

CENTRE FOR INCLUSION AND CITIZENSHIP



A Comparison of Cost and Service Utilization Across Individualized and Traditional Funding Options Through Community Living British Columbia

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Abstract

Community Living British Columbia (CLBC) is the provincial crown agency mandated under the Community Living Authority Act, to deliver supports and services to adults with developmental disabilities and their families in British Columbia. Since its inception in 2005, CLBC has developed a variety of funding mechanisms to deliver supports and services including four models of individualized funding (IF). While there has been a significant amount of research on IF, there has been relatively little which examines the comparative cost and service utilization of IF in comparison with traditional (block) funding methods and across modes of IF delivery. Using descriptive statistics and secondary data analysis on service usage and cost of four IF modes, this quantitative study sheds light on the usage and cost of services across IF modalities and in comparison with block funding methods offered by CLBC. The results reveal IF costs are generally lower or on par with traditional methods but show some variation across IF modes. The results also demonstrate some inconsistency across regions and in relation to service users needs.

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Table of Contents

Executive Summary.....6

Introduction and Background.....8

Previous Literature on Funding Mechanisms.....10

Methods.....14

Results.....15

 Overview Across Funding Modes.....15

 Individualized Funding Modes.....16

 Direct funded respite.....16

 Direct funding.....20

 Host agency.....27

 Microboards.....32

 Comparison Across Funding Modes.....39

Discussion and Implications.....43

Limitations and Recommendations for Further Research.....46

References.....47

List of Tables

Table 1: The Mean, Standard Deviation and Range of Annual Funding by Funding Mode.....	15
Table 2: Direct Funded Respite - Sample Characteristics.....	17
Table 3: Direct Funded Respite - Funding by Region.....	18
Table 4: Direct Funded Respite - Funding by Age.....	19
Table 5: Direct Funded Respite - Funding by Gender.....	19
Table 6: Direct Funded Respite - Funding by GSA level.....	19
Table 7: Direct Funded Respite - Funding by Number of Flags.....	20
Table 8: Direct Funding - Sample Characteristics.....	21
Table 9: Direct Funding by Type of Service Received.....	23
Table 10: Direct Funding - Number of Service Users and Services Received.....	24
Table 11: Direct Funding by Region.....	25
Table 12: Direct Funding by Age.....	25
Table 13: Direct Funding by Gender.....	26
Table 14: Direct Funding by GSA Level.....	26
Table 15: Direct Funding by Number of Flags.....	27
Table 16: Host Agency Funding - Sample Characteristics.....	28
Table 17: Host Agency Funding by Type of Services Received.....	29
Table 18: Host Agency Funding by Number of Service Users and Services Received.....	30
Table 19: Host Agency Funding by Region.....	31
Table 20: Host Agency Funding by GSA Level.....	32
Table 21: Host Agency Funding by Number of Flags.....	32
Table 22: Microboard Funding - Sample Characteristics.....	33
Table 23: Microboard Funding by Type of Services Received.....	35
Table 24: Microboard Funding by Number of Service Users and Services Received.....	36
Table 25: Microboard Funding by Region.....	37
Table 26: Microboard Funding by Age.....	38
Table 27: Microboard Funding by GSA Level.....	39
Table 28: All IF Modes - Frequency of Value Ranges Across Three IF Modes.....	39
Table 29: All Funding Modes - Funding Allocated by Service.....	41
Table 30: All IF Modes - Funding Allocated by GSA Levels.....	42
Table 31: All IF Modes - Funding Allocated by Number of Flags.....	43

Executive Summary

Community Living British Columbia (CLBC) is a provincial crown agency mandated under the *Community Living Authority Act* to deliver supports and services to adults with developmental disabilities and their families in British Columbia.

In addition to traditional block-funded services, individuals and families have several Individualized Funding (IF) options through CLBC. These include direct funded respite, direct funding, host agency funding, and microboard funding. The aim of this study was to identify and analyze relationships between service utilization, cost of services, and service modalities in order to:

- Provide an accurate picture of comparable cost for similar services delivered by different means;
- Identify whether there were significant cost variations associated with different funding methods for similar services;
- Determine whether particular service utilization patterns are associated with particular delivery modalities; and
- Examine key demographic variables associated with each of these.

Previous research on the delivery mechanisms for services and supports has generally supported policy and practice goals towards greater independence, favouring funding attached to individuals as opposed to services. Researchers have described in detail the benefits that IF structures promote, as well as the limitations of these structures in practice. While previous reviews have also examined some the range of services covered by various IF initiatives, there has been little discussion as to the cost of IF models in comparison with traditional models or across IF models.

The study reported on here involves a statistical analysis of cost and usage of community living programs in British Columbia within and across the five funding modes. The study's quantitative data analysis incorporated descriptive statistics, as well as bivariate analysis to explore associations between the types of services received and independent variables.

Results of the analysis offer a picture of usage, costs, and demographic circumstances surrounding the uptake of individually funded services in British Columbia. Demographically, there is indication of some trends in the types of service users using one of the three IF modes.

Some significant characteristics of this variation suggest that regional preferences in IF modes exist. While not absolutely consistent across funding types, there was a general positive correlation between GSA level and usage of IF funding methods, meaning that more people with high GSA scores used IF funding methods than those with low GSA scores. With regard to flags, there was a general negative trend in usage with regards to flags - the fewer flags associated with an individual, the more likely they were to use IF funding methods.

All of the core IF modes provided a broad array of services with respite and community based services having a high frequency across types. Overall, with the exception of microboards, two core IF methods (host agency and direct funding) have lower costs than block funded services in all service areas, with the exception of community based supports and employment. With respect to microboards, the study reveals a higher cost for this mode in comparison to both IF funding modalities and block funded services. The current study supports the view that IF methods can cover virtually all services supported by CLBC, at a cost relatively equal to or lower than traditional block funded services.

From a cost perspective, both direct payments and host agency modes of IF would seem to offer the most economical options; however, microboards may in fact offer equal or better value for money when other considerations such as building social capital, ongoing network support and ability to support persons with complex support needs are considered.

Introduction and Background

Community Living British Columbia (CLBC) is a provincial crown agency mandated under the *Community Living Authority Act* to deliver supports and services to adults with developmental disabilities and their families in British Columbia. CLBC assumed authority in 2005 after years of development, and as a result of family and self advocacy leadership as well as professional and academic expertise. The aim of this shift in authority (the mandate was previously under the jurisdiction of the Ministry of Child and Family Development) was to create a community-based, consumer-driven and responsive system of supports for adults with developmental disabilities (Stainton, 2005).

One of the ways CLBC sought to achieve this aim was by introducing a system of individualized funding (IF) to increase control and flexibility among service users and their families. Since its inception, much attention has been directed towards evaluating the success of various elements of system change that CLBC has brought with it - including IF. This report evaluates the comparative cost of various IF funding methods employed by CLBC and the average cost of traditional block funded services. In addition, the report looks at the specific service cost and utilization funded by different IF methods and the demographic profile of users.

The suite of services, eligibility and assessment criteria, and service modalities used by CLBC are briefly described below. The range of support services funded by CLBC includes residential, non-residential and other family and individual supports. Residential services take the form of live-in support, shared living (often called homesharing), cluster apartment living, and staffed residential settings. Respite services are either funded through direct payments to families or through CLBC or agency-based contracts. Community inclusion services include supported or customized employment, skill development, community-based or home-based supports. Other supports for individuals and families include behavioural consultation, home-maker services, outreach support, direct support for individuals and families, supports to home sharing or live-in support, and support coordination services. The desired outcome of all of these services follow the vision of the crown corporation, *good lives in welcoming communities*.

In order to access these services, individuals must be deemed eligible through a formal assessment process by a registered professional. Once eligible, an internal assessment of the individual's disability-related needs and support preferences is conducted. The Guide to Support Allocation (GSA) is the instrument used by CLBC to determine the level of support an individual requires from level one (minimal support) to level five (maximum support). In addition, 'flags' are used to augment the GSA by highlighting specific risks such as medical or behavioural issues. The flags range from 0-5, with five being the highest risk. This instrument was still in a development phase for the period covered by the data.

The system element central to this study is the methods used to fund the delivery of services to individuals and families. At its inception, the CLBC structure and operational model presented significant changes in the way service funding is accessed by families and individuals in British Columbia. CLBC funds supports and services through a variety of methods which follow one of three mechanisms: traditional block funding, where contracts are made with approved agencies to deliver set amounts of service units; contracts made directly with individual home share providers; and funding negotiated through a variety of IF options. IF has been developed as a way to provide individuals and families with flexible, person-centred, self-directed payment options for arranging, managing, and paying for supports and services.

Individuals and families have several IF options through CLBC.

- *Direct Funding* allows the individual, family or their representative(s) to receive funding directly to retain and manage agreed upon supports.
- *Host Agency Funding* sees IF channeled through an agency selected by the individual or family. The agency then supports the individual and/or their family or representative to utilize and manage their funds for agreed upon supports.
- *Microboard Funding*, allows the microboard, an incorporated entity, to receive and manage the funding. In this structure, the individual requiring support and their network are the members of the board, and the board's only purpose is to support the single individual.
- *Direct funded respite* (as with direct funding above but exclusively for respite).

The aim of the study was to identify and analyze relationships between service utilization, cost of services, and service modalities in order to:

- Provide an accurate picture of comparable cost for similar services delivered by different means;
- Identify whether there were significant cost variations associated with different funding methods for similar services;
- Determine whether particular service utilization patterns are associated with particular delivery modalities; and
- Examine key demographic variables associated with each of these modalities.

Previous Literature on Funding Mechanisms

Research on the delivery mechanisms for services and supports has generally supported policy and practice goals towards greater independence, favouring funding attached to individuals as opposed to services. The overarching rationale is that block funded services tend to cater to the interests of systems and agencies as opposed to the interests of meeting individual needs. This is consistent with a rights-based approach to disability, where individuals receive the supports and services that enable inclusion and citizenship in society, rather than emphasizing collective approaches to care giving and protection for people with disabilities. As stated by Stainton (2009), “while on one level IF is simply a policy mechanism, it is embedded in a discourse of rights, freedoms, and equality within the disability communities” (14).

Scholars such as Stainton and Boyce (2004), Powers (2006), Laragy (2009), and Lord and Hutchinson (2003) have described in detail the benefits that IF structures promote. These include enhanced self-determination and autonomy, satisfaction, well-being, enhanced quality of life and more positive service outcomes when compared to more traditional funding mechanisms. Lord and Hutchinson suggest that individualizing relationships between funders and service users actually builds the capacity for individuals, families and communities to participate more readily in the world around them. With choice and flexibility in the types and ways services are received, people are better able to live according to their personal goals and objectives, making it possible to achieve their aspirations as opposed to simply conforming to a set of outcomes typi-

cally associated with disability programming.

With these benefits come some important limitations or cautions with the wholesale adoption of this new model, and research over the past decade has articulated some of these. Firstly, the administrative burden of IF can be very onerous for individuals and families, who often lack the time and resources needed to carry out successful support plans (Powers, 2006). Since the traditional block funding system has been well established over time, the liability and licensing procedures involved with formal service delivery cannot be easily parsed out to individual units or families administering IF. The costs of these procedural mechanisms are often not covered in IF contracts, leading to a lack of competitive or safeguarded employment for staff (Powers, 2006). The protections traditionally offered by unionized employment also present challenges for the development of a healthy workforce under IF systems (Stainton, 2009).

A further concern over adopting IF as a policy goal is related to the level of vulnerability associated with intellectual disability. Powers (2006) has critiqued mechanisms that assume a requisite competency level for individuals accessing IF, suggesting that this creates a real gap in the safeguarding of supports for this group. Systems set up without proper safeguards, Laragy (2009) suggests, make access to this mechanism unequal. In other words, without pointed consideration of access issues, IF would remain out of reach for people who lack the skills and resources to properly utilize this option. This introduces the risk that those with the highest support needs may be further marginalized by an IF system of supports.

To counter these potential limitations, these scholars suggest that IF must be “embedded in a broader context of service and policy structures” (Stainton, 2009, 15). This broader context must ensure equity in terms of funding levels across geographic jurisdictions, levels of disability-related need, and demographic factors such as gender and age. An additional system component noted by Lord & Hutchinson (2003), Laragy (2009) and Stainton (2009) is the provision of information, planning, and management support provided as component of IF systems. This would be seen as accommodating the needs of those who would not otherwise access the IF option. The delivery of IF mechanisms must finally be offered in a way in which its principles,

policies and practices are seen to be in coherence with one another, in order to allow individuals to experience the benefits listed above (Lord & Hutchinson, 2003).

While previous reviews have also examined the range of services covered by various IF initiatives, there has been little discussion as to the cost of IF models in comparison with traditional models or across IF models. Below is a brief summary of the literature on cost and resources, given the paucity of data it includes data from other user groups which is indicated where applicable.

Conroy et al (2002) studied the US Self-determination initiatives for people with intellectual disabilities utilizing comparison and control groups. Results varied but in the three States reported on he found:

- New Hampshire: 12.4%-15.5% cost reduction over traditional funding methods.
- Michigan: Cost reduced by 6.7% on average with the greatest reduction amongst those with the highest (and costliest) needs.
- California: Cost rose for both the Self determination (IF) and control groups but cost rose at a rate 50% less for the self determination group and the study concludes that IF is a very effective break on cost escalation.

Rigorous control group studies were conducted on the Cash and Counselling initiative (CC), the US individualized funding programme for seniors and people with physical disabilities. The Arkansas project shows CC in the first year was more expensive than traditional methods but the authors note that the level of service was far higher in the control group. Despite this difference by year two the cost had reached relative neutrality. The authors conclude ‘adopting a “Cash and Counselling” model of consumer direction can be a cost-effective way to substantially improve the access to care and well-being of people eligible for Medicaid personal care.’ (Dale et al, 2004).

The cost related literature on the UK Direct Payments (DP) program is limited and focuses mainly on physical disability, the primary user group. Existing literature ranges from citing savings of 30%-40% on support packages (Zarb&Nadash, 1994) to more cautious estimates which suggests that DP may not result in cost savings, but that they ‘certainly represent value for

money' (Taylor in Glasby&Littlechild 2002). Dawson (2000), in one of the more comprehensive evaluations of a DP scheme concludes that DP is a cheaper alternative to direct service, and that the scheme should become cheaper still over time. She does note, however, the difficulty in estimating all the related costs such as opportunity costs to the Local Authority, and indicates that the approach used in the implementation can have a significant impact on the overall cost of such schemes. It should be noted that from the outset DP schemes were required to be 'at least as cost effective' as services otherwise arranged (DoH, 1997 in Glasby&Littlechild, 2002). A study of DP programmes in two Welsh authorities (Stainton, Boyce & Phillips, 2009) concluded that if implemented effectively, DP need not be any more costly than traditional services and may over time prove to be less costly. They also found evidence to suggest that considerable opportunity cost savings could be achieved with better policy, systems, training and procedures, along with a critical mass of users. This is consistent with other findings (Carmichael & Brown, 2002) which suggest that overly complex administrative procedures, a lack of critical mass, lack of training and experience among case managers, and a lack of effective support services hinder the take-up rate, effectiveness and efficiency of direct payments schemes.

In the most recent and comprehensive study of DP, the Personal Social Services Research Unit (Davey et al, 2007) surveyed all Local Authority (the statutory bodies responsible for community care) direct payment and support schemes in the UK. Their findings indicate wide variation in implementation and cost, but overall found that direct payments were cheaper for learning disability (intellectual disability). It should be noted that this is based the percentage of community care budget spent on direct payments for each group compared to the percentage of users on direct payments. As such it does not directly account for variation in intensity, type of support, etc. which may affect cost comparisons. For residential care cost, live-in direct payments were less expensive on average than comparable cost for residential care for all groups except older people and mental health. This study also notes that comparison can be further complicated by the inclusion in DP rates of items such as: Tax; National insurance; Holiday pay; Sickness pay; Start-up costs; Contingency funds; and Support costs.

Methods

The study reported on here involves a statistical analysis of cost and usage of community living programs in British Columbia within and across the five funding modes: direct funding, host agency funding, funding via microboards, and traditional block funded services. The fifth, direct funded respite, funds respite services exclusively, as opposed to the other modes that fund a broad range of supports. As such, the most detailed analysis was sought for the three broad IF programs, which were later compared to the aggregate data for traditional block contracts.

The study's quantitative data analysis incorporated descriptive statistics, which describe the basic features of the data and illustrate associations between variables in a study. The study also included secondary data analysis using individual data gathered by CLBC. This data set was comprised of the demographic characteristics, service usage and expenditures (service costs) for all individuals receiving direct funded respite, direct funding, host agency funding, and microboard funding. The data also included aggregate data on traditional block funded services, up to December 31st 2010. No identifying data was provided to the researchers and approval for the study was granted by CLBC and the Behavioural Research Ethics Board of the University of British Columbia.

Collected data were entered and processed using SPSS statistical software (version 19). Descriptive statistics were computed on demographic characteristics of the overall sample. Frequency distributions were run for each of the demographic and study variables to complete a profile analysis of the sample, assess data and determine measures of central tendency and variability. Mean and standard deviation were reported for continuous measures and frequencies and percentages for categorical variables.

The data analysis process primarily involved the estimation of the total average costs for each of the above-mentioned services as well as bivariate analysis to explore associations between the types of services received (service utilization) and independent variables such as region, age, gender, Guide to Support Allocation (GSA) level and number of flags.

Results of the analysis offer a picture of usage, costs, and demographic circumstances

surrounding the uptake of individually funded services in British Columbia. With aggregate data on the costs of block-funded services, comparison can be made about, within and across the different modes of funding services. This allows for an analysis and recommendations for further policy goals, research and system components necessary to realize the benefits that funding mechanisms can bring.

Results

The results in this section are organized first as an overview across the IF funding modes, followed by a more detailed analysis of each of the four IF modes. Finally, a comparative look at all of the IF funding modes and block funding against key variables completes the study's findings. It is worth noting that although data was provided for all of the IF service users in the province, incomplete data or missing values in some places meant that the samples were smaller than the actual number of service users. These omissions are noted in the analysis and the tables below. All funding figures represent an annual cost.

Overview Across Funding Modes

Table 1 shows an analysis of the total per user cost under each of the funding modes. The results show that costs were generally highest for microboards ($M=\$50,897.94$, $SD=\$48,273.62$) followed by direct funding ($M=\$19,967.67$, $SD=\$20,261.63$), host agency ($M=\$15,545.16$, $SD=\$31,393.33$), and direct funded respite ($M=\$3,633.50$, $SD=\$3,141.73$)¹. Notably, microboards have a much higher standard deviation, indicating the presence of several high cost contracts in relation to the mean.

Table 1

The Mean, Standard Deviation and Range of Annual Funding by Funding Mode

Funding Mode	Mean	SD	Minimum	Maximum	Total Cost
Adult Direct Funded Respite (N=848)	\$3,633.50	\$3,141.73	\$180.00	\$44,842.80	\$3,081,211.05
Direct Funding (N=101)	\$19,967.67	\$2,0261.63	\$933.32	\$117,742.20	\$3,254,730.04
Host Agency (N=100)	\$15,545.16	\$31,393.33	\$216.00	\$343,737.12	\$3,559,841.03
Microboards (N=262)	\$50,897.94	\$48,273.62	\$1,706.40	\$313,056.00	\$19,242,420.12

¹ Direct funded respite is a service specific programme unlike the others analyzed here and as such is not directly comparable.

Individualized Funding Modes

Each IF mode (direct funded respite, direct funding, host agency funding, microboard funding) was utilized in each of the 11 regions of British Columbia, with the exception of host agency funding which was only used in 9 regions. Variables used to analyze each funding mode include the demographic characteristics of age, gender, location (region) where the service was provided, as well as GSA level and number of flags attributed to individuals receiving service. The GSA and flag system was only recently introduced; therefore no levels are indicated for many of the individuals included in the data. This is noted in the applicable tables as N/A.

Direct funded respite: There were 854 service users of adult direct funded respite; however, complete demographic data was only available for 848 cases. No funding had been received in six cases out of the sample. This is reflected in Tables 2 through 7.

An analysis of the demographic characteristics of the sample shows that the highest percentages of service users were from Vancouver Coastal region (16.4 %), and male (54.6%). The majority of the service users were between 19 and 30 years old (76.8 %), less than one percent were 61 or older. The range in ages of the service users was 19-83 years old, at the time of data analysis.

With regard to GSA levels and flags, most users of direct funded respite did not have either identified (69.6% in both cases). Of those who did have GSA scores, most fell into levels four and five, five being the highest level of disability-related need. Only one service user was categorized as level 1 (the lowest level of disability-related need). Lower levels of identified flags were present in the sample, with only 0.5% categorized as having 4 flags. Table 2 illustrates the demographic characteristics of those receiving direct funded respite services from CLBC.

Table 2

Direct Funded Respite - Sample Characteristics

Characteristics (N=848*)	n	%
Region		
Central & Upper Island	98	11.6
Kootenay	46	5.4
North	68	8.0
North Okanagan – Shuswap	53	6.3
Simon Fraser	66	7.8
South Central Okanagan	63	7.4
South Island	63	7.4
Surrey Delta	99	11.7
Thompson Cariboo	57	6.7
Upper Fraser	96	11.3
Vancouver Coastal	139	16.4
Age (years)		
19-30 years	651	76.8
31-40 years	116	13.7
41-50 years	54	6.4
51-60 years	22	2.6
61 years & above	5	0.6
Gender		
Male	463	54.6
Female	385	45.4
GSA Level		
Level 1	1	0.1
Level 2	9	1.1
Level 3	67	7.9
Level 4	93	11.0
Level 5	88	10.4
N/A	590	69.6
Number of Flags		
0	165	19.5
1	45	5.3
2	28	3.3
3	16	1.9
4	4	0.5
N/A	590	69.6

*N=854 with full data. But sample size was dropped (N=848) as missing data were excluded from the total sample before running frequencies.

Table 3 shows the funding amounts for direct funded respite in each of the regions in British Columbia. The total funding spent for all 11 regions in British Columbia was \$3,081,211.05. The average amount of funding that service users received was \$3,633.50 (*SD*\$3,141.73) with a minimum amount of \$180.00 and maximum amount of \$44,842.80. The number of service users and amount of funding spent by regions in British Columbia vary. The Upper Fraser region had both the highest overall expenditure and the highest mean cost at \$4,258.56 per individual. This contrasts with the Kootenay region, which had the lowest mean cost at \$3,143.00.

Table 3

Direct Funded Respite - Funding by Region

Region (N=848)	Mean	SD	Minimum	Maximum	Total Cost
					\$3,081,211.05
Central & Upper Island (n=98)	\$3,663.42	\$2,125.34	\$2,796.00	\$16,296.00	\$359,015.40
Kootenay (n=46)	\$3,143.10	\$1,306.97	\$657.60	\$6,000.00	\$144,582.50
North (n=68)	\$3,706.10	\$4,667.51	\$2,266.68	\$38,916.00	\$252,015.12
North Okanagan–Shuswap(n=53)	\$3,673.59	\$2,431.74	\$2,799.96	\$15,411.96	\$194,700.50
Simon Fraser (n=66)	\$3,289.43	\$2,478.62	\$1,423.31	\$22,145.76	\$217,102.19
South Central Okanagan (n=63)	\$3,640.22	\$1,856.54	\$699.99	\$13,392.00	\$229,333.80
South Island (n=63)	\$3,256.95	\$1,145.53	\$447.96	\$6,000.00	\$205,188.12
Surrey Delta (n=99)	\$3,992.41	\$4,570.24	\$180.00	\$35,400.00	\$395,248.78
Thompson Cariboo (n=57)	\$4,143.48	\$678.44	\$2,266.80	\$44,842.80	\$236,178.24
Upper Fraser (n=96)	\$4,258.56	\$3,595.98	\$2,266.68	\$27,300.00	\$408,821.68
Vancouver Coastal (n=139)	\$3,158.45	\$1,135.21	\$1,141.92	\$11,356.00	\$439,024.72

With regard to the age groups, as shown in Table 4, the expenditure was proportional to the number of service users by each age group. The majority of service users were between 19 and 30 years of age (76.8%), and more funding was provided to those in this age group both in total and on average ($M=3,735.40$). Table five shows no significant difference by gender in funding levels.

Table 4

Direct Funded Respite - Funding by Age

Age (N=848)	Mean	SD	Minimum	Maximum	Total Cost
					\$3,081,211.05
19-30 years (n=651)	\$3735.40	\$3,450.77	\$180.00	\$44,842.80	\$2,431,744.41
31-40 years (n=116)	\$3,206.45	\$1,358.20	\$1,400.04	\$13,392.00	\$371,947.70
41-50 years (n=54)	\$3,552.77	\$2,556.55	\$1,200.00	\$20,400.00	\$191,849.80
51-60 years (n=22)	\$3,221.18	\$916.05	\$2,566.63	\$5,599.92	\$70,865.95
61 years & above (n=5)	\$2,960.64	\$1,561.57	\$1,633.31	\$5,599.92	\$14,803.19

Table 5

Direct Funded Respite - Funding by Gender

Gender (N=848)	Mean	SD	Minimum	Maximum	Total Cost
					\$3,081,211.05
Male (n=463)	\$3,626.40	\$3,268.29	\$180.00	\$44,842.80	\$1,679,022.66
Female (n=385)	\$3,642.05	\$2,986.64	\$447.96	\$35,400.00	\$1,402,188.39

Table 6 shows the funding provided to individuals for direct funded respite, categorized by GSA levels of the service users. There is, as would be expected, a general correlation between GSA level and funding levels. This consistency was not as clear in looking at the number of flags attributed to individuals, shown in Table 7. While the average amount of funding provided to the clients with four flags was much higher than those in lower categories ($M=\$14,010.69$, $SD=\$20,597.08$), those with two flags received slightly higher levels of funding than those with three.

Table 6

Direct Funded Respite - Funding by GSA level

GSA Level (N=848)	Mean	SD	Minimum	Maximum	Total Cost
					\$3,081,211.05
Level 1 (n=1)					\$2,799.96
Level 2 (n=9)	\$2,800.41	\$3.13	\$2,796.00	\$2,808.00	\$25,203.72
Level 3 (n=67)	\$3,837.14	\$3,819.15	\$699.99	\$24,000.00	\$298,448.04
Level 4 (n=93)	\$4,021.74	\$2,647.19	\$180.00	\$22,145.76	\$410,589.77
Level 5 (n=88)	\$5,530.74	\$7,318.90	\$699.99	\$44,842.80	\$408,777.71
N/A (n=590)	\$3,280.33	\$1,688.14	\$447.96	\$19,716.00	\$1,935,391.85

Table 7

Direct Funded Respite - Funding by Number of Flags

Number of flags(N=848)	Mean	SD	Minimum	Maximum	Total Cost
					\$3,081,211.05
0 (n=165)	\$3,957.21	\$3,543.94	\$699.99	\$27,300.00	\$652,939.09
1 (n=45)	\$4,088.04	\$2,659.03	\$180.00	\$16,296.00	\$183,961.77
2 (n=28)	\$5,877.04	\$7,001.85	\$699.99	\$38,916.00	\$164,557.23
3 (n=16)	\$5,519.90	\$8,106.19	\$699.99	\$35,400.00	\$88,318.35
4 (n=4)	\$14,010.69	\$20,597.08	\$2,799.96	\$44,842.80	\$56,042.76
N/A (n=590)	\$3,280.33	1688.14	\$447.96	\$19,716.00	\$1,935,391.85

Direct funding. Direct Funding was offered in all 11 regions in British Columbia. The sample size was 102 with full data; however, complete demographic data was only available for 101 clients due to one missing value. Demographic characteristics of the sample (N=101) are presented in Table 8.

The highest percentage of service users were from the Vancouver Coastal region (18.8%), whereas the lowest percentage of service users were from North Okanagan - Shuswap and Thompson Cariboo (3.0% each). The majority of clients were male (55.4%) and within the age range of 19-30 years old (81.2%). GSA level and number of flags was not identified for 39.6% of the clients.

Table 8

Direct Funding - Sample Characteristics

Characteristics	<i>n</i>	%
Region		
Central & Upper Island	8	7.9
Kootenay	7	6.9
North	7	6.9
North Okanagan – Shuswap	3	3.0
Simon Fraser	11	10.9
South Central Okanagan	7	6.9
South Island	17	16.8
Surrey Delta	15	14.9
Thompson Cariboo	3	3.0
Upper Fraser	4	4.0
Vancouver Coastal	19	18.8
Age (years)		
19-30 years	82	81.2
31-40 years	10	9.9
41 years and above	9	8.9
Gender		
Male	56	55.4
Female	45	44.6
GSA Level		
Level 2	2	2.0
Level 3	9	8.9
Level 4	21	20.8
Level 5	29	28.7
N/A	40	39.6
Number of Flags		
0	28	27.7
1	14	13.9
2	8	7.9
3	7	6.9
4	2	2.0
5	2	2.0
N/A	40	39.6

$N=102$ with full data, but the sample size was dropped ($N=101$) as one missing data was excluded from the total sample before running frequencies.

The total funding spent under the direct funding mode was \$3,254,730.04. The mean amount of funding that service users received was \$19,967.67(*SD*\$20,261.63). The minimum amount of funding was \$933.32 and the maximum amount of funding was \$117,742.20. Under direct funding, 12 types of services were provided. Frequencies and percentages for services provided as well as total costs and average amount of funding for each type of service are presented in Table 9.

The number of service users who received different types of services, and the total cost spent for each type of service varied. Service users most frequently received respite (34.4%), whereas only one person (0.6%) received behavioral consultation. A small percentage received live in support ($n=13$, 8.0%), which was the most expensive direct funded service on average ($M=\$39,706.94$, $SD=\$29,447.45$).

Table 9

Direct Funding by Type of Service Received

Types of Service(N=101)	<i>n</i>	<i>%</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Total Cost</i>
							\$3,254,730.04
Respite	56	34.4	\$11,433.10	\$14,393.33	\$933.32	\$58,406.74	\$ 630,693.03
Community Based Services	42	25.8	\$23,250.04	\$21,272.16	\$2,218.92	\$117,742.20	\$ 974,282.59
Behavioral Consultation	1	0.6					\$3708.00
Direct Family Support	7	4.3	\$31,526.52	\$29,646.53	\$1,500.00	\$72,002.28	\$220,685.62
Employment	5	3.1	\$13,880.84	\$9,007.12	\$5,280.00	\$26,950.96	\$69,404.22
Employment Services-Individual Placement	2	1.2	\$27,570.14	\$24,184.27	\$10,469.28	\$44,671.00	\$ 55,140.28
Home Sharing	7	4.3	\$30,029.94	\$23,229.33	\$12,360.36	\$78,867.00	\$210,209.56
Homemaker Services	4	2.5	\$19,453.54	\$13,273.45	\$7,279.92	\$37,766.36	\$89,593.37
Live in Support	13	8.0	\$39,706.94	\$29,447.45	\$8,000.00	\$107,288.00	\$ 516,190.20
Outreach Support	5	3.1	\$12,549.59	\$5,783.78	\$8,034.00	\$21,979.44	\$ 62,747.94
Skill Development	16	9.8	\$19,663.61	\$12,050.90	\$5,154.72	\$40,310.40	\$314,617.71
Supports to Home Sharing/ Live in Support	5	3.1	\$21,491.50	\$21,196.51	\$2,472.00	\$54,384.00	\$ 107,457.52

Many service users received more than one type of service. Table 10 shows the total number of services provided by region and a breakdown of those receiving 1-4 types of service.

Table 10

Direct Funding - Number of Service Users and Services Received

Characteristics (N=101)	Total # of services received	One type of service	Two types of service	Three types of service	Four types of service
Region					
Central & Upper Island (n=8)	10	6	2		
Kootenay (n=7)	17	1	3	2	1
North (n=7)	15	1	4	2	
North Okanagan – Shuswap (n=3)	5	1	2		
Simon Fraser (n=11)	22	3	6	1	1
South Central Okanagan (n=7)	12	4	2		1
South Island (n=17)	27	8	8	1	
Surrey Delta (n=15)	20	12	1	2	
Thompson Cariboo (n=3)	5	1	2		
Upper Fraser (n=4)	6	2	2		
Vancouver Coastal (n=19)	24	14	5		

As shown in Tables 11-15, the number of services provided and costs for services by region, age, gender, GSA level and number of flags varied. Though more total services were provided to users in the South Island (n=27), more funding and less total services were provided to users from Central & Upper Island (Table 11). There is significant variation in the mean level of funding provided through direct funding across regions with the low being North Okanagan-Shuswap (M=10493.60) and a high in the Central & Upper Island (M= 47549.28). In other words, direct funding levels vary significantly across the regions.

With regard to age, the 19-30 year old category was far more likely to receive direct funded services than the two older cohorts (see Table 8). Not surprisingly, the levels of funding were also higher on average among this cohort than the older cohorts (Table 12). There was no significant gender variation in the number of services received or the cost of those services. (Table 13)

Table 11

Direct Funding by Region

Region(N=101)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,254,730.04
Central & Upper Island (n=8)	10	\$47,549.28	\$34,919.64	\$6,643.56	\$107,288.00	\$475,492.77
Kootenay (n=7)	17	\$12,801.82	\$16,253.43	\$2,799.96	\$6,9732.60	\$217,630.9
North (n=7)	15	\$13,233.60	\$10,112.75	\$933.32	\$31,123.20	\$198,503.93
North Okanagan - Shuswap(n=3)	5	\$10,493.60	\$6,781.46	\$1,776.00	\$19,050.10	\$52,468
Simon Fraser(n=11)	22	\$15,544.62	\$13,186.59	\$1,633.31	\$45,041.04	\$341,981.71
South Central Okanagan (n=7)	12	\$15,755.03	\$12,488.00	\$1,500.00	\$38,464.32	\$189,060.31
South Island(n=17)	27	\$20,745.59	\$22,581.07	\$2,799.96	\$117,742.20	\$560,130.9
Surrey Delta (n=15)	20	\$19,253.72	\$15,712.53	\$2,218.92	\$60,000.00	\$385,074.32
Thompson Cariboo (n=3)	5	\$15,386.25	\$17,309.42	\$2,643.63	\$44,671.00	\$76,931.25
Upper Fraser (n=4)	6	\$25,309.99	\$29,424.95	\$2,799.96	\$78,867.00	\$151,859.92
Vancouver Coastal (n=19)	24	\$25,233.17	\$20,457.46	\$1,201.65	\$76,145.76	\$605,596.03

Table 12

Direct Funding by Age

Age(N=101)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,254,730.04
19-30 years (n=82)	132	\$21,228.91	\$21,735.54	\$933.32	\$117,742.20	\$2,802,215.8
31-40 years (n=10)	14	\$11,171.31	\$7,572.28	\$2,333.30	\$23,687.04	\$156,398.38
41 years and above (n=9)	17	\$17,418.58	\$12,421.12	\$1,500.00	\$39,552.00	\$296,115.86

Table 13

Direct Funding by Gender

Gender (N=101)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,254,730.04
Male (n=56)	87	\$18,646.98	\$17,657.50	\$933.32	\$78,867.00	\$1,622,287.42
Female (n=45)	76	\$21,479.51	\$22,910.64	\$1,500.00	\$117,742.20	\$1,632,442.62

Regarding GSA levels, where known, the expected pattern was found; those with level five received higher amounts of funding ($M=\$26,022.34$, $SD=\$24,174.90$) than level four ($M=\$21,103.89$, $SD=\$17,370.89$). However, relatively less funding was provided to the clients with GSA level three ($M=\$9,074.94$, $SD=\$7,861.18$) than those with a level two rating ($M=\$10,746.61$, $SD=\$6804.83$) (Table 14).

Where the number of flags was included (Table 15), the average amount of funding provided to clients with four flags was much higher than to those in the ranges zero to three. However, those with five flags received less. This finding should be treated with caution as the standard deviation was quite high, and the number of clients and services very low.

Table 14

Direct Funding by GSA Level

GSA Level (N=101)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,254,730.04
Level 2 (n=2)	3	\$10,746.61	\$6,804.83	\$3,279.96	\$16,599.50	\$32,239.82
Level 3 (n=9)	19	\$9,074.94	\$7,861.18	\$1,201.65	\$24,943.40	\$172,423.84
Level 4 (n=21)	37	\$21,103.89	\$17,370.89	\$1,633.31	\$72,002.28	\$780,843.77
Level 5 (n=29)	47	\$26,022.34	\$24,174.90	\$933.32	\$107,288.00	\$1,223,049.9
N/A (n=40)	57	\$18,353.91	\$20,321.66	\$1,500.00	\$117,742.20	\$1,046,172.71

Table 15

Direct Funding by Number of Flags

Number of Flags (<i>N=101</i>)	# of services re- ceived	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Total Cost</i>
						\$3,254,730.04
0 (<i>n=28</i>)	49	\$16,529.55	\$16,500.16	\$1,201.65	\$72,002.28	\$809,948.15
1 (<i>n=14</i>)	26	\$19,942.88	\$17,709.17	\$2,333.30	\$72,002.28	\$518,514.75
2 (<i>n=8</i>)	13	\$24,558.86	\$19,897.06	\$2,218.92	\$76,145.76	\$319,265.23
3 (<i>n=7</i>)	13	\$27,287.20	\$25,676.80	\$933.32	\$76,512.72	\$354,733.62
4 (<i>n=2</i>)	3	\$47,298.57	\$52,778.89	\$8,000.00	\$107,288.00	\$141,895.7
5 (<i>n=2</i>)	2	\$32,099.94	\$21,21.41	\$30,599.88	\$33,600.00	\$64,199.88
N/A (<i>n=40</i>)	57	\$18,353.91	\$20,321.66	\$1,500.00	\$117,742.20	\$1,046,172.71

Host agency. Host Agency funding was used in nine of the eleven regions in British Columbia: The North and Simon Fraser did not report any funded host agency contracts. The sample size was 155; however, complete data was only available for 100. The South Island (34%) and Central & Upper Island (24%) combined accounted for 50% of all host agency service users. Only one client from Surrey Delta was using host agency funding. The majority of users were within the age cohort of 19-30 years old (63%), and male (57%). GSA levels and number of flags were not identified for 29% of the sample.

Table 16

Host Agency Funding - Sample Characteristics

Characteristics	<i>N</i>	%
Region		
Central & Upper Island	26	26.0
Kootenay	5	5.0
North Okanagan – Shuswap	13	13.0
South Central Okanagan	4	4.0
South Island	34	34.0
Surrey Delta	1	1.0
Thompson Cariboo	7	7.0
Upper Fraser	5	5.0
Vancouver Coastal	5	5.0
Age (years)		
19-30 years	63	63.0
31-40 years	23	23.0
41-50 years	9	9.0
51 years & above	5	5.0
Gender		
Male	57	57.0
Female	43	43.0
GSA Level		
Level 2	5	5.0
Level 3	21	21.0
Level 4	20	20.0
Level 5	25	25.0
N/A	29	29.0
Number of Flags		
0	48	48.0
1	8	8.0
2	11	11.0
3	4	4.0
N/A	29	29.0

The total funding for the nine regions in British Columbia was \$3,559,841.03. The average amount of funding that service users received was \$15,545.16 (*SD*\$31,393.33). The minimum amount of funding was \$216.00 and the maximum amount of funding was \$343,737.12.

Twelve different types of services were funded through the host agency method. Frequencies and percentages for services provided, as well as total costs and average amount of funding

for each type of service, are presented in Table 17. The most frequently funded service was host agency coordination ($n=81$, 35.4%), with community based services being the most common type of service ($N=55$, 24%) followed by home sharing and skill development ($N=16$, 7%). The highest average cost was for community based services ($M=\$34,237.51$, $SD=\$57,627.78$) followed by home sharing ($M=\$29,472.78$, $SD=\$11,889.88$).

Table 17

Host Agency Funding by Type of Services Received

Types of Service(N=100)	<i>n</i>	<i>%</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Total Cost</i>
							\$3,559,841.03
Respite	21	9.2	\$8,143.17	\$6,247.72	\$960.00	\$24,844.30	\$171,006.46
Community Based Services	55	24.0	\$34,237.51	\$57,627.78	\$1,800.00	\$343,737.12	\$1,884,192.93
Direct Family Support	14	6.1	\$4,113.82	\$4,863.78	\$1,762.80	\$20,380.80	\$57,593.5
Employment	4	1.7	\$4,202.80	\$3,955.27	\$1,130.00	\$9,708.00	\$15,681.2
Home Sharing	16	7.0	\$29,472.78	\$11,889.88	\$15,264.00	\$54,022.56	\$471,564.47
Host Agency Co-ordination Fee	81	35.4	\$4,482.26	\$5,024.40	\$216.00	\$32,676.27	\$363,062.65
Individual Services	1	.4					\$21,115.32
Individualized Funding	1	.4					\$7,556.73
Live in Support	2	.9	\$17,176.95	\$4,381.59	\$14,078.70	\$20,275.20	\$34,353.90
Outreach Support	13	5.7	\$10,489.96	\$5,811.55	\$962.38	\$23,775.90	\$136,369.50
Skill Development	16	7.0	\$20,727.51	\$12,745.43	\$1,210.00	\$46,750.70	\$331,640.1
Supports to Home Sharing/ Live in Support	5	2.2	\$13,140.86	\$12,401.49	\$1,284.00	\$33,875.00	\$65,704.28

In all regions, the most common number of services received was two. Table 18 shows the total number of services provided by region.

Table 18

Host Agency Funding by Number of Service Users and Services Received

Characteristics(N=100)	Total # of services received	One type of service	Two types of service	Three types of service	Four types of service
Region					
Central & Upper Island (n=26)	54		24	2	
Kootenay (n=5)	11		4	1	
North Okanagan – Shuswap (n=12)	33		7	5	1
South Central Okanagan (n=4)	9		3	1	
South Island (n=34)	83	1	18	14	1
Surrey Delta (n=1)	2		1		
Thompson Cariboo (n=7)	15		6	1	
Upper Fraser (n=5)	12		4		1
Vancouver Coastal (n=5)	10		5		

As shown in Tables 19-23, the number of services provided and costs per service by region, age, gender, GSA level and number of flags vary. The largest number of services were provided to clients from the South Island (n=83). The mean amount of funding was significantly higher in Vancouver Coastal than in other regions. On the other end of the spectrum, significantly less funding was allocated to the one client from Surrey Delta who received two types of services. The extremely high standard deviation (maximum funding in Vancouver Coastal), as well the fact that Surrey Delta had only one user, largely accounts for this differential. The mean funding for the other seven regions ranged from a low of \$10,607.40 in North Okanagan-Shuswap to a high of \$22,207.75 in Thompson Cariboo. While still a significant range, the latter observation is a better indicator than the two extreme mean funding levels noted prior.

Table 19

Host Agency Funding by Region

Region(N=100)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,559,841.03
Central & Upper Island (n=26)	54	\$17,175.68	\$47,309.32	\$478.12	\$343,737.12	\$927,486.62
Kootenay (n=5)	11	\$14,099.77	\$15,760.05	\$660.00	\$51,783.00	\$155,097.46
North Okanagan - Shuswap (n=12)	33	\$10,607.40	\$12,773.66	\$216.00	\$38,184.00	\$350,044.31
South Central Okanagan (n=4)	9	\$18,894.53	\$11,351.96	\$9,408.00	\$41,301.40	\$170,050.8
South Island (n=34)	83	\$11,585.68	\$10,401.19	\$1,031.52	\$50,184.00	\$961,611.13
Surrey Delta (n=1)	2	\$7,689.00	\$8,540.44	\$1,650.00	\$13,728.00	\$15,378
Thompson Cariboo (n=7)	15	\$22,207.75	\$17,965.50	\$1,927.20	\$54,022.56	\$333,116.25
Upper Fraser (n=5)	12	\$16,869.23	\$13,100.18	\$1,563.60	\$33,875.00	\$202,430.74
Vancouver Coastal (n=5)	10	\$44,462.57	\$88,473.43	\$1,830.36	\$291,261.25	\$444,625.73

With regard to age, the 19-30 year old cohort was again the most likely to use host agency funding. Mean funding levels were highest for the 31-40 year old age group, and lowest in the 41-50 year old age group. With regard to gender, males again formed the largest group of users, but unlike direct funding, males also had the highest mean level of funding (M=\$17,881.67; F.\$12,249.44).

For those where GSA level was available, funding generally followed the expectation of higher funding with higher GSA levels (Table 20). For those where data on the number of flags was available, the majority had no flags indicated. While mean funding was highest for those with three flags, those with one and two flags had a mean funding level slightly below those with no flags. (Table 21)

Table 20

Host Agency Funding by GSA Level

GSA Level(N=100)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,559,841.03
Level 2 (n=5)	10	\$5,351.28	\$5,598.19	\$216.00	\$14,730.72	\$53,512.78
Level 3 (n=21)	46	\$7,291.88	\$7,633.50	\$271.50	\$33,762.50	\$335,426.63
Level 4 (n=20)	48	\$12,209.14	\$13,540.32	\$414.96	\$55,423.83	\$586,038.54
Level 5 (n=25)	62	\$27,371.64	\$55,502.59	\$960.00	\$343,737.12	\$1,697,041.41
N/A (n=29)	63	\$14,092.41	\$13,771.21	\$660.00	\$50,184.00	\$887,821.67

Table 21

Host Agency Funding by Number of Flags

Number of Flags(N=100)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$3,559,841.03
0 (n=48)	108	\$16,065.41	\$43,154.09	\$271.50	\$343,737.12	\$1,735,064.4
1 (n=8)	19	\$14,257.56	\$11,414.39	\$216.00	\$35,784.00	\$270,893.7
2 (n=11)	26	\$14,810.01	\$16,682.20	\$960.00	\$54,022.56	\$385,060.32
3 (n=4)	13	\$21,615.46	\$17,541.59	\$1,563.60	\$55,423.83	\$281,000.95
N/A (n=29)	63	\$14,092.41	\$13,771.21	\$660.00	\$50,184.00	\$887,821.67

Microboards. The sample size for microboard funding was 262 with full data for each case. The complete demographic data is available in Table 22. The highest percentage of service users was from the Central and Upper Island region (18.7 %), the lowest percentage was from the Kootenay region (1.1%). A majority of clients were male (52.3%), between 19-30 years old(59.5%). The lowest number of service users were 61 years and above (1.1%). GSA levels and number of flags of were not identified for 76.7%.

Table 22

Microboard Funding - Sample Characteristics

Characteristics (N=262)	<i>N</i>	<i>%</i>
Region		
Central & Upper Island	49	18.7
Kootenay	3	1.1
North	21	8.0
North Okanagan – Shuswap	8	3.1
Simon Fraser	32	12.2
South Central Okanagan	22	8.4
South Island	22	8.4
Surrey Delta	26	9.9
Thompson Cariboo	20	7.6
Upper Fraser	17	6.5
Vancouver Coastal	42	16.0
Age (years)		
19-30 years	156	59.5
31-40 years	68	26.0
41-50 years	17	6.5
51-60 years	18	6.9
61 years & above	3	1.1
Gender		
Male	137	52.3
Female	125	47.7
GSA Level		
Level 2	1	0.4
Level 3	8	3.1
Level 4	25	9.5
Level 5	27	10.3
N/A	201	76.7
Number of Flags		
0	28	10.7
1	8	3.1
2	10	3.8
3	12	4.6
4	1	0.4
5	2	0.8
N/A	201	76.7

Table 23 shows the costs related to the various services under microboard funding. The total cost of funding allocated for the 11 regions in British Columbia was \$19,242,420.12. The average amount of funding that service users received was \$50,897.94 (SD =\$48,273.62). The minimum amount of funding was \$1,706.40 and the maximum amount of funding was \$313,056.00.

Under microboard funding, fifteen types of service were provided. Frequencies and percentages for services provided as well as total costs and average amount of funding for each type of service are presented in Table 23. The number of services used and the costs spent on services vary. As shown in Table 23, the most frequently used service under microboards was community based services ($n=95$, 25.1%), whereas only one client used behavioral consultation services. Staffed residential services ($n=22$, 5.8%) had the highest average amount of funding overall. This was significantly higher than the next highest average cost, for live-in support, but both had high standard deviations.

Table 23

Microboard Funding by Type of Services Received

Types of Service (N=262)	<i>n</i>	<i>%</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Total Cost</i>
							\$19,242,420.12
Behavioral Consultation	1	0.3					\$5,562.00
Cluster Apartment Living	2	0.5	\$37,331.88	\$5,888.62	\$33,168.00	\$41,495.76	\$74,663.76
Community Based Services	95	25.1	\$42,741.68	\$29,289.28	\$2,492.64	\$171,279.60	\$4,060,459.56
Contracted Respite	46	12.2	\$14,958.76	\$20,695.31	\$1,706.40	\$102,339.24	\$688,103.16
Direct Family Support	2	0.5	\$50,109.48	\$30,118.51	\$28,812.48	\$71,406.48	\$100,218.96
Employment	2	0.5	\$14,427.00	\$9,041.07	\$8,034.00	\$20,820.00	\$28,854.00
Home Based	10	2.6	\$40,476.20	\$20,064.66	\$18,000.00	\$74,184.00	\$404,762.04
Home Sharing	35	9.3	\$43,852.20	\$35,777.15	\$8,122.92	\$162,000.00	\$1,534,826.88
Homemaker Services	3	.8	\$25,636.00	\$18,556.99	\$4,212.00	\$36,696.00	\$79,908
Individual Services	31	8.2	\$43,841.14	\$23,760.75	\$6,848.40	\$117,368.40	\$1,359,075.24
Live in Support	25	6.6	\$70,968.80	\$59,916.36	\$14,628.00	\$313,056.00	\$1,774,220.04
Outreach Support	35	9.3	\$55,434.63	\$37,650.74	\$6,583.44	\$164,900.64	\$1,940,212.08
Skill Development	62	16.4	\$57,284.85	\$51,986.49	\$10,202.04	\$244,724.77	\$3,551,660.52
Staffed Residential	22	5.8	\$135,205.41	\$68,085.76	\$23,045.64	\$292,611.72	\$2,974,519.08
Supports to Home Sharing/Live in Support	7	1.9	\$95,053.54	\$96,461.51	\$6,492.00	\$275,961.12	\$665,374.8

Many service users received more than one type of service. As shown in Table 24, service users from the Simon Fraser region received more services than those from other regions. Service users who received a large number of services were most commonly 19-30 years old

($n=232$) and male ($n=202$). There was a general correlation with GSA levels, those with higher GSA levels receiving relatively more services; a similar correlation was not evident with flags.

The Table 24 shows the total number of services provided by region and the number of people receiving one to four types of services per region.

Table 24

Microboard Funding by Number of Service Users and Services Received

Characteristics(N=262)	Total # of services received	One type of service	Two types of service	Three types of service	Four types of service
Region					
Central & Upper Island ($n=49$)	59	39	10		
Kootenay ($n=3$)	4	2	1		
North ($n=21$)	32	10	11		
North Okanagan – Shuswap ($n=8$)	12	5	2	1	
Simon Fraser ($n=32$)	65	10	13	7	2
South Central Okanagan ($n=22$)	52	3	8	11	
South Island ($n=22$)	24	20	2		
Surrey Delta ($n=26$)	30	22	4		
Thompson Cariboo ($n=20$)	24	16	4		
Upper Fraser ($n=17$)	29	6	10	1	
Vancouver Coastal ($n=42$)	47	37	5		

The total amount of funding allocated per region varied considerably under the microboard funding mode. The Simon Fraser region provided 32 individuals a total of 65 services, while the Kootenay region offered 3 individuals a total of 4 services.

Table 25

Microboard Funding by Region

Region(N=262)	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$19,242,420.12
Central & Upper Island (n=49)	59	\$62,473.45	\$52,546.45	\$4,617.96	\$191,976.24	\$3,685,933.68
Kootenay (n=3)	4	\$31,434.00	\$17949.35	\$15,360.00	\$57,156.00	\$125,736
North (n=21)	32	\$56,227.25	\$59,132.30	\$1,706.40	\$313,056.00	\$1,799,271.84
North Okanagan - Shuswap (n=8)	12	\$21,225.46	\$20,805.17	\$2,492.64	\$68,580.00	\$254,705.52
Simon Fraser (n=32)	65	\$30,574.33	\$24,472.51	\$2,768.04	\$153,692.77	\$1,987,331.52
South Central Okanagan (n=22)	52	\$35,067.49	\$26,762.99	\$2,250.00	\$124,932.00	\$1,826,509.44
South Island (n=22)	24	\$103,599.32	\$72,901.05	\$15,420.00	\$292,611.72	\$2,486,383.56
Surrey Delta (n=26)	30	\$48,323.48	\$35,077.36	\$2,799.96	\$137,679.84	\$1,449,704.4
Thompson Cariboo (n=20)	24	\$46,960.25	\$41,819.83	\$3,324.00	\$171,156.00	\$1,127,045.88
Upper Fraser (n=17)	29	\$46,455.17	\$33,350.59	\$9,663.24	\$162,000.00	\$1,347,199.92
Vancouver Coastal (n=42)	47	\$67,076.56	\$58,837.85	\$11,632.08	\$275,961.12	\$3,152,598.36

As shown in Table 26, clients within the age group of 19-30 years old ($n=156$) were the most frequent users of microboards; however, the mean costs were highest for the 31-40 year old cohort in comparison to all other age cohorts ($M=\$61,484.12$, $SD=\$50,321.09$). While the male service users received more services than the females, mean levels of funding provided to female clients was slightly higher than male clients.

Table 26

Microboard Funding by Age

<i>Age (N=262)</i>	<i># of services received</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Total Cost</i>
						\$19,242,420.12
19-30 years (n=156)	232	\$48,354.25	\$47,284.72	\$1,706.40	\$313,056.00	\$11,221,186.56
31-40 years (n=68)	93	\$61,484.12	\$50,321.09	\$3,540.00	\$244,724.77	\$5,718,023.5
41-50 years (n=17)	24	\$47,356.50	\$58,608.47	\$9,600.00	\$292,611.72	\$1,136,555.98
51-60 years (n=18)	25	\$41,915.48	\$37,448.11	\$8,700.00	\$149,226.60	\$1,047,887.08
61 years & above (n=3)	4	\$29,691.75	\$11,467.34	\$22,138.92	\$46,655.76	\$118,767

Table 27 shows that there was no direct correlation between GSA level and mean funding levels. There was a significant increase in average funding from level three to four, but a drop-off from level four to five. Similarly, the number of flags did not correlate to increased average funding levels. However, the sample is quite small for those with four or five flags, and no data on flags was available for the majority of service users. The amount of funding allocated for two services provided to only one individual with four flags was much higher ($M=\$130,843.14$, $SD=\$86,455.26$) than that provided to the other users. Therefore, the lack of correlation cannot be seen as providing any significant evidence about the costs or usage of microboards in relation to flags.

Table 27

Microboard Funding by GSA Level

GSA Level (N=262).	# of services received	Mean	SD	Minimum	Maximum	Total Cost
						\$19,242,420.12
Level 2 (n=1)	2	\$11,547.00	\$13,916.71	\$1,706.40	\$21,387.60	\$23,094
Level 3 (n=8)	11	\$18,293.59	\$9,696.80	\$2,799.96	\$31,868.16	\$201,229.44
Level 4 (n=25)	37	\$50,661.70	\$54,163.81	\$2,799.96	\$27,5961.12	\$1,874,482.8
Level 5 (n=27)	47	\$42,274.74	\$38,356.85	\$2,250.00	\$186,039.72	\$1,986,912.96
N/A (n=201)	281	\$53,927.76	\$49,398.05	\$2,492.64	\$313,056.00	\$15,156,700.92

Comparisons Across Funding Modes

Average amounts of funding received were grouped into categories for the purpose of running frequencies. As shown in Table 28, 163 services were provided under direct funding; 231 services were provided under host agency; and 379 services were provided under microboards. The largest number of services under direct funding and microboards ranged from \$10,001 to \$50,000, whereas under host agency this is between \$0-\$10,000.00. There were no services that cost more than \$200,000.00 under the direct funding mode. Only one service under host agency and one service under microboards cost more than \$300,000.00. Microboards had a significantly higher percentage of service users whose services cost over \$100,000.00 (12.4%) than the other funding modalities (Host Agency-0.8%; Direct Funding- 1.2%). This may indicate that microboards were used more frequently by individuals with high support needs than the other IF modalities. Table 28 illustrates the frequencies of cost categories across IF funding modes.

Table 28

All IF Modes - Frequency of Value Ranges Across Three IF Modes

Amount of Funding	Direct Funding	Host Agency	Microboards
\$0 - \$10,000.00	63 (38.7%)	134 (58.5%)	38 (10.1%)
\$10,001.00 - \$50,000.00	87 (53.4%)	88 (38.4%)	215 (56.9%)
\$50,001.00 - \$100,000.00	11 (6.7%)	5 (2.2%)	78 (20.6%)
\$100,001.00 - \$200,000.00	2 (1.2%)		41 (10.8%)
\$200,001.00 - \$300,000.00		1 (0.4%)	5 (1.3%)
above \$300,000.00		1 (0.4%)	1 (0.3%)
Total # of services used	163 (100%)	231 (100%)	379 (100%)

A number of similar services were provided under all of the funding modes. Table 33 shows the costs for specific services across the three main IF models as well as the average cost of those provided through general service contracts. As shown in Table 29, microboards were generally more costly than all three other funding methods. However, as noted above, high standard deviation in microboard costs indicates the presence of several very high cost individuals using this method of funding.

With regards to individual service costs, host agency funding generally had the lowest costs for the following services: outreach support; home sharing; live in support; and, employment. Costs were relatively equivalent for skill development, with the exception of microboards, which was significantly higher. For community based supports, costs were higher in all three IF models than for general contracted services, and significantly higher for microboards. This is primarily a result of two exceptionally high contracts (\$291,261.24 & \$343,737.12) and reflected in the high standard deviation under microboards. Overall, with the exception of microboards, the two core IF methods (host agency and direct funding) had lower costs than block-funded services in all service areas where full data is available, except for community based supports and employment where there were a slightly lower cost for block funded contracts.

Table 29

All Funding Modes - Funding Allocated by Service

<i>Services</i>	<i>Direct Funding</i> (N=101)	<i>Host Agency Data</i> (N=100)	<i>Microboards</i> (N=262)	<i>Block Funded</i>
Outreach Support	\$12,549.59 (\$5,783.78)	\$10,489.96 (\$5,811.55)	\$55,434.63 (\$37,650.74)	\$25,700.00
Cluster Living			\$37,331.88 (\$5,888.62)	\$51,300.00
Direct Home Sharing				\$27,600.00
Agency Coordinated Home Sharing				\$38,700.00
Home Sharing	\$30,029.94 (\$23,229.33)	\$29,472.78 (\$11,889.88)	\$43,852.20 (\$35,777.15)	\$32,200.00
Live in Support	\$39,706.94 (\$29,447.45)	\$17,176.95 (\$4,381.59)	\$70,968.80 (\$59,916.36)	\$48,700.00
Staffed residential			\$135,205.41 (\$68,085.76)	\$110,000.00
Employment	\$13,880.84 (\$9,007.12)	\$4,202.80 (\$3,955.27)	\$14,427.00 (\$9,041.07)	\$13,600.00
Skill Development	\$19,663.61 (\$12,050.90)	\$20,727.51 (\$12,745.43)	\$57,284.85 (\$51,986.49)	\$23,200.00
Individual Services		\$21,115.32	\$43,841.14 (\$23,760.75)	
Community Based	\$23,250.04 (\$21,272.16)	\$34,237.51 (\$57,627.78)	\$42,741.68 (\$29,289.28)	\$18,900.00
Home Based			\$40,476.20 (\$20,064.66)	\$29,700.00
Contracted Respite			\$14,958.76 (\$20,695.31)	\$5,000.00
Behavioral	\$3,708.00		\$5,562.00	\$5,000.00
Psychological				\$5,000.00
Homemaker	\$19,453.54 (\$13,273.45)		\$25,636.00 (\$18,556.99)	\$5,000.00

Table 30 shows the difference in costs under the four IF modes by GSA levels. In general there is a consistent correlation of higher funding levels for higher GSA levels with two exceptions; direct funding has a slightly higher average cost for level two than three, and; microboard

funding has a slightly higher average cost for level four than five. It is worth repeating here, that the high standard deviation of the level four funding accounts to some degree for the anomaly under microboards. What is less consistent is the level of funding by GSA level across funding types, as well as graduation of funding as one moves up levels. For example, under direct funding we see a significant jump in funding levels between levels three and four, whereas under host agency funding this significant increase does not occur until level five.

Table 30
All IF Modes - Funding Allocated by GSA Levels

GSA Levels	Adult Direct Funded Respite (N=848)	Direct Funding (N=101)	Host Agency Data (N=100)	Microboards (N=262)
Level 1	\$2,799.96			
Level 2	\$2,800.41 (\$3.13)	\$10,746.61 (\$6,804.83)	\$5,351.28 (\$5,598.19)	\$11,547.00 (\$13,916.71)
Level 3	\$3,837.14 (\$3,819.15)	\$9,074.94 (\$7,861.18)	\$7,291.88 (\$7,633.50)	\$18,293.59 (\$9,696.80)
Level 4	\$4,021.74 (\$2,647.19)	\$21,103.89 (\$17,370.89)	\$12,209.14 (\$13,540.32)	\$50,661.70 (\$54,163.81)
Level 5	\$5,530.74 (\$7,318.90)	\$26,022.34 (\$24,174.90)	\$27,371.64 (\$55,502.59)	\$42,274.74 (\$38,356.85)
N/A	\$3,280.33 (\$1,688.14)	\$18,353.91 (\$20,321.66)	\$14,092.41 (\$13,771.21)	\$53,927.76 (\$49,398.05)

Table 31 shows the difference in costs provided under the four IF modes by number of flags. As with GSA levels there was a general pattern of correlation between funding levels and flags, though not with absolute consistency. Five flags received less funding under direct funding and microboards than four flags.

Table 31

All IF Modes - Funding Allocated by Number of Flags

Number of flags	Adult Direct Funded Respite (N=848)	Direct Funding (N=101)	Host Agency Data (N=100)	Microboards (N=262)
0	\$3,957.21 (\$3,543.94)	\$16,529.55 (\$16,500.16)	\$16,065.41 (\$43,154.09)	\$27,883.36 (\$22,194.17)
1	\$4,088.04 (\$2,659.03)	\$19,942.88 (\$17,709.17)	\$14,257.56 (\$11,414.39)	\$57,599.63 (\$44,532.04)
2	\$5,877.04 (\$7,001.85)	\$24,558.86 (\$19,897.06)	\$14,810.01 (\$16,682.20)	\$64,466.58 (\$73,920.79)
3	\$5,519.90 (\$8,106.19)	\$27,287.20 (\$25,676.80)	\$21,615.46 (\$17,541.59)	\$47,436.80 (\$36,772.12)
4	\$14,010.69 (\$20,597.08)	\$47,298.57 (\$52,778.89)		\$130,843.14 (\$86,455.26)
5		\$32,099.94 (\$2,121.41)		\$25,784.00 (\$20,212.71)
N/A	\$3,280.33 (\$1,688.14)	\$18,353.91 (\$20,321.66)	\$14,092.41 (\$13,771.21)	\$53,927.76 (\$49,398.05)

Discussion and Implications

Demographically, the study results indicate some trends in the types of service users using one of the three IF modes. IF modes were used far more frequently (50%+) by younger people (19-30 years old) than by any other age cohort, with the lowest utilization amongst older persons (61+). While there was no significant differential usage of IF systems by gender, usage did vary significantly across regions of the province. Some significant characteristics of this variation suggest that regional preferences in IF modes exist. For example, there was no host agency utilization in the North or Simon Fraser regions, but significantly higher use of host agency in the South Island and Central and Upper Island regions. Similarly, microboards were used more frequently in the Central and Upper Island and Vancouver Coastal regions. With regards to direct funded respite in particular, there was significant regional variability in the mean cost, ranging from a low of \$3,143.10 in the Kootenay region to a high of \$4,258.56 in the Upper Fraser.

Analyzing the usage across GSA levels resulted in some significant observations. While not absolutely consistent across funding types, there was a general positive correlation between GSA level and usage of IF funding methods, meaning that more people with high GSA scores

used IF funding methods than those with low GSA scores. This is notable given Laragy's suggestion that IF would be more difficult to access for people with higher needs. On the contrary, the data analysis suggests that IF modes were more common amongst people with higher levels of assessed disability-related need. What was less consistent was the considerable variability of mean costs across core funding modalities by GSA level (see Table 10). As a measure of support needs, one would expect to see more consistency of mean costs across the core funding modalities.

With regard to flags, there was a general negative trend in usage with regards to flags - the fewer flags associated with an individual, the more likely they were to use IF funding methods. However, since the flag system was used to denote specific risks factors or concerns rather than general need, there would not be the same expectation of consistency with flags as with GSA levels.

In terms of the range of services provided under each mode, all of the core IF modes provided a broad array of services with respite and community based services having a high frequency across types. Microboards provided the largest array of services. Use of home sharing was significantly higher amongst microboards and lowest amongst direct funding contracts. Skill development was also highest amongst microboard contracts but lowest in host agency. Here also, there is significant variability of cost for some similar services across funding modalities, though it should be noted that the current study cannot directly account for level of individual needs.

Overall, with the exception of microboards, two core IF methods (host agency and direct funding) have lower costs than block funded services in all service areas, with the exception of community based supports and employment. With respect to these services, direct funding is slightly higher than in block funded services. Since these specific, non-residential services vary widely in terms of staffing ratios, it is not possible from this data to determine whether the cost savings under block funded contracts can be explained by higher levels of congregation in day programs.

With respect to microboards, the study reveals a higher cost for this mode in comparison to both IF funding modalities and block funded services. Some possible explanations can

be speculated for this difference, and microboard funding should therefore not be mistakenly accounted for as more expensive as a result of this study. With the data available, there were a greater number of high cost contracts and more individuals with higher GSA and flag levels than in other funding modes, but this does not seem to account for the consistency or level of differential cost. A further explanation may be that microboards have generally been in place longer than the IF modalities and contracts were negotiated at a time when relatively more resources were available. Another possible explanation may be simply that the presence of a microboard may indicate a greater capacity for effective advocacy. It should also be noted that this study cannot assess the value added by a microboard, which may to some degree justify the differential in cost.

The current study supports the view that IF methods can cover virtually all services supported by CLBC, at a cost relatively equal to or lower than traditional block funded services. Given that the literature supporting IF describes quality outcomes and high satisfaction levels by service users, the current study should be considered alongside the qualitative evidence pointing to this preference. (Stainton, 2009; Laragy, 2009; Glasby&Littlechild, 2002; Stainton & Boyce, 2004). As the discussion of previous literature indicates, there is ample evidence to suggest that the values espoused by CLBC matches the principles IF modes were built upon; namely, self determination, autonomy, and community inclusion (Dawson, 2000; Lordand Hutchison, 2003; Powers et al., 2003; Rosenau,2002; Stainton and Boyce, 2004). Given the above, expansion of IF services both in numbers of people using them and in consistent availability of IF type supports across the province would seem to be a reasonable policy goal. As with any support service, IF needs to have mechanisms of support for effective utilization and monitoring systems in place as it expands.

From a cost perspective, both direct payments and host agency modes of IF would seem to offer the most economical options; however, microboards may in fact offer equal or better value for money when other considerations such as building social capital, ongoing network support and ability to support persons with complex support needs are considered. A significant cost issue which emerges from this study is the lack of consistency across the regions with regard to cost of

services, notably direct funded respite. As IF expands, it will be important to ensure consistency of resources for similar services across the regions.

Limitations and Recommendations for Further Research

While the current research provides a snapshot of IF funding methods cost and utilization, it cannot evaluate the comparative outcomes, quality or value added components of these funding modes. The comparisons between IF methods and block funding must also be treated with some caution as the aggregate cost of traditional funding does not necessarily take into account further opportunity cost associated with agency delivered services where overhead cost may not show up fully in average contract costs. Further, the current data did not allow for a robust comparison on the relative needs of those individuals using the various funding methods. GSA levels and flags provided some proxy measures but these were only available for a portion of the data, and both instruments were early in their implementations at the time of data analysis. Further research on a sample of users to measure need, quality, and outcome measures would provide a better picture of the relative merits of the funding methods beyond simply cost and utilization.

Finally, it should be noted that the data only covers the period up to December 31st 2010. Many of the methods were still in a relatively early phase and subsequent changes may have affected the finding of this study.

References

- Conroy, James, Fullerton, A., Brown M. & Garrow, J, (2002) *Outcomes of the Robert Wood Johnson Foundation's National Initiative on Self Determination for Persons with Developmental Disabilities: Final Report on 3 Years of Research and Analysis*. Narbeth PA: Centre for Outcome Analysis.
- Dale, Stacy, Brown, Randall & Phillips, Barbara (2004) *Does Arkansas' Cash and Counseling Affect Service Use and Public Costs? Final Report*. Princeton: Mathematica Policy Research.
- Davey, V., Fernández, J.-L., Knapp, M., Vick, N., Jolly, D., Swift, P., Tobin, R., Kendall, J., Ferrie, J., Pearson, C., Mercer, G. and Priestley, M. (2007) *Direct Payments: A National Survey of Direct Payments Policy and Practice*, (London, PSSRU).
- Dawson, C., (2000) *Independent Successes: Implementing Direct Payments*. York: Joseph Rowntree Foundation.
- Glasby, J., & Littlechild, R. (2002). *Social work and direct payments*. Bristol: PolicyPress.
- Laragy, C. (2009). Does individualised funding offer new opportunities or unacceptable risks? Australian case studies of people with an intellectual disability. In Bigby, C & Fyffe, C. (Eds.), *Achieving their own lives: The implementation of individualised funding for people with intellectualDisability: Proceedings of the third annual roundtable on intellectual disability policy* (pp.22-32). Melbourne: School of Social Work and Social Policy, La Trobe University.
- Lord, J. and Hutchison, P. (2003). Individualized support and funding: Building blocks for capacity building and inclusion. *Disability & Society*, 2(3), 71–86.
- Powers, I., Sowers, J., & Singer, G.H.S. (2006). Across-disability analysis of person-directed, long-term services. *Journal of Disability Policy Studies*, 17, 66-76.
- Rosenau, N. (2002). Individual funding: flavour of the day or sea change? *Policy Research Briefs*, 2. Fitzroy: Disability Foundation of Australia.
- Stainton, T. (2009) Individualised funding: An international review of approaches, outcomes and challenges. Laragy, C. In Bigby, C & Fyffe, C. (Eds.), *Achieving their own lives: The implementation of individualised funding for people with intellectualDisability: Proceedings of the third annual roundtable on intellectual disability policy* (pp.14-21). Melbourne: School of Social Work and Social Policy, La Trobe University.
- Stainton, Tim, Steve Boyce and Ceri Phillips (2009). 'Independence pays: cost and resource analysis of direct payments in two local authorities'. *Disability and Society*. Volume 24, .Number 2, 161 - 172.
- Stainton, T. and Boyce, S. (2004). 'I have got my life back': User's experience of direct payments. *Disability and Society*, 19(5), 443-454.
- Stainton, T. (2005). Empowerment and the architecture of rights-based social policy. *Journal of Intellectual Disabilities*, 9(4), 287-296.
- Stainton, Tim & Boyce, Steve (2001). Final Report: An Evaluation of Cardiff and the Vale Independent Living Scheme and the Implementation of Direct Payments. Cardiff: Wales Office of Research and Development in Health and Social Care.
- Zarb, G. & Nadash, P. (1994) *Cashing in on Independence: Comparing the Cost and benefits of cash and service*. London: BCODP.

