gains where these programs are successful in their aims of avoiding future sexual assaults provides a strong rationale for their provision

[12] Costs include all reported costs that are allocated to the program by GCASA, including management, office and professional services (such as counselling and advocacy) costs.

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Appendix A: Literature scan strategy

The purpose of the literature scan is to capture all relevant and publicly available information pertaining to the benefits of SASS and SABTS. In particular, it considers the evidence base for better mental health outcomes as a result of sexual assault support services.

The literature scan focused on three questions:

- What is the prevalence and incidence of sexual assault in Australia, Victoria and Gippsland?
- What impacts does sexual assault have on children/young persons and adults?
- What impacts does SASS have on children/young persons and adults who have experienced sexual assault?
- What is the evidence to support SABTS?
- What is the evidence to support prevention and education?

The search strategy for this literature review was organised into two stages: the development of a research question and related search terms, and the application of this search to relevant search engines, databases and journals.

The 'PICO' approach was utilised to develop a research question, which identified the population, indicator, control and outcome (summarised in columns one and two of Table A.1). Our research question combined each of the identified elements. We then identified search terms associated with each of the PICO parameters.

Table A.1: Summary of question framework and search terms

Question elements	Parameters	Search terms
Population	People in Australia, Victoria and Gippsland	Australia OR Victoria OR Gippsland
Intervention	• Sexual assault • Sexual assault support services.	• Person who experienced sexual assault • Support services OR counselling OR education OR advocacy.
Comparator/control	• People who have not experienced sexual assault • People who have not received support services.	• Randomised control trial OR comparison • Sexual assault support services OR rape support services.
Outcome	• Mental health • Physical health • Employment.	• Mental health outcomes OR anxiety OR depression OR quality of life • Physical health OR injury • Employment OR work.

The following sources were searched for relevant literature:

- Australian Government, State and Territory Government websites including Victorian Department of Human Services, specifically Victorian Centres Against Sexual Assault
- PubMed, Google Scholar and Scopus (for peer-reviewed literature)
- Australian Institute of Family Studies.

Appendix B: Approach to valuing the health and wellbeing impacts of GCASA services

Disability weights

The World Health Organisation (WHO) publishes disability weights for all non-fatal consequences of disease and injury. A disability weight quantifies health loss – it is a weight factor that reflects the severity of a disease on a scale from 0 (perfect health) to 1 (equivalent to death). These measures were re-estimated in 2010 for the Global Burden of Disease Study. To do this, judgements about health losses associated with many causes of disease and injury were elicited from the general public in diverse communities. This was completed through household and telephone surveys in Bangladesh, Indonesia, Peru, Tanzania and the USA, and an open-access web-based survey. The following table summarises disability weights published in this research for anxiety disorders.

Table B.1: Summary of disability weights associated with levels of anxiety

Mental, behavioural, and substance use disorders	Disability weight	Confidence interval
Anxiety disorders: mild	0·030	(0·017–0·048)
Anxiety disorders: moderate	0·149	(0·101–0·210)
Anxiety disorders: severe	0·523	(0·365–0·684)

Source: Salomon 2012, Common values in assessing health outcomes from disease and injury: disability weights measurement study for the Global Burden of Disease Study 2010, The Lancet, volume 380.

In light of existing literature on the impact of therapeutic services, we assumed that receiving counselling would decrease a person's anxiety following a sexual assault from 'moderate' to 'mild'. This reflects GCASA's focus on people with moderate mental health issues, and that the literature suggests anxiety is improved following treatment, but not entirely removed.

Value of a statistical life year

The Australian Department of the Prime Minister and Cabinet published research on the value of statistical life and the value of a statistical life year. In 2014 dollars, a statistical life year was valued at $182,000 (Department of the Prime Minister and Cabinet 2014). The value of statistical life year estimates the value society places on reducing the risk of premature death, expressed in terms of saving a statistical life year. That is, this value is measured by estimating how much society is willing to pay to reduce the risk of death.

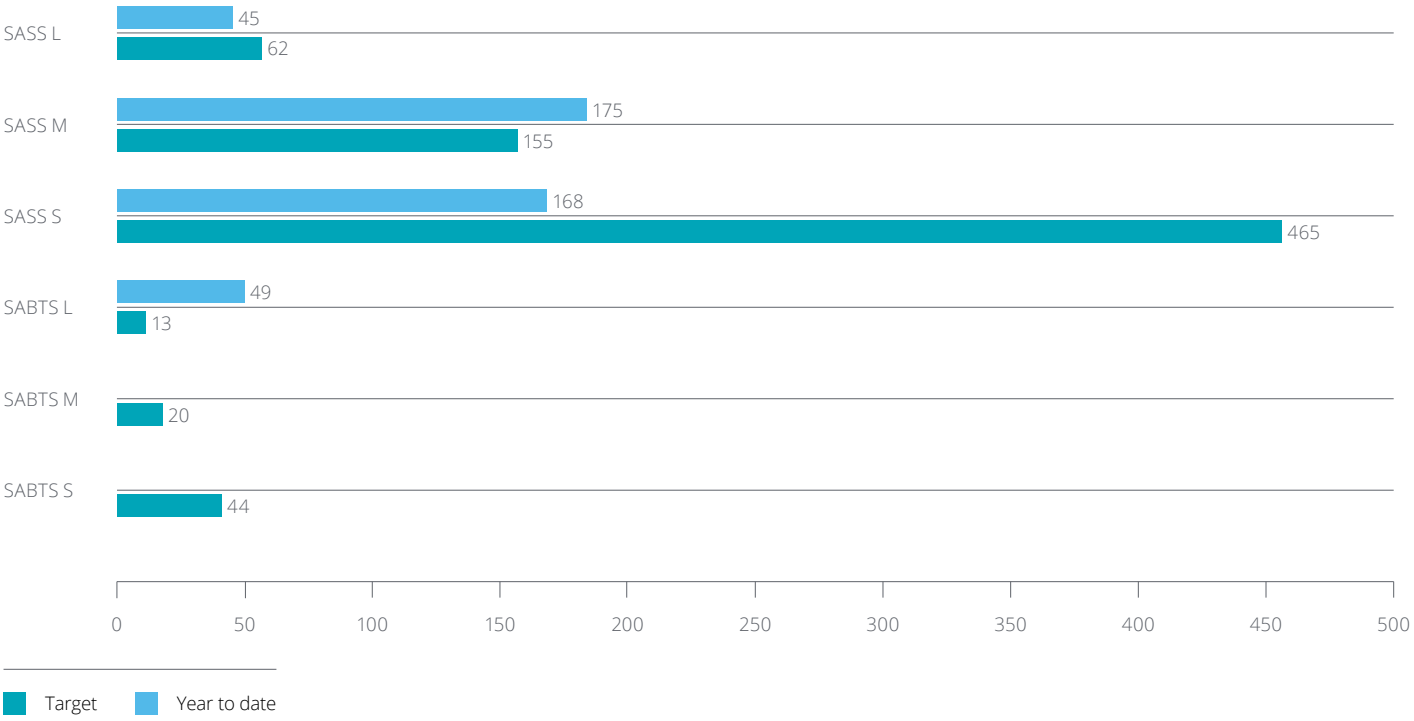
Client numbers and service duration

In both the SASS and SABTS programs, clients are defined as long, medium and short term service users based on the number of hours of support that they receive. The hours of support received by each individual are as follows:

- Short term: less than ten hours of support
- Medium term: between ten and thirty hours of support
- Long term: more than thirty hours

The chart below shows the number of people who have received short, medium and long term services in the SASS and SABTS services.

Chart B.1: Number of people who received short, medium and long term SASS and SABTS services in 2013-14



Source: GCASA

Appendix C: Detailed calculations of mental health impacts

Short term clients

Table C1: Calculation of disability, short term clients 2014-15

Measure	Value
Anxiety disorders: mild	0.030 (disability weight)
Value of statistical life year	$182,000
Number of short term clients	465
Cost of mild anxiety per person for three month period	$1,365

Table C2: Estimated value of disability, short term clients 2014-15 ($)

Short term	0-3 months	3-6 months	6-9 months	9-12 months
With GCASA	634,725	0	0	0
Without GCASA	634,725	634,725	0	0
Difference	**0**	**634,725**	**0**	**0**

Medium term clients

Table C3: Calculation of disability, short term clients 2014-15

Measure	Value
Anxiety disorders: moderate	0.149 (disability weight)
Value of statistical life year	$182,000
Number of short term clients	155
Value of disability, moderate anxiety per client for three months	$6,779

Table C4: Estimated value of disability, medium term clients 2014-15 ($)

Medium term	0-3 months	3-6 months	6-9 months	9-12 months
With GCASA	1,050,823			
* 50% Mild		105,788	0	$0
* 50% Moderate		525,411	105,788	$0
Without GCASA	1,050,823	1,050,823		
* 50% Mild			105,788	$0
* 50% Moderate			525,411	105,788
Difference	**0**	**419,624**	**525,411**	**105,788**
Total				**1,050,823**

Long term clients

Table C5: Calculation of disability, long term clients 2014-15

Measure	Value
Anxiety disorders: severe	0.523 (disability weight)
Value of statistical life year	$182,000
Number of short term clients	62
Cost of moderate anxiety per person for three month period	$23,796

Table C6: Estimated value of disability, long term clients 2014-15 ($)

Long term	0-3 months	3-6 months	6-9 months	9-12 months
With GCASA	1,475,383			
* 50% Mild		210,165	210,165	210,165
* 50% Moderate		737,692	210,165	210,165
Without GCASA	1,475,383	1,475,383		
* 50% Mild			210,165	210,165
* 50% Moderate			737,692	210,165
Difference	**0**	**527,527**	**527,527**	**0**
Total				**$1,055,054**

Limitation of our work

General use restriction

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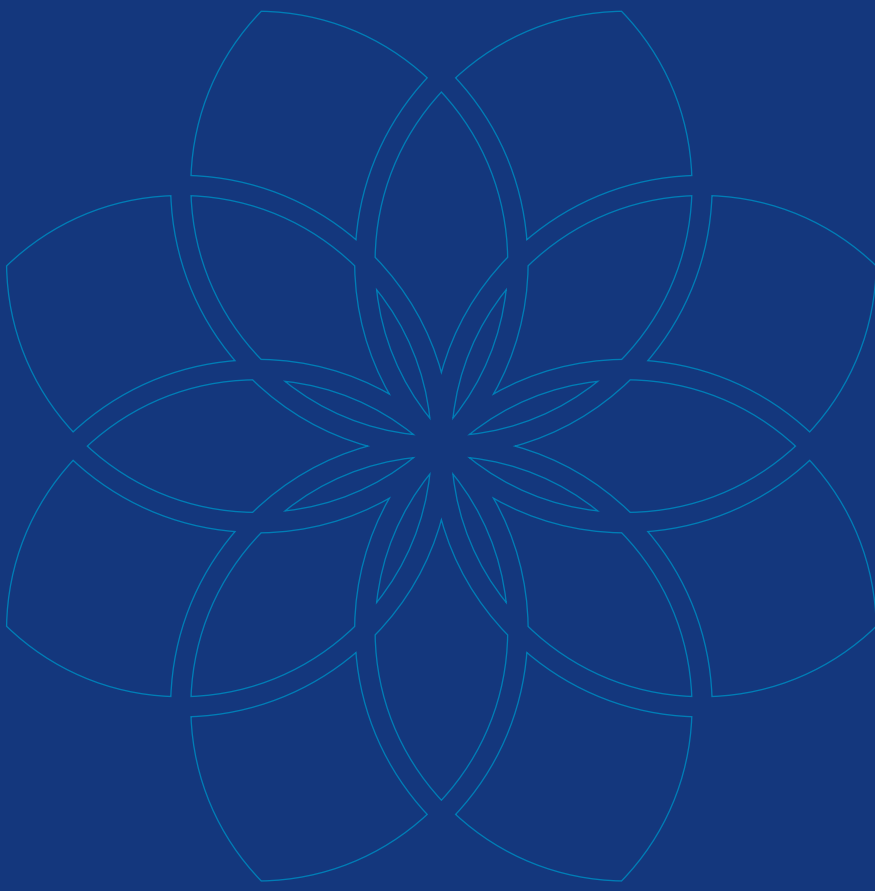

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