



Correctional Service
Canada

Service correctionnel
Canada



SAFETY, RESPECT
AND DIGNITY
FOR ALL

LA SÉCURITÉ,
LA DIGNITÉ
ET LE RESPECT
POUR TOUS

File #394-2-68
Evaluation Report:
Electronic Monitoring Program Pilot

Evaluation Branch
Policy Sector
December 2009

This page is purposely left blank

ACKNOWLEDGEMENTS

The Evaluation team would like to thank all the respondents including several Parole Officers in the Ontario region, current and past Monitoring Centre staff, other CSC staff and the EMPP participants (offenders), who participated and provided their views on the implementation of the Electronic Monitoring Program Pilot in CSC. We would like to express our appreciation to the Evaluation Consultative Group Members, including Ian Broom, Brian Grant (Research Branch), Jim Bonta (Public Safety Canada) and Larry Motiuk, Bev Arseneault, Paul Woodward, Paul Charkavi and Monty McTaggart (Correctional Operations and Programs) who provided insights and feedback during several stages of the evaluation.

EVALUATION REPORT PREPARED BY:

Michael K. Olotu
Director, Evaluation

Martin Beaupré
Senior Evaluator

Paul Verbrugge
Evaluation Analyst

OTHER EVALUATION TEAM MEMBERS:

Amanda Nolan, Evaluation Analyst

Marcie McKay, Evaluation Analyst

Cara Scarfone, Evaluation Analyst

Lindsey Pecaric, Evaluation Analyst

**Correctional Service Canada's
Electronic Monitoring Program Pilot**

SIGNATURES

Original signed by
Dr. Pamela M. Yates
Director General
Evaluation Branch

April 9, 2010
Date

Original signed by A/AACP Bill Staubi for
Lynn Garrow
Associate Assistant Commissioner
Policy Sector

April 9, 2010
Date

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	III
EVALUATION TEAM MEMBERS:	III
TABLE OF CONTENTS	V
LIST OF TABLES.....	VII
LIST OF FIGURES.....	VII
EXECUTIVE SUMMARY	IX
INTRODUCTION	17
ELECTRONIC MONITORING: A PREVAILING GLOBAL CORRECTIONAL PRACTICE	17
THE ELECTRONIC MONITORING PROGRAM PILOT (EMPP).....	19
CHARACTERISTICS OF EMPP PARTICIPANTS	22
<i>Age</i>	23
<i>Ethnicity</i>	23
<i>Sentence Type and Length</i>	23
<i>Offence Type</i>	24
<i>Scheduled Offences</i>	25
<i>Criminogenic Need/Domain Assessment</i>	26
<i>Institutional Misconduct and Segregation</i>	28
<i>Release Type</i>	28
<i>Release Conditions</i>	29
GOVERNANCE STRUCTURE	31
EMPP FINANCIAL BUDGET AND EXPENDITURES.....	33
EVALUATION STRATEGY	35
EVALUATION OBJECTIVES	35
LOGIC MODEL	35
EVALUATION METHODOLOGY	37
MEASURES AND PROCEDURE.....	37
INTERVIEWS WITH KEY INFORMANTS	38
OFFENDER RESPONDENTS	39
CSC STAFF RESPONDENTS	39
MONITORING CENTRE STAFF RESPONDENTS	40
POLICE SERVICES STAFF RESPONDENTS	40
AUTOMATED DATA SOURCES.....	41
DOCUMENT REVIEW	41
LIMITATIONS.....	41
KEY FINDINGS.....	43
EVALUATION OBJECTIVE 1: CONTINUED RELEVANCY	43
GOVERNMENT AND DEPARTMENTAL PRIORITIES	43
EVALUATION OBJECTIVE 2: IMPLEMENTATION.....	48
EM EQUIPMENT AND TECHNOLOGY (BATTERY, SIZE, DRIFT AND ALERTS).....	48
<i>Battery</i>	48
<i>Drift - A GPS Relative Positioning Error</i>	49
<i>Breach of Device and Tamper Alerts</i>	50

SELECTION CRITERIA.....	52
MONITORING AND RESPONSE PROTOCOLS	56
<i>Monitoring</i>	56
<i>Training</i>	61
<i>Victims</i>	62
EVALUATION OBJECTIVE 3: SUCCESS	64
STATUTORY RELEASE WITH RESIDENCY (SRR)	64
IMPACT ON WARRANTS OF SUSPENSION	66
IMPACT ON APPREHENSION	66
IMPACT ON DECISION-MAKING	67
OFFENDER ACCOUNTABILITY	68
IMPACT ON PAROLE OFFICERS/PAROLE SUPERVISORS	69
PERCEPTION OF PUBLIC AND STAFF SAFETY	71
EVALUATION OBJECTIVE 4: COST-EFFECTIVENESS	73
EVALUATION OBJECTIVE 5: UNINTENDED / OTHER FINDINGS	78
IMPACT ON OFFENDERS	78
LONG-TERM SUPERVISION ORDERS AND EM	79
REFERENCES	82
APPENDIX 1 – EVALUATION STRATEGY	85

LIST OF TABLES

Table 1: Age at Release - Population and the EMPP Sample.....	23
Table 2: Ethnicity, EMPP Participants and Population	23
Table 3: Sentence Type, EMPP Participants and Population	24
Table 4: Sentence Length and Time Served, EMPP Participants and Population	24
Table 5: Current Offence Types, EMPP Participants and Population	24
Table 6: Scheduled Offences, EMPP Participants and Population	25
Table 7: Last Correctional Plan Progress Report - Need Domains, EMPP Participants and Population.....	26
Table 8: Last Correctional Plan Progress Report - Risk, Need, Motivation, and Reintegration Potential Ratings, EMPP Participants and Population	27
Table 9: Institutional Offences and Involuntary Segregation, EMPP Participants and Population	28
Table 10: Conditional Release Type, EMPP Participants and Population.....	29
Table 11: Release Conditions, EMPP Participants and Population	30
Table 12: EM Financial Data (September 2008 to July 2009).....	33
Table 13: Projected Operational Budget for NMC	34
Table 14: CSC Staff Respondent Position Titles	39
Table 15: Respondent Agreement Regarding Supervision Challenges and EMPP Addressing Supervision Challenges	47
Table 16: Respondent Agreement Regarding the EM Equipment.....	49
Table 17: Type and Frequency of Occurrence Reports	51
Table 18: Type and Frequency of Strap Tamper Alerts.....	51
Table 19: Respondent Agreement Regarding Monitoring Activities	57
Table 20: Respondent Agreement Regarding Actions Taken by Monitoring Centre Staff/EMPP Staff Once an Alert Has Been Received	58
Table 21: Significant Challenges to Monitoring Centre Staff	59
Table 22: Effects of EMPP on Offender Accountability	68
Table 23: CSC Staff Agreement towards their Workload	71
Table 24: Frequency of Contact between EMPP Participants and Population (SRR cases) with parole officers.....	77
Table 25: Number of LTSO Designations over the past ten years	79

LIST OF FIGURES

Figure 1: Governance Structure of EMPP	32
Figure 2: EMPP Logic Model.....	36
Figure 3: Distribution of levels of frequency of contact for EMPP participants with a residency condition and the corresponding population.....	65
Figure 4: Frequency of contact between EMPP participants and Population with parole officers.....	76
Figure 5: Current Number of SRR and LTSOs by Region	81

LIST OF ACRONYMS

CCC	Community Correctional Centre
CCC	Criminal Code of Canada
CCRA	Corrections and Conditional Release Act
CD	Commissioner's Directive
CRF	Community Residential Facility
COMO	Cost of Maintaining Offender
CPIC	Canadian Police Information Centre
CSC	Correctional Service of Canada
EM	Electronic Monitoring
EMPP	Electronic Monitoring Program Pilot
RF	Radio Frequency
GPS	Global Positioning System
IFMMS	Integrated Financial and Material Management System
LTO	Long Term Offender
LTSO	Long Term Supervision Order
MC	Monitoring Centre
NHQ	National Headquarters
NPB	National Parole Board
NMC	National Monitoring Centre
OMS	Offender Management System
P	Population
ROE	Risk Offender Enforcement
ROPE	Repeat Offender Parole Enforcement
RPP	Report on Plans and Priorities
SR	Statutory Release
SRR	Statutory Release with Residency
TBS	Treasury Board Secretariat
UAL	Unlawfully at Large
WED	Warrant Expiry Date

EXECUTIVE SUMMARY

Introduction:

This evaluation was initiated in response to a request for an analysis of CSC's Electronic Monitoring Program Pilot (EMPP) and constituted an implementation evaluation intended to examine the progress of EMPP to date and establish a foundation upon which the design and delivery of EMPP could be realigned. Treasury Board standards for evaluation were used to examine the project's continued relevancy, implementation, success, and cost-effectiveness.

On August 11th, 2008, the Minister of Public Safety Canada announced the launch of the pilot to electronically monitor offenders on conditional release in the community. Electronic monitoring was piloted within CSC in order to assess its potential as an additional tool for managing federal offenders in the community, thereby contributing to the safety of Canadians. More specifically, EMPP was intended to provide parole officers with additional offender supervision and monitoring tools in the community, increase offender accountability, encourage positive offender behaviour, and augment staff safety. Furthermore, the specific purposes of EMPP were to¹:

- Test CSC's capacity to manage information received through GPS technology;
- Ensure that an appropriate policy framework and response protocols were in place;
- Assess staff readiness to use EM as a tool to assist in monitoring offenders in the community;
- Identify appropriate response protocols when an EM alert was received; and
- Identify future needs and requirements in relation to a potential larger scale, national EM program.

Program Profile:

The one-year program pilot commenced in August 2008. During the first phase, 15 CSC staff volunteers wore the ankle device for a two-week period. The objective was to test CSC's protocols, inform policy changes, identify additional training requirements, identify potential technological challenges and assess CSC's readiness to use EM with offenders. Phase II began

¹ CSC (2008). *Electronic Monitoring Program Pilot: Results-Based Management and Accountability Framework*. Ottawa, ON: Author.

in September 2008 when EMPP was launched as a pilot project in the Central Ontario District (i.e., Greater Toronto Area). The second phase commenced in September 2008, when EMPP was officially launched in the Central Ontario District, and included the monitoring of nine offenders who had been released to the community and who were subject to either a curfew or a special residency condition. The third phase began in January 2009, adding to the program pilot offenders being prepared for release from a federal penitentiary on conditional release. A total of 46 offenders participated in the program pilot throughout the second and third phases.

Financial Expenditures:

Financial information pertaining to EMPP was provided to the Evaluation Branch by the Director General (DG) of the Community Reintegration Branch. This source of financial information was used as EMPP financial data was not coded in the Integrated Financial and Material Management System (IFMMS) in its entirety.

EMPP's budget was calculated for the period from September 2008 to August 2009 and was based on the following expenditures: \$282,067 in EM project staff salaries, \$237,441 in start-up costs for the National Monitoring Centre, including the cost of agreement with the Province of Nova Scotia, \$45,000 in EM device related costs and \$291,588 in salaries as a portion of the total NMC staff salaries (\$395,727) that was related to EMPP monitoring. The latter was calculated as a percentage of monitoring centre staff expenses, taking into account the distribution of their level of effort on the community staff safety (12hrs daily/5 days weekly) and EMPP projects (24 hrs/7 days weekly). Specifically, a level of effort per week per employee was determined based on the total number of hours with respect to both projects (i.e., $12 \times 5 = 60$ hours/week on community staff safety and $24 \times 7 = 168$ hours/week on EMPP). The salary dollar (\$395,727) amounts were thus allocated accordingly - \$291,588 for EMPP and \$104,138 for Community Staff Safety. The overall EMPP expenditure during the program pilot amounted to \$856,096.

According to the projected budget for the National Monitoring Centre (NMC) provided by the Comptroller's Branch, the NMC budget is projected at \$1,684,990 for 2009-2010, \$3,220,871 for 2010-2011 and \$4,083,569 for 2011-2012. The number of Full Time Equivalent (FTE) positions

will incrementally rise from 17 to 44 by the end of fiscal year 2011-2012. The NMC is responsible for managing other programs including the Duty Officer Program, Community Staff Safety Program and the Electronic Monitoring Program. As such, costs represent multiple activities; however, proportional costs for EMPP specifically could not be determined. Nonetheless, the evaluation team was provided with a projected ratio of EM activities within the NMC operations with a projected value of approximately \$1million/year. Therefore, the cost-effectiveness analysis conducted in the evaluation was based on the projected cost of \$1M. All necessary projections of costs relative to benefits were calculated using \$1M as a benchmark value.

Evaluation Strategy:

The evaluation strategy was developed in consultation with a consultative group, comprised of key stakeholders (e.g., Community Reintegration Branch, CSC staff members and managers). The evaluation used both qualitative and quantitative methodologies. Information used to facilitate these analyses was collected through:

- Interviews with key informants;
- Data derived from CSC's automated database - Offender Management System (OMS);
- Cost of Maintaining Offender (COMO) - The key data source for the cost-effectiveness analyses was CSC's COMO database. This database is used by CSC to estimate the cost of keeping offenders in the federal correctional system;
- Financial data provided by the Community Reintegration Branch as well as by IMRS through Financial Management Services;
- Monitoring data provided by the EM unit of the Community Reintegration Branch;
- A review of relevant CSC documentation including EM policy/guidelines and response protocols;
- A review of relevant governmental documentation; and
- A review of the relevant literature regarding the use of electronic monitoring in corrections, including the relevancy and success of electronic monitoring in other jurisdictions.

It should be noted that the current evaluation has a number of significant limitations. More specifically, the sample size was unavoidably small due in part to EMPP being designed and implemented to monitor a maximum of 30 offenders at any one time during the one-year pilot. Additionally, only 9 offenders accepted to participate in the evaluation interviews and, thus, these offenders' views cannot be considered as representative of all offender participants in the project. Furthermore, there were some challenges encountered during the course of the evaluation due to the quality of data maintained regarding the EMPP participants. For instance, it was difficult to determine the exact number of offenders who participated in EMPP during the time period of interest, as there were inconsistencies regarding the list of participants, start and end dates of participation, and whether an offender was referred but refused to participate in EMPP.

KEY FINDINGS

EVALUATION OBJECTIVE 1: CONTINUED RELEVANCY

FINDING 1: The Electronic Monitoring Program Pilot is consistent with government priorities and CSC's mission. It may benefit some offenders, although the benefits could not be demonstrated in the current evaluation.

FINDING 2: There is a varying degree of use of EM technology among correctional and law enforcement agencies nationally and internationally. The greatest jurisdictional variability relates to eligibility requirements and the type of offender for whom EM is used.

FINDING 3: While the majority of monitoring centre and CSC staff indicated that electronic monitoring filled a gap with respect to managing release conditions (e.g., geographical restrictions), offenders themselves did not perceive that such monitoring system enhanced their accountability.

EVALUATION OBJECTIVE 2: IMPLEMENTATION

FINDING 4: There were challenges associated with the reliability of the technology used in EMPP with respect to the sustainability of a charged battery (e.g. time to charge, duration of charge), the device (size, comfort and visibility), drift, and frequent false tamper alerts.

FINDING 5: The characteristics of EMPP participants demonstrated that the current eligibility criteria were not consistent with the selection of offenders for participation in EMPP.

FINDING 6: Certain behaviour of offenders while on conditional release demonstrated that EM might not be the most appropriate form of intervention in the community.

FINDING 7: EMPP monitoring activities were generally efficient and monitoring centre staff members took the appropriate actions when alerts were received. The monitoring activities increased the frequency of contact between parole officers and offenders beyond the required number in the policy.

FINDING 8: The majority of respondents described several challenges facing the National Monitoring Centre, including its location, the condition of the centre and NMC operators' knowledge of the geography of EMPP coverage area, as well as technical and communication difficulties.

FINDING 9: CSC has established effective partnerships with police services in the catchment areas to support the monitoring of offenders and responses to alerts, although communication between these police agencies and CSC could be improved.

FINDING 10: CSC developed and trained staff and partners who were responsible for the application and/or removal of EM devices, and the monitoring of offenders. However, there were several challenges in the collection, storage, analysis and reporting of data received in the monitoring centre.

FINDING 11: The existing legislative framework does not support the monitoring centre in notifying victims when an offender is on EM unless a Warrant of Apprehension and Suspension has been issued.

EVALUATION OBJECTIVE 3: SUCCESS

FINDING 12: The research literature is inconclusive with respect to the rehabilitative impact of electronic monitoring. Evaluation findings were similarly inconclusive.

FINDING 13: The frequency of contact between offenders on SRR and their parole officers was not reduced as a result of their participation in EMPP.

FINDING 14: There was no difference between EMPP participants and a matched comparison group on the number of Warrants of Suspension issued, although electronic monitoring was used in some cases to cancel the Warrant of Suspension issued on offenders.

FINDING 15: There are conflicting views regarding the impact of EMPP on offenders' accountability. Generally, CSC staff, monitoring centre staff and police officers agreed that

EM had a deterrent effect on offenders and held offenders accountable. The offenders themselves did not share this view and research literature is inconclusive.

FINDING 16: The integration of EMPP monitoring and response requirements with parole officers' responsibilities may potentially increase their workload.

EVALUATION OBJECTIVE 4: COST EFFECTIVENESS

FINDING 17: Cost-effectiveness of EMPP has not yet been demonstrated given the short period of implementation; however, EM has potential cost-saving value for CSC. Furthermore, the surveillance and monitoring value could provide opportunities for offenders to enhance their independent community living.

EVALUATION OBJECTIVE 5: UNINTENDED/OTHER FINDINGS

FINDING 18: Despite technical challenges associated with EM, some offenders indicated that it provided personal benefit and supported their reintegration potential.

LIST OF RECOMMENDATIONS

RECOMMENDATION 1: CSC should conduct an evaluation of EMPP within approximately 3 years in order to examine the continued relevancy, effectiveness, cost - effectiveness and implementation of EMPP within the community supervision model and in order to determine its disposition.

RECOMMENDATION 2: CSC should explore alternative technologies that could address deficiencies of the current technology in order to maximize the benefits of EM particularly with regards to reliable monitoring and supervision of offenders in the community.

RECOMMENDATION 3: Given the jurisdictional variability in the eligibility requirements for EM, CSC should conduct a review of available research in order to determine the category and types of offenders for whom EM will be most suited.

RECOMMENDATION 4: CSC should review and adapt EM selection criteria, focusing on those areas in which EM could play a critical role in maximizing offenders' successful reintegration and supervision in the community.

RECOMMENDATION 5: CSC should develop and provide to all EMPP staff appropriate data management (data collection, storage, analysis, and reporting) training that will foster reporting of EM outcomes and support decision-making.

RECOMMENDATION 6: CSC should develop a policy bulletin to guide the monitoring centre staff in monitoring EMPP participants if and when an offender is within the registered victim's area of residence.

RECOMMENDATION 7: Given the level of contact and monitoring of EMPP participants by the monitoring centre and the increase in Parole Officer contact (see finding 7), CSC should review whether changes to the policy framework on frequency of contact between EMPP participants and their respective parole officers are required.

RECOMMENDATION 8: CSC should review EM monitoring requirements and potential impacts on the responsibilities of parole officers, and adjust parole officer workload formulas accordingly.

RECOMMENDATION 9: If EM is expanded or implemented on a national basis, it should be integrated into CSC's community supervision strategy in order to enhance the supervision of offenders, particularly those with appropriate level of risk and needs, and suitable release conditions.

RECOMMENDATION 10: CSC should review the policy framework guiding the frequency of intervention between parole officers and adapt the required frequency of contact taking into consideration the collateral monitoring and surveillance value of EM in the supervision of offenders in the community.

RECOMMENDATION 11: CSC should develop a strategy to increase the number of offenders who are monitored using EM so as to be cost-effective, and should regularly monitor results.

This page is purposely left blank

INTRODUCTION

This evaluation was initiated in response to a request for an in-depth analysis of CSC's Electronic Monitoring Program Pilot (EMPP). The current evaluation is an implementation evaluation intended to examine the progress of EMPP to date and establish a foundation upon which the design and delivery of EMPP could be realigned. Treasury Board standards for evaluation were used to examine the project's continued relevancy, implementation, success, and cost-effectiveness.

On August 11th, 2008, the Honourable Stockwell Day, then the Minister of Public Safety Canada, announced the launch of this pilot to electronically monitor federal offenders who were released to the community on conditional release². As noted by Minister Day³,

This initiative will better protect communities and provide an additional tool for the Correctional Service of Canada and police to prevent crime. Our Government is determined to ensure that those offenders who are released by the National Parole Board into the community are more effectively monitored. We have listened to police and victims groups who have been requesting such a tool for years. 'Compelling offenders to abide by the conditions of their release is a key aspect of our reform' of Canada's prison system.

In initiating the project, CSC entered into an agreement with the Government of Nova Scotia for the electronic monitoring devices, given that the province was the first in Canada to use GPS technology to monitor offenders and the technology had been in place for two years. CSC therefore borrowed on their experiences in the design of its program pilot. The CSC one-year pilot then commenced in September 2008, and was intended to include up to a maximum of 30 offenders at any one time in the Ontario Region.

Electronic Monitoring: A Prevailing Global Correctional Practice

Since the 1960s when American Psychologist Dr. Robert Schweitzgebel conceived the innovative idea of electronically monitoring offenders, the idea has captured the attention

² Conditional Release includes: Temporary Absences, Day/Full Parole, Statutory Release

³ Public Safety Canada (2008). *Government initiates electronic monitoring for federal offenders*. Retrieved August 18, 2009 from <http://www.publicsafety.gc.ca/media/nr/2008/nr20080811-eng.aspx>

of correctional officials and law enforcement agencies around the world. The motives behind its implementation in corrections, however, have varied widely.

Electronic monitoring (EM) may be employed at various stages of the criminal justice system, including at pre-trial, at sentencing, and/or following a period of incarceration (Black & Smith, 2003; Bottos, 2007; John Howard Society of Alberta [JHSA], 2006). During the pre-trial stage, EM may be used as a condition upon which a defendant is released on bail or when a decision is made to release an accused on a recognizance bond. Electronic monitoring at this stage is primarily used for surveillance, to ensure that offenders appear for trial and to reduce the likelihood of further offences being committed. At the sentencing phase, EM may be used as a sentencing option to facilitate home detention. Following a period of incarceration, EM is most often used as a condition of early release (i.e., parole) and the focus is on reintegration and rehabilitation. The ultimate goal of all EM initiatives in corrections appears to be intended to increase offender accountability, reduce recidivism rates and enhance public safety by providing an additional tool to traditional methods of community supervision (Bottos, 2007).

In New Zealand and Australia, EM is used as a measure for home detention, compelling offenders to “remain within the precincts of a specified residence during specified hours; and permitting absences from those precincts only during specified periods and for approved purposes” (Henderson, 2006 pg. 03). The electronic monitoring of offenders was introduced in the United States during the 1980s, with its use increasing significantly during the 1990s due to the potential for a cost-effective way to reduce the escalating prison population. It is currently used in most US states for home detention, probation, parole, juvenile detention and bail (Barry et al., 2007). For example, in Florida, EM is used as an intermediate sanction program to divert offenders from prison, while providing greater levels of offender accountability and surveillance than would be provided by traditional probation supervision (Padgett, Bales & Blomberg, 2006).

The use of EM increased throughout Europe during the mid 1990s, particularly in Sweden and the Netherlands, where it has been used alongside intensive supervision programs and as an alternative to custody (Eley et al., 2005).

In 2007, a CSC research report⁴ highlighted the advantages and disadvantages of electronic monitoring, the dominant issues surrounding its implementation, and the results of outcome evaluations conducted to date. In terms of advantages, the report suggested that EM provided an additional tool for community parole officers to monitor offender behaviour, and encouraged offender rehabilitation by increasing their accountability and deterring them from recidivist behaviour (Bottos, 2007). Conversely, the report outlined a few disadvantages of EM, such as the fact that EM only provided a geographic location of the offender, and although assumptions could be made based on the geographic location, specific behaviours were not identified. Hence, EM did not guarantee that an offender was abiding by all conditions of release.

The Electronic Monitoring Program Pilot (EMPP)

CSC implemented the Electronic Monitoring Program Pilot (EMPP) as part of risk management and the integrated supervision of offenders on conditional release in the Ontario Region in September 2008. The objective of piloting EM within CSC was to assess its potential as an additional tool for managing federal offenders on conditional release, thereby contributing to public safety.

The specific purposes of EMPP were to⁵:

- Test CSC's capacity to manage information received through GPS technology;
- Ensure that an appropriate policy framework and response protocols were in place;
- Assess staff readiness to use EM as a tool to assist in monitoring offenders in the community;
- Identify appropriate response protocols when an EM alert was received; and
- Identify future needs and requirements in relation to a potential larger scale, national EM program.

⁴ Bottos, S. (2007). An Overview of Electronic Monitoring in Corrections: The Issues and Implications. *Research report: Correctional Service of Canada.*

⁵ CSC (2008). *Electronic Monitoring Program Pilot: Results-Based Management and Accountability Framework.* Ottawa, ON: Author.

The program pilot was not designed to replace the traditional function of parole officers, Community Residential Facilities (CRFs) or Community Correctional Centres (CCC) in the management of released offenders.

EMPP involved participating offenders wearing an ankle bracelet utilizing Global Positioning System (GPS) and cellular technology to monitor movement at all times. Alerts were received by staff in the National Monitoring Centre (NMC) in Ottawa, if participating offenders violated parole conditions such as curfew or location restrictions, or if they tampered with or failed to charge the ankle device. NMC staff work with parole officers to manage offenders who are being electronically monitored, as parole officers analyze the data received to verify whether or not offenders are following their parole conditions, particularly those relating to curfew and geographical restrictions. If an alert is received, appropriate action is taken and police may be contacted.

CSC's current legislation (*Corrections and Conditional Release Act [CCRA]*) does not speak to the use of Electronic Monitoring on Federal offenders. Thus, during the pilot, EM was not imposed as a special condition by the National Parole Board. More specifically, EM was applied as part of a "Local Instruction" as per the *CCRA*, Section 134 (1)⁶

EMPP involved three phases over a one-year period. Phase I began in August 2008 when 15 CSC staff volunteers wore the ankle device for a two-week period. This was done in order to monitor response protocols and test the readiness of the project and to extensively test the use of GPS technology. Volunteers were given predetermined scenarios and activities that would otherwise have constituted a breach of the conditions of EM operations (e.g., tampering with the device, entering exclusion zones, violating curfew). A review of these activities was conducted in order to develop procedures and guidelines, and in some cases, existing guidelines were updated to reflect lessons learned.

⁶ An offender who has been released on parole, statutory release or unescorted temporary absence shall comply with any instructions given by a member of the Board or a person designated, by name or by position, by the Chairperson of the Board or the Commissioner, or given by the institutional head or by the offender's parole supervisor, respecting any conditions of parole, statutory release or unescorted temporary absence in order to prevent a breach of any condition or to protect society.

Phase II began in September 2008 when EMPP was launched in the Central Ontario District (i.e., Greater Toronto Area). Voluntary offenders who participated in the program pilot during this phase were required to meet one of the following criteria⁷: 1) EM was proposed as a possible enhanced supervision approach; 2) subject to a curfew condition; or 3) having a special residency condition. Offenders meeting the criteria were reviewed for potential participation and confirmed acceptance into the program pilot by the National EM Referral Committee⁸. A total of nine offenders were included in EMPP throughout Phase II.

Phase III began in January 2009, and was an expansion of Phase II, which included offenders being prepared for release from a federal penitentiary on conditional release. It included offenders subject to a National Parole Board (NPB) imposed special condition regarding geographic restrictions. A total of 37 offenders were included in EMPP throughout Phase III.

All offenders included in EMPP during phases II and II were male and none of the participants had a Long Term Supervision Order designation (LTSO). EMPP commenced within the geographic boundaries of the Central Ontario Parole District, and later expanded to include the Greater Ontario and Northern District in the spring of 2009. At the time of this evaluation, EMPP was available within all operational sites in the Central Ontario District and most of the operational sites in the Greater Ontario and Nunavut District with the exception of the Timmins, Ottawa and Nunavut parole offices. EMPP was not available for implementation at the Timmins Parole Office due to a contract Parole Officer being unavailable for training. Implementation at the Ottawa Parole Office was delayed due to implementation of other national initiatives. Furthermore,

⁷ CSC (2008). *Electronic Monitoring Program Pilot: Results-Based Management and Accountability Framework*. Ottawa, ON: Author.

⁸ This committee is chaired by the EMPP National Project Manager and members include: the District Director, Associate District Director, various Parole Officers and Parole Officer Supervisors, the Community Corrections Liaison Officer, the Community Reintegration Operations Director (or designate), and membership from the National Parole Board.

according to the Project Authority, EMPP was not implemented in the Nunavut parole office because of functionality issues associated with technology.

Characteristics of EMPP Participants

This section examines whether EMPP participants differed from the larger population of offenders with respect to demographic characteristics, correctional plan information, and institutional behaviour before release⁹.

A total of 46 offenders participated in EMPP between September 2008 and June 15th, 2009. Note that the number of times EM was implemented was greater than the number of participants because some offenders participated more than once.

The "population" of offenders (P) was defined as male offenders who were released: (a) on full parole or statutory release; (b) in Ontario; and, (c) between September 2008 and June 2009. In total, the population consisted of 1480 offenders.

Statistical comparisons in this section test the likelihood that a distribution within a characteristic, such as one found in the EMPP sample would be observed, if 46 offenders were drawn from the population at random. A *Z-score* (for a continuous variable like age) or a one-way Chi-squared statistic (for a categorical variable like ethnic group) was calculated based on the population parameters (i.e., population mean, population standard deviation, population proportions) and the observed distribution.

Population parameters were used to calculate the *Z-score* and one-way Chi-squared statistics¹⁰. The statistics calculated represent the likelihood that the EMPP participant group was different from the population. EMPP participants were compared with the population on key variables such as age, ethnicity, index offence type, institutional behaviour (disciplinary charges and segregation), and criminogenic needs.

⁹ All offenders included in the EMPP during phases I and II were male

¹⁰ The Chi-squared statistical test technique for independence is used to determine whether a distribution of observed frequencies differs from expected frequencies (McGibbon, 2006). In a one-way Chi-square test, the expected frequencies are based on the proportions observed in the population.

Age

EMPP participants ranged in age from 22 to 63 years. The mean age of the EMPP participants was 34 years, compared to 36 years for the population. The distribution of offenders' age at the time of release can be seen in Table 1. EMPP participants did not differ from the population with respect to age. Fifty percent of the participants were between 22 and 31 years of age.

Table 1: Age at Release - Population and the EMPP Sample

Variable		n	M	SD	Median	Z
Age at Release	EM	46	33.96	10.86	31	-1.56 (NS)
	P	1480	36.40	10.63	35	

Note : EM = EMPP Participants, P = Population; *p < .05, **p < .01, ***p < .001 (NS-Not Significant)

Ethnicity

In terms of ethnic composition, it was found that the group of EMPP participants differed significantly from the population (see Table 2). More specifically, a larger proportion of the EMPP participants was Black, whereas the majority of offenders in the comparative population were Caucasian. The disproportional representation of offenders in this category suggests that Black offenders were over-represented among the group of EMPP participants relative to the population who were within the catchment areas.

Table 2: Ethnicity, EMPP Participants and Population

	Caucasian		Black		Aboriginal		Other		X ²
	n	%	n	%	n	%	n	%	
EM	28	61	14	30	3	7	1	2	11.35**
P	1018	69	208	14	124	8	121	8	

Note : EM = EMPP Participants, P = Population; df = 3; **p < .01.

Sentence Type and Length

The EMPP participants and the population were also compared on sentence type, which can be found in Table 3¹¹. No significant differences were found.

¹¹ Long-term offenders (10 years or more) were included in the indeterminate group.

Table 3: Sentence Type, EMPP Participants and Population

	Determinate		Indeterminate		X ²
	n	%	n	%	
EM	45	98	1	2	0.01 (NS)
P	1445	98	35	2	

Note : EM = EMPP Participants, P = Population; df = 1; *p < .05, **p < .01, ***p < .001, (NS-Not Significant)

Sentence length and time served until release are presented in Table 4. Times are expressed in years. Traditionally, CSC assigns offenders to the least restrictive facility where their correctional plan can be addressed and fosters their release into the community as law-abiding citizens. Sentence length was only calculated for offenders who were not serving a life sentence. Overall, the EMPP participants were serving longer sentences and had been incarcerated for a longer period of time compared to the population.

Table 4: Sentence Length and Time Served, EMPP Participants and Population

		n	M	SD	Median	Z
Sentence Length (years)	EM	45	5.09	4.90	3.24	2.55**
	P	1445	3.90	3.15	3.0	
Time Served to Release (years)	EM	46	4.52	5.83	2.34	2.69**
	P	1480	3.13	3.50	2.05	

Note : EM = EMPP Participants, P = Population; *p < .05, **p < .01, ***p < .001

Offence Type

The types of offences that were associated with an offender's index offence are presented in Table 5. Relative to the population, the EMPP participant group had a significantly higher proportion of offenders serving sentences for weapons offences. There were no other significant differences.

Table 5: Current Offence Types, EMPP Participants and Population

Offence Type		No		Yes		X ²
		n	%	n	%	
Homicide	EM	43	93	3	7	.95

	P	1424	96	56	4	
Sexual	EM	43	93	3	7	.02
	P	1376	93	104	7	
Assault	EM	34	74	12	26	0.34
	P	1147	78	333	23	
Drug	EM	33	72	13	28	1.09
	P	1156	78	324	22	
Break and Enter	EM	33	72	13	28	.73
	P	1140	77	340	23	
Robbery	EM	32	70	14	30	.60
	P	1103	75	337	25	
Weapons	EM	30	65	16	35	6.81**
	P	1191	80	289	20	
Other	EM	13	28	33	72	.12
	P	385	26	1095	74	
Note : EM = EMPP Participants, P = Population; df = 1; *p < .05, **p < .01, ***p < .001						

Scheduled Offences

Table 6 describes the percentage of offenders who were serving a sentence for an offence that fell within Schedule 1 (i.e., serious offence against the person) or Schedule 2 (i.e., serious drug offence) as outlined in the Corrections and Conditional Release Act (CCRA). The EMPP participant group did not significantly differ from the population.

Table 6: Scheduled Offences, EMPP Participants and Population

CCRA Def.		No		Yes		X ²
		n	%	n	%	
Schedule 1	EM	22	48	24	52	.00
	P	705	48	775	52	
Schedule 2	EM	32	70	14	30	1.31
	P	1135	77	345	23	
Note : P = Population, EM = EMPP Participants; df = 1; *p < .05, **p < .01, ***p < .001						

Criminogenic Need/Domain Assessment

Table 7 describes the distribution of need domain ratings, based on an offender's last Correctional Plan Progress Report (CPPR) before release. As indicated in the table, EMPP participants had significantly higher needs with respect to associates/social interaction compared to the population. Specifically, almost 92% ($n=42$) had some and/or considerable need for improvement with respect to associates and social interaction, while 78% ($n=36$) had some and/or considerable need for improvement in substance abuse, 87% ($n=40$) for personal and emotional orientation, and 89% ($n=41$) for attitude. Although only associates/social interaction was the need area that showed a significant difference, the trends showed in the areas of substance abuse, personal and emotional orientation and attitude were worth noting. As indicated in the 2007 CSC research report cited earlier in the report, while EM may be useful for monitoring the movement of offenders, it is less useful for assessing or preventing offender negative associations, substance use, psychological dispositions and attitude. Conversely, research shows that the use of EM allows offenders to spend more time with their families and to retain family responsibilities, potentially allowing for improved rehabilitation and reintegration into the community (Black & Smith, 2003). Table 7 reveals that 78% ($n=36$) of the EMPP participants had marital and family relationships as **assets**, thus demonstrating no need for improvement in this area.

Table 7: Last Correctional Plan Progress Report - Need Domains, EMPP Participants and Population

Criminogenic factors		Asset / No Need		Some Need		Considerable Need		χ^2
		n	%	n	%	n	%	
Employment	EM	9	20	29	63	8	17	3.49
	P	377	25	959	65	143	10	
Marital / Family	EM	36	78	9	20	1	2	6.62*
	P	897	61	441	30	145	10	
Associates / Social Interaction	EM	4	9	18	39	24	52	14.54***
	P	282	19	791	53	407	28	

Substance Abuse	EM	10	22	20	43	16	35	2.22
	P	417	28	495	33	568	38	
Community Functioning	EM	34	74	10	22	2	4	1.08
	P	990	67	421	28	69	5	
Personal / Emotional	EM	6	13	21	46	19	41	.93
	P	256	17	698	47	526	36	
Attitude	EM	5	11	18	39	23	50	5.60
	P	333	23	622	42	525	35	
Note : EM = EMPP Participants, P = Population; df = 2; *p < .05, **p < .01, ***p < .001								

Table 8 compares the relative risk, need, motivation, and reintegration potential levels based on an offender's last CPPR before conditional release. Overall, the EMPP group had higher dynamic need levels compared to the population. Most EMPP participants were found to be of moderate to high risk (95%; $n=44$, though not statistically significant), had a moderate level of motivation (70%; $n=32$, a non-significant difference), and a low to moderate reintegration potential (84%; $n=39$, not a significant difference).

Table 8: Last Correctional Plan Progress Report - Risk, Need, Motivation, and Reintegration Potential Ratings, EMPP Participants and Population

Var		Low		Moderate		High		X ²
		n	%	n	%	n	%	
Risk	EM	2	4	20	43	24	52	2.6
	P	176	12	623	42	681	46	
Need	EM	1	2	8	17	37	80	9.58**
	P	152	10	463	31	865	58	
Motivation	EM	8	17	32	70	6	13	.47
	P	228	15	1007	68	245	17	
Reintegration	EM	20	43	19	41	7	15	3.45
	P	495	33	600	41	385	26	
Note : EM = EMPP Participants, P = Population; df = 2; *p < .05, **p < .01, ***p < .001								

Institutional Misconduct and Segregation

The proportion of EMPP participants who had an institutional charge for which they were subsequently convicted 90 days prior to release is presented in Table 9. The table also outlines the proportion of offenders who were held in segregation for a disciplinary or institutional security reason at any point within 90 days before their release. A larger proportion of EMPP participants was convicted of an institutional charge within 90 days of their conditional release, compared to the population. This difference was observed with respect to both minor and serious institutional charges. With respect to segregation, a higher proportion of EMPP participants, compared to the population, was held in segregation at some point within 90 days of their release.

Table 9: Institutional Offences and Involuntary Segregation, EMPP Participants and Population

Charges	Groups	No		Yes		X ²
		n	%	n	%	
Minor	EM	31	67	15	33	9.00**
	P	1239	84	241	16	
Serious	EM	38	83	8	17	5.94*
	P	1365	92	115	8	
Minor or Serious	EM	28	61	18	39	9.27**
	P	1171	79	309	21	
Any Segregation	EM	35	76	11	24	8.72**
	P	1324	89	156	11	

Note : P = Population, EM = EMPP Participants; df = 1; *p < .05, **p < .01, ***p < .001

Release Type

The population was limited to offenders who were released on full parole or statutory release. Table 10 presents the type of conditional release granted to offenders for the supervision period. Notwithstanding that majority of the EMPP participants were

released on statutory release (91%; $n=42$), this was consistent with the population (83%; $n=1232$)¹².

Table 10: Conditional Release Type, EMPP Participants and Population

Groups	Full-Parole		Statutory-Release		X ²
	n	%	n	%	
EM	4	9	42	91	2.14
P	248	17	1232	83	

Note : GP = General Population, EM = EMPP Participants; df = 1; *p < .05, **p < .01, ***p < .001

Of the offenders participating in EMPP, 20% ($n=9$) were interviewed for this evaluation. Among these, twenty-two percent ($n=2$) and 78% ($n=7$) indicated that they were under Full Parole and Statutory Release during their participation in EMPP, respectively. When asked about the length of their participation in EMPP, 22% ($n=2$) indicated less than 10 days, 44% ($n=4$) indicated 11-50 days, 11% ($n=1$) indicated 51-100 days. and 22% ($n=2$) indicated more than 100 days¹³. Additionally, 89% ($n=8$) indicated being under curfew; 22% ($n=2$) indicated having a special condition to reside in a CRF/CCC, 33% ($n=3$) indicated having their parole suspended or revoked, 67% ($n=6$) indicated having a special condition prohibiting them from being in a specific area/place, and 44% ($n=4$) indicated “other” situations, which included abstaining from drugs/alcohol ($n=2$), having a non-association condition ($n=1$), and having to report relationships ($n=1$).

Release Conditions

While CSC has the responsibility of managing offenders’ sentences, including the development of a responsive correctional plan to address their criminogenic needs, the National Parole Board (NPB) has the ultimate mandate of granting, denying and revoking conditional release, as well as imposing conditions of release. Table 11 describes the conditions imposed by NPB on the offenders included in this evaluation. While there were no statistically significant differences between the EMPP participants and the

¹² None of the participants had a Long Term Supervision Order designation (LTSO)

¹³ There were no data available from the monitoring centre to verify the length of participation of some offenders. Hence, some analyses could not be conducted to measure impact on correctional results.

population, the findings outlined in Table 11 were consistent with the findings regarding EMPP participants' criminogenic needs. Specifically, NPB decisions revealed that a high proportion of offenders had conditions to avoid certain persons (93%; $n=43$), abstain from drug use (87%; $n=40$) and alcohol use (65%; $n=35$). These are conditions meant to mitigate criminogenic factors such as associates and social interaction, substance abuse, and attitude.

As stated earlier in the report, while EM may have value for monitoring the mobility and location of offenders, it may not be an adequate or appropriate tool to assess and prevent participants from breaching these conditions. Also notably, the majority of the EMPP participants (78%; $n=36$) did not have a condition to reside at a specific place. This factor had been established as essential in the selection criteria for EMPP.

Table 11: Release Conditions, EMPP Participants and Population

Release Conditions	Groups	No		Yes		X ²
		n	%	n	%	
Avoid Certain Persons	EM	3	7	43	93	.02
	P	90	6	1390	94	
Abstain from Drugs	EM	6	13	40	87	2.16
	P	326	22	1154	78	
Abstain from Alcohol	EM	16	35	30	65	.06
	P	489	33	991	67	
Follow Treatment Plan	EM	18	39	28	61	.08
	P	610	41	870	59	
Avoid Certain Places	EM	30	65	16	35	.03
	P	946	64	534	36	
Follow Psychological Counselling	EM	35	76	11	24	.14
	P	1090	74	390	26	
Reside at Specific Place	EM	36	78	10	22	.48
	P	1092	74	388	26	
Other Condition	EM	14	30	32	70	.18
	P	494	33	986	67	

Note. P = Population, EM = EMPP Participants; $df = 1$; * $p < .05$, ** $p < .01$, *** $p < .001$

In summary, recognizing that the EMPP participants were voluntary participants, the picture that emerged after the compilation of several findings with respect to the characteristics of the participants was as follows. CSC's EMPP participant tended to: (a) be offenders between the ages of 22-30 years (a mean age of 34 years); (b) with weapons related index offences; (c) have high needs in the areas of associates and social interaction; (d) have been released on statutory release; and (e) have NPB imposed release conditions to abstain from associating with a person and/or abstain from the use of drugs and alcohol.

Governance Structure

EMPP was a pilot project with the objective of examining the implementation of the project within CSC in order to determine its possible national implementation. Several stakeholders played an important role in the project. They included the Community Reintegration Branch, CSC staff members and managers involved in decision-making (particularly in the Ontario Region), external stakeholders (e.g., the Government of Nova Scotia, the Office of the Correctional Investigator, the Office of the Federal Ombudsman for Victims of Crime), National Parole Board (NPB), Police Services/Agencies in Ontario, EMPP participants, as well as members of the general community¹⁴.

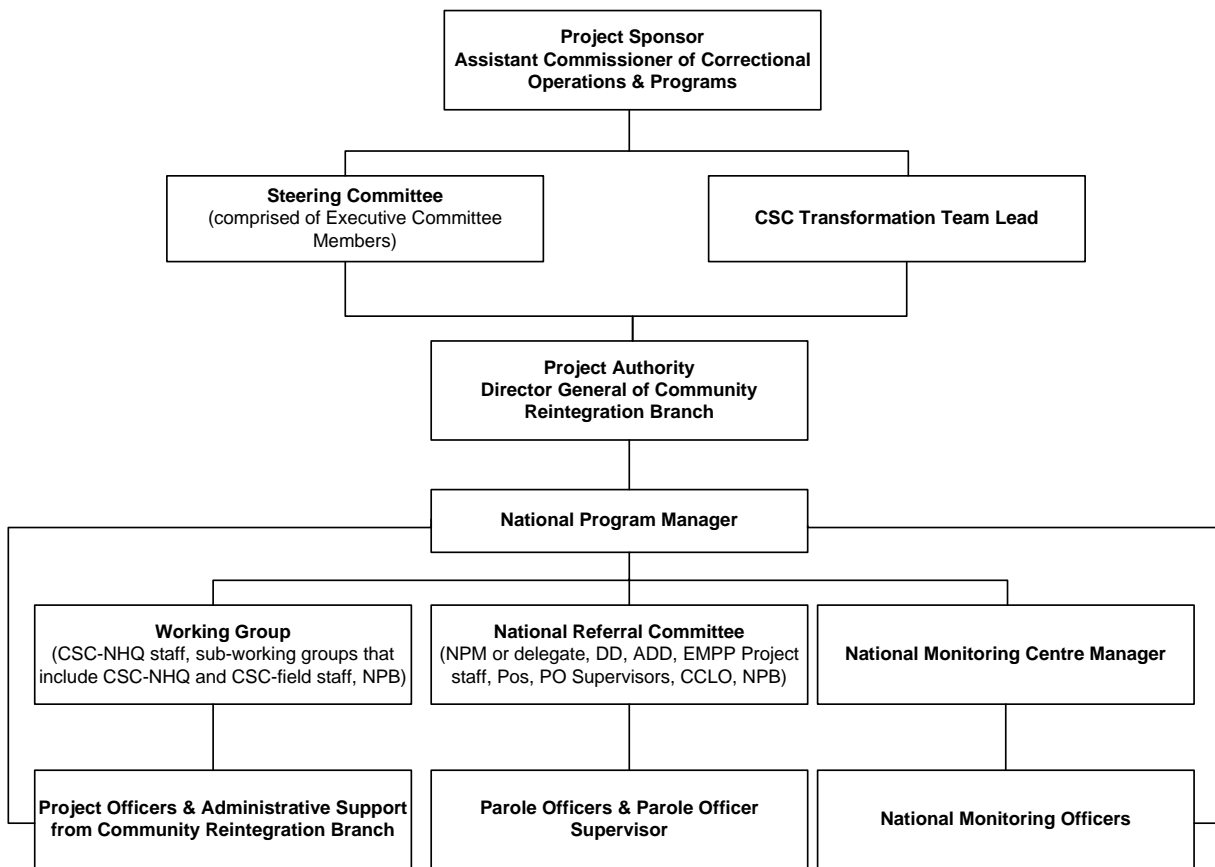
In the governance structure, the National Project Manager reports to the Director General of Community Reintegration¹⁵ and has responsibility for the day-to-day management of the project. The Director General of the Community Reintegration Branch, in turn, is accountable to the Project Sponsor, the Assistant Commissioner of Correctional Operations and Programs. A steering committee comprising of Executive Committee members was established and chaired by the Commissioner's delegate, with the main purpose to serve as an advisory and decision-making body. The Project Authority reports to the steering committee and makes any necessary presentations pertaining to progress or issues that require attention. The Project Authority also reports to the Transformation

¹⁴ CSC (2008). *Electronic Monitoring Program Pilot: Results-Based Management and Accountability Framework*. Ottawa, ON: Author.

¹⁵ Following the first 6 months of implementation of the EMPP, the Community Reintegration governance structure changed as it was converted from a division to a branch with its own Director General.

Team lead on a regular basis with any progress or information for dissemination. The National Project Manager is supported by an EMPP working group that consists of CSC-NHQ employees, as well as a number of sub-working groups comprised of CSC employees from both NHQ and CSC field staff. The NPB is also represented on these committees. Parole Officers and Parole Officer Supervisors involved in EMPP maintain their reporting relationships to their respective managers. Figure 1 provides a schematic depiction of EMPP’s governance structure.

Figure 1: Governance Structure of EMPP



In order to facilitate the referral process, a National EM Referral Committee has been established to review and confirm acceptance into EMPP. This committee is chaired by the National Project Manager (or delegate), and members include the District Director, Associate District Director, EMPP project staff, Parole Officers and Parole Officer Supervisors, Community Corrections Liaison Officer, and NPB members. The

National EM Referral Committee meets weekly to review new referrals, as well as on an “as required” basis. The committee is responsible for ensuring that a list of approved candidates and their anticipated release dates are available, as well as tracking referrals and decisions with respect to offender participation in EMPP. It should be noted that the District Directors may not be present during the committee meetings. However, there is a briefing process in place to inform District Directors of committee decisions, as directors have access to the minutes and are also briefed periodically regarding progress or status of referrals.

EMPP Financial Budget and Expenditures

The EMPP budget is based on the costs of the contract with the Government of Nova Scotia for the EM devices, employee salary and operations, and miscellaneous expenses. The Director General of Community Reintegration provided the financial information outlined in Table 12. Traditionally, the Evaluation Branch uses financial information provided by the Finance Department of CSC, which is verified in the Integrated Financial and Material Management System (IFMMS). IFMMS is the central repository for accounting information, receiving transactions from CSC’s sub-ledgers. Given that the financial information with respect to the EM project was not coded in the IFMMS in its entirety, the evaluation used the financial data provided by the program pilot manager.

Table 12: EM Financial Data (September 2008 to July 2009)

Timeframe	Salary	O & M	Outstanding. Invoice	NMC EM Portion	Total
Sept 08 – Aug. 09	\$282,067	\$237,441	\$45,000	\$291,588	\$856,096

Source: Provided by EM Unit (DG, Community Reintegration Branch)

EMPP’s budget was calculated for the period from September 2008 to August 2009 and was based on the following expenditures: \$282,067 in EM project staff salaries, \$237,441 in start-up costs for the National Monitoring Centre, including the cost of agreement with the Province of Nova Scotia, \$45,000 in EM device related costs and \$291,588 in salaries

as a portion of the total NMC staff salaries (\$395,727) that was related to EMPP monitoring. The latter was calculated as a percentage of monitoring centre staff expenses, taking into account the distribution of their level of effort on the community staff safety (12hrs daily/5 days weekly) and EMPP projects (24 hrs/7 days weekly). Specifically, a level of effort per week per employee was determined based on the total number of hours with respect to both projects (i.e., $12 \times 5 = 60$ hours/week on community staff safety and $24 \times 7 = 168$ hours/week on EMPP). The salary dollar (\$395,727) amounts were thus allocated accordingly - \$291,588 for EMPP and \$104,138 for Community Staff Safety. The overall EMPP expenditure during the program pilot amounted to \$856,096.

Table 13 below outlines the projected financial and FTEs required to manage the National Monitoring Centre (NMC). The centre is responsible for managing other programs including the Duty Officers Program, Staff Safety Program and the Electronic Monitoring Program. The program manager informed the evaluation team that the centre would continue whether the Electronic Monitoring existed in CSC or not. Nonetheless, the evaluation team was provided with a projected ratio of EM activities within the NMC operations with a projected value of approximately \$1million/year. Therefore, the cost-effectiveness analysis conducted in the evaluation was based on the projected cost of \$1M. All necessary projections of costs relative to benefits were calculated using \$1M as a benchmark value.

Table 13: Projected Operational Budget for NMC

Year	FTEs	Salary Totals¹⁶	EMPP O&M	Total
2009-2010	>17	\$1,284,990	\$400,000	\$1,684,990
2010-2011	>32	\$2,393,871	\$827,000	\$3,220,871
2011-2012	>44	\$3,256,569	\$827,000	\$4,083,569
Total	44			\$4,083,569

¹⁶ Does not include overtime, EBP, and PWGSC

EVALUATION STRATEGY

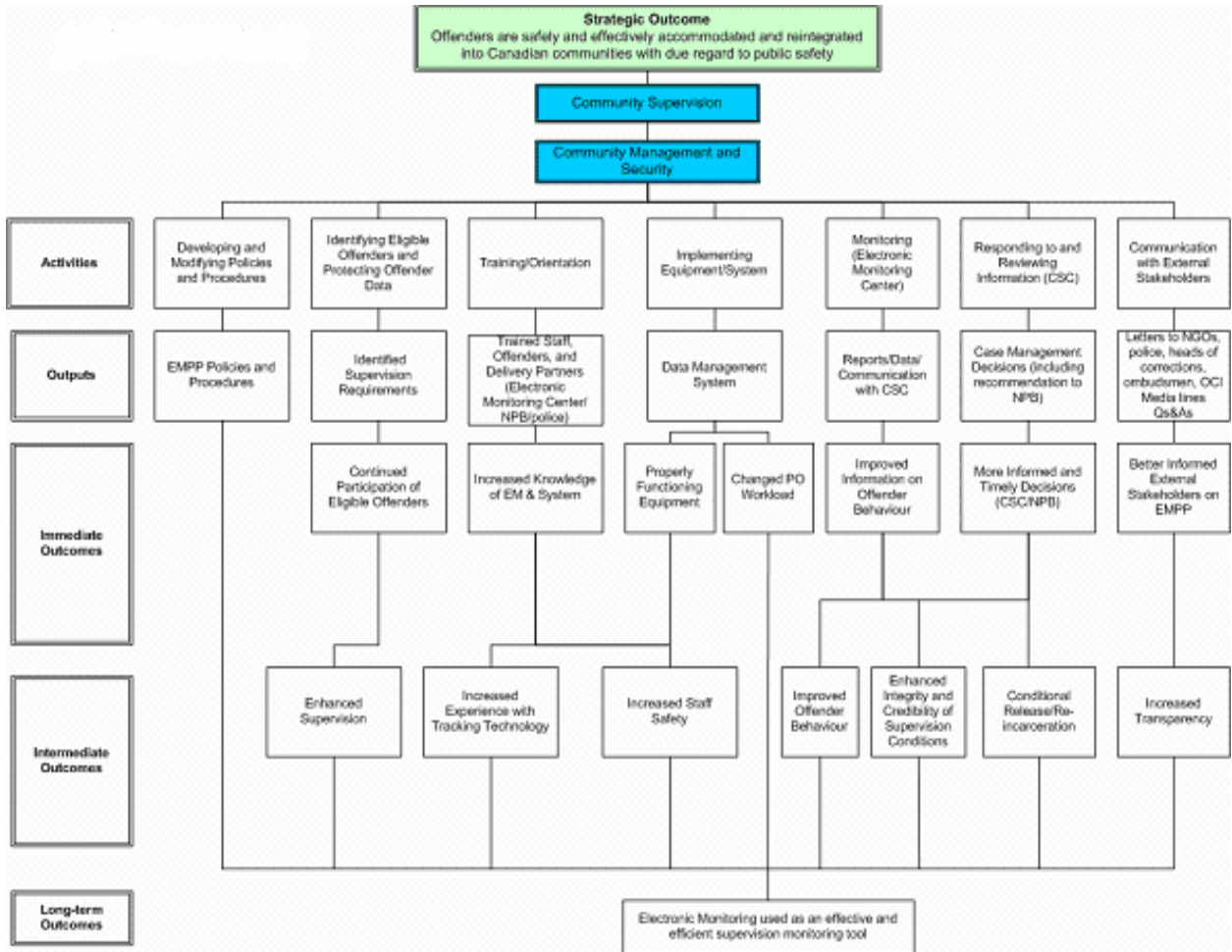
Evaluation Objectives

The current evaluation is an implementation evaluation intended to examine the progress of EMPP to date and establish a foundation upon which the design and delivery of EMPP could be realigned. The evaluation is formative in nature and focuses on the status of the program's implementation. Other evaluation issues pertaining to continued relevancy, success, cost-effectiveness and unintended impacts are also addressed. The comprehensive evaluation matrix that identifies the EMPP evaluation questions, performance indicators and data sources is shown in Appendix 1.

Logic Model

A logic model summarizes the key elements of the program, policy or initiative. It reveals the rationale for the program, articulates the intended outcomes, and outlines the cause-and-effect relationships between the program activities and intended outcomes. The logic model developed for EMPP is presented in Figure 2.

Figure 2: EMPP Logic Model



As outlined in the logic model, EMPP outcomes are achieved through the delivery of a number of key activities, including:

- Developing and modifying policies and procedures;
- Identifying eligible offenders, as outlined in Section 1.2 using an instruction form that identifies the conditions of offenders’ participation and protecting offender data;
- Training and orientation;
- Implementing equipment and system;
- Monitoring (Electronic Monitoring Centre);
- Responding to and reviewing information (CSC); and
- Communicating with external stakeholders.

Immediate and intermediate outcomes of EMPP include¹⁷:

- Enhanced supervision of offenders on release in the community;
- Increased experience with tracking technology;
- Increased staff safety;
- Improved offender behavior;
- Enhanced integrity and credibility of supervision conditions;
- Appropriate conditional release or re-incarceration; and
- Increased transparency.

EVALUATION METHODOLOGY

Measures and Procedure

A multi-method approach, incorporating qualitative and quantitative methodology, was utilized to address the evaluation objectives. This included:

- Interviews with key informants;
- Data derived from CSC's automated database - Offender Management System (OMS);
- Cost of Maintaining Offender (COMO) - The key data source for the cost-effectiveness analyses was CSC's COMO database. This database is used by CSC to estimate the cost of keeping offenders in the federal correctional system;
- Financial data provided by the Community Reintegration Branch as well as by IMRS through Financial Management Services;
- Monitoring data provided by the EM unit of the Community Reintegration Branch;
- A review of relevant CSC documentation including EM policy/guidelines and response protocols;
- A review of relevant governmental documentation; and

¹⁷ Please note that not all program outcomes have yet materialized. As a result, some outcome analyses were not included in the scope of the evaluation.

- A review of the relevant literature regarding the use of electronic monitoring in corrections, including the relevancy and success of electronic monitoring in other jurisdictions.

Interviews with Key Informants

Feedback regarding issues related to the relevance, implementation, and success of EMPP was obtained from four different key groups via interviews with: 1) CSC staff; 2) offenders; 3) monitoring centre staff; and 4) police services staff.

Distinct interview protocols were developed for each of the four key groups. Participation in interviews was solicited by way of requests to contribute information relevant to the evaluation through face-to-face meetings. Interviews were structured such that they addressed the evaluation objectives of relevancy, success (effectiveness and efficiency), cost-effectiveness, implementation, and unintended effects.

Interviews included a mix of “closed” interview questions (e.g., dichotomous yes/no; 5-point Likert-scale responses) and open-ended questions. Upon completion of the interviews, data were entered into Snap Survey software. Quantitative interview data were exported to and analyzed using the Statistical Package for the Social Sciences (SPSS). Responses to the 5-point Likert scales were often aggregated so that categories were created for the lower two points, the middle point, and the higher two points. For example, for scales ranging from strongly disagree to strongly agree (1=*strongly disagree*; 2=*disagree*; 3=*neither agree nor disagree*; 4=*agree*; and 5=*strongly agree*), the results were combined across the “agree” and “strongly agree” categories to create an “agree” category, and the “disagree” and “strongly disagree” categories were combined to create a “disagree” category.

It should also be noted that, when calculating total frequencies, “don’t know” and unanswered (missing) responses were excluded. Qualitative data generated as a result of the interview process were exported into Microsoft Word, and themes relevant to the evaluation objectives were then generated by evaluation analysts and compared across team members to ensure agreement. Responses to the closed questions and themes

generated from the open-ended questions are presented in the appropriate key findings sections below. Face-to-face interviews were conducted with CSC staff members, members of police services, past and present EMPP offender participants, and past and present monitoring centre staff. When an individual was not available for a face-to-face interview, either an interview was conducted over the telephone or an interview protocol was mailed to the individual. All interviews were conducted during the period of May 10th, 2009 and June 23rd, 2009.

Offender Respondents

Past and present EMPP participants were asked to volunteer to participate in an interview with the CSC Evaluation Branch staff. A total of 9 offenders were interviewed, representing 20% of the 46 offenders who have participated in the Electronic Monitoring Program Pilot. As indicated earlier in the report, this low response rate cannot be considered to truly represent offenders' views pertaining to EMPP. It should also be noted that EMPP participants (offenders) were voluntary participants in the program pilot.

CSC Staff Respondents

A total of 37 CSC staff in the pilot area were interviewed¹⁸. Position titles are presented in Table 14. On average, staff members had worked for CSC for 12 years ($SD=6.94$), and had been in their current position for 7.65 years ($SD=7.07$). In addition, respondents indicated being involved with EMPP for an average of 5.49 months ($SD=3.28$).

Table 14: CSC Staff Respondent Position Titles

Position Title	Staff (n=37)	
	n	%
Parole Officer (community)	22	59%
Parole Officer Supervisor	10	27%

¹⁸ In addition to the CSC and monitoring centre staff members who were interviewed, managers directly involved with the EMPP provided evaluation members with context and background information regarding the program pilot, as well as their views regarding its relevancy and performance. Since the structured interview protocols were not used with these individuals, their responses were not included in the total frequencies of interviewee responses. However, information provided by them has been incorporated throughout the findings of the report.

Area Director	1	3%
Community Corrections Liaison Officer	2	5%
Other	3	8%

Note: Two respondents did not provide a position title; and two respondents reported being both a Community Parole Officer and a Parole Officer Supervisor.

The majority of CSC staff respondents 65%, ($n=24$) indicated being considerably familiar with the goals and objectives of EMPP, 24% ($n=9$) indicated being completely familiar, and 11% ($n=4$) indicated being moderately familiar with EMPP.

Monitoring Centre Staff Respondents

A total of seven staff members who were seconded to work in the Monitoring Centre were interviewed, including current and past members. Staff position titles included National Monitoring Centre Team Leader, Monitoring Officer, Staff Training Officer, Acting Project Officer, Correctional Program Officer, Acting Parole Officer Supervisor and Social Program Officer. On average, respondents indicated working for CSC for 13 years ($SD=5.99$), and being in their current position for 10 months ($SD=11.76$). Further, an average of 5 months ($SD=1.98$) was indicated for being involved with EMPP. Of the monitoring centre staff respondents, 43% ($n=3$) indicated being at least moderately familiar with the goals and objectives of EMPP, while 29% ($n=2$) indicated being considerably familiar and 29% ($n=2$) indicated being completely familiar. Given the small number of respondents, results based on this group should be interpreted with caution.

Police Services Staff Respondents

A total of 10 members of various police services in the Ontario Region were interviewed. Positions titles included constable, sergeant, staff sergeant, detective constable, detective sergeant, police parole liaison, Repeat Offender Parole Enforcement (ROPE) and Risk Offender Enforcement (ROE) squad members, and members of the Behavioural Assessment Special Division. On average, respondents indicated working for a police service for 19 years ($SD=7.93$), and being in their current position for 3 years ($SD=1.91$). With regards to how long they had been involved with EMPP, 22% ($n=2$) indicated less than one month, 22% ($n=2$) indicated 1-3 months, 11% ($n=1$) indicated 4-6 months; and

33% ($n=3$) indicated more than 6 months. Of all police services respondents, 60% ($n=6$) indicated that they were at least moderately familiar with the goals and objectives of EMPP, 30% ($n=3$) indicated that they were considerably familiar, and 10% ($n=1$) indicated having limited familiarity. Again, it should be noted that this is a small sample and findings may not be representative of police views.

Automated Data Sources

Information regarding the EMPP participants (e.g., demographic characteristics, offence characteristics, sentence information, correctional outcomes, and other pertinent information) was extracted from CSC's Offender Management System (OMS; automated database maintained by CSC).

Document Review

Documents from various sources were reviewed, including program documentation and reports and other CSC and governmental reports and documentation (e.g., Reports on Plans and Priorities, the CSC Review Panel, Commissioner's Directives, media reports). Related information from other correctional jurisdictions/countries (e.g., Canadian provincial systems, United States, European nations, Australia, New Zealand) was also reviewed.

LIMITATIONS

The current evaluation has a number of significant limitations. First, the sample size was unavoidably small due in part to EMPP being designed and implemented to monitor a maximum of 30 offenders at any one time during the one-year pilot.

Second, the number of interview respondents was limited. For instance, only nine offenders of the 46 who had participated in EMPP were interviewed because of lack of interest on their part. Thus, offender respondents' views regarding EMPP cannot be considered representative of all participants in the project nor of offenders generally. Similarly, only seven monitoring centre staff members were interviewed, which was

approximately half of all past and present monitoring centre staff members, because of some members declining participation when requested.

Third, there were some challenges encountered during the course of the evaluation due to the quality of data maintained regarding the EMPP participants. For instance, it was difficult to determine the exact number of offenders who participated in EMPP during the time period of interest, as there were inconsistencies regarding the list of participants, start and end dates of participation, and whether an offender was referred but refused to participate in EMPP.

Fourth, although application dates were available in the GPS software, the monitoring centre data sheet did not sufficiently outline the length of time and verifiable reasons that part-time participants, ($n=6$) actually wore the EM device. Therefore, it was not possible to examine correctional results for this group separately. Similarly, for all EMPP participants, we were unable to determine reasons for removal of the EM device and the relationship between any breach of release conditions and EM participation.

Fifth, since EMPP had been in effect for less than one year, conclusions about its effects on correctional programming and recidivism could not be determined due to the short follow-up period.

Finally, it is worth emphasizing that participation in the one-year pilot project was on a voluntary basis. As a result, past and current program participants were not representative of the general offender population.

KEY FINDINGS

Results are presented under their respective Evaluation Objectives, namely: 1) *Continued Relevancy*; 2) *Implementation*; 3) *Success*; 4) *Cost Effectiveness*; and 5) *Unintended/other Findings*.

EVALUATION OBJECTIVE 1: CONTINUED RELEVANCY

Evaluation Objective: Does EM remain and continue to be consistent with departmental and government-wide objectives and priorities?

FINDING 1: The Electronic Monitoring Program Pilot is consistent with government priorities and CSC's mission. It may benefit some offenders, although the benefits could not be demonstrated in the current evaluation.

Government and Departmental Priorities

Canadian federal departments' strategic outcomes and their corresponding program activities must be aligned with 13 Government of Canada outcome areas. Through the program activities of Custody, Correctional Interventions, Community Supervision, CORCAN, and Internal Services¹⁹, CSC contributes to the social affairs area, under the Government of Canada outcome, A Safe and Secure Canada. Program activities in this outcome area aim to create a safe and just society and to protect national security interests.

In 2006-2007, CSC established five priorities in response to the changing offender profile, the paramount importance of public safety, and the government's emphasis on crime prevention. As noted in the 2009-2010 Report on Plans and Priorities (RPP), in order to achieve the expected results of the program activity of community supervision, CSC has planned several activities, among which are strategies to intervene more effectively with offenders in the community including electronic monitoring, strategies

¹⁹ Correctional Service Canada (2009-2010). *Report on Plans and Priorities*. Ottawa, ON: Author.

specific to short-term offenders, and for offenders under Long-Term Supervision Orders (LTSOs).

Furthermore, consistent with CSC's policy and legislative framework, the aim of EMPP is to contribute to public safety by providing additional offender supervision and monitoring tools for staff in community parole offices, increasing offender accountability, encouraging positive offender behavioural change, and augmenting staff safety. Given the potential surveillance and monitoring value of EM, offenders appropriately selected to participate in the program may benefit in electronic monitoring and gradual release back into the community.

FINDING 2: There is a varying degree of use of EM technology among correctional and law enforcement agencies nationally and internationally. The greatest jurisdictional variability relates to eligibility requirements and the type of offender for whom EM is used.

CSC's Independent Review Panel's 2007 report, *A Roadmap to Strengthening Public Safety*, examined the need to consider the use of electronic monitoring of particular offenders with high risks and needs in the community²⁰. As noted in the report, the Panel was not convinced that a general application of electronic monitoring for all federal offenders on conditional release was required. This view is consistent and prevalent among correctional and law enforcement agencies around the world. For instance, EM is used in Australia and New Zealand primarily as a home detention program to restrict and monitor offenders who would be better served in the community than incarcerated (Gibbs & King, 2003). In the United States, particularly Florida and California, EM is used in response to the exponential increase in prison population and as a tool to supervise more dangerous habitual offenders and for sexual offenders (Office of Program Policy Analysis & Government Accountability [OPPAGA], 2005).

²⁰ Correctional Service Canada Review Panel (2007). *A Roadmap to Strengthening Public Safety* (Cat. No. PS84-14/2007E). Ottawa, ON: Minister of Public Works and Government Services Canada.

FINDING 3: While the majority of monitoring centre and CSC staff indicated that electronic monitoring filled a gap with respect to managing release conditions (e.g., geographical restrictions), offenders themselves did not perceive that such monitoring system enhanced their accountability.

As previously noted, the Honourable Stockwell Day, then the Minister of Public Safety Canada, launched the pilot of the EM initiative in CSC in August 2008. The Minister underscored the government's commitment to fostering a safe and just society and for protecting Canadians while listening to the voices of victims and law enforcement agencies across Canada. The implementation of EM in CSC could potentially provide greater surveillance of offenders under supervision, thereby giving CSC greater knowledge of offenders' mobility while on conditional release. While several research reports support the surveillance value of EM, its effect on deterring future criminal behaviour has not been demonstrated.

All of the monitoring centre staff interviewed (100%; $n=7/7$), and the large majority of both CSC staff (89%; $n=33/37$) and police services staff (80%; $n=8/10$) interviewed agreed that there was a need for EMPP. Two of the three groups of interview respondents agreed that it served as an enhanced supervision and information-gathering tool [CSC staff: 68% ($n=21/31$); monitoring centre staff: 67% ($n=4/6$)].

Notwithstanding that participants were volunteers, some offenders interviewed disagreed that taking part in EMPP was the best option for them (44%; $n=4/9$), while a few neither agreed nor disagreed (33%; $n=3/9$) and a few agreed (22%; $n=2/9$). Among the reasons provided were problems associated with device batteries and the overwhelming number of telephone calls received in order to instruct them to charge their batteries so as to avoid tamper alerts or to recalibrate their devices to address drift (22%; $n=2/9$). Some of the offenders suggested that EM was better suited to more violent or dangerous offenders (50%; $n=2/4$).

The NPB has the ultimate authority to grant, deny and revoke an offender's conditional release. Once released, CSC assumes the responsibility for supervision in the community.

When asked what role EM technology played in the supervision of offenders in the community, all of the monitoring centre staff and almost all of the CSC staff who were interviewed indicated that EMPP filled a gap in the supervision of offenders in the community [100% ($n=7/7$) and 97% ($n=36/37$), respectively]. Among the reasons provided included: that it could be an enhanced supervision tool [CSC staff: 53% ($n=19/36$); monitoring centre staff: 57% ($n=4/7$)]; that it could increase offender accountability and credibility [CSC staff: 25% ($n=9/36$)]; and that it could have a deterrent effect on offenders [CSC staff: 14% ($n=5/36$)].

Key respondents also agreed that CSC had traditionally been confronted with several challenges in managing some conditional release conditions, particularly those relating to the movement of offenders, residency conditions, non-association and curfews. As shown in Table 15, the majority of respondents agreed that EM addressed challenges for geographic restrictions, curfew, and residency. For example, 89% ($n=33/37$) of CSC staff and 86% ($n=6/7$) of monitoring centre staff agreed that there were challenges in managing offenders with geographical restrictions as conditions of release. Fifty-five percent ($n=18/33$) of CSC staff and 45% ($n=14/31$) of CSC staff also agreed that CSC had challenges in managing offenders with residency condition and on suspension, respectively. Additionally, 59% ($n=17/29$) of CSC staff and 57% ($n=4/7$) of monitoring centre staff agreed that EMPP addressed the challenges related to offenders on suspension and/or revocation.

Table 15: Respondent Agreement Regarding Supervision Challenges and EMPP Addressing Supervision Challenges

	Challenges			EMPP Addresses Challenges		
	Respondents	Disagree % (n)	Agree % (n)		No % (n)	Yes % (n)
Geographic Restrictions	CSC Staff (n=37)	5% (2)	89% (33)	CSC Staff (n=37)	3% (1)	97% (36)
	MC Staff (n=7)	0% (0)	86% (6)	MC Staff (n=7)	0% (0)	100% (7)
Curfew	CSC Staff (n=37)	11% (4)	70% (26)	CSC Staff (n=37)	5% (2)	95% (35)
	MC Staff (n=7)	0% (0)	86% (6)	MC Staff (n=7)	0% (0)	100% (7)
Suspension / Revocation	CSC Staff (n=31)	32% (10)	45% (14)	CSC Staff (n=29)	41% (12)	59% (17)
	MC Staff (n=7)	14% (1)	71% (5)	MC Staff (n=7)	43% (3)	57% (4)
Residency	CSC Staff (n=33)	27% (9)	55% (18)	CSC Staff (n=33)	24% (8)	76% (25)
	MC Staff (n=7)	0% (0)	71% (5)	MC Staff (n=5)	40% (2)	60% (3)
Non-association Condition	CSC Staff (n=36)	8% (3)	86% (31)	CSC Staff (n=36)	42% (15)	58% (21)
	MC Staff (n=7)	0% (0)	86% (6)	MC Staff (n=7)	43% (3)	57% (4)

Source: CSC staff interviews; monitoring centre including staff interviews.

As stated earlier in the report, the current evaluation aimed to guide the design and delivery of EMPP in order to realign its current implementation and position the program pilot for sustainable results. Summative evaluations of programs after 5 years of implementation can assist to determine outcome achievement of the desired results. In the case of EMPP, contingent upon a well disciplined collection of implementation and outcome data, CSC should be in a position to examine the continued relevancy, effectiveness and implementation within approximately 3 years. This implementation evaluation will ultimately contribute to future evaluation or disposition of EMPP.

RECOMMENDATION 1: CSC should conduct an evaluation of EMPP within approximately 3 years in order to examine the continued relevancy, effectiveness, cost-effectiveness and implementation of EMPP within the community supervision model and in order to determine its disposition.

EVALUATION OBJECTIVE 2: IMPLEMENTATION

Evaluation Objective: Has EMPP been implemented in such a way that goals and objectives can be realistically achieved, and have implementation issues been adequately considered?

***FINDING 4:** There were challenges associated with the reliability of the technology used in EMPP with respect to the sustainability of a charged battery (e.g. time to charge, duration of charge), the device (size, comfort and visibility), drift, and frequent false tamper alerts.*

EM Equipment and Technology (Battery, Size, Drift and Alerts)

A review of the literature suggests that problems with the EM technology are not uncommon. For instance, difficulties have been encountered with the equipment and its monitoring capabilities, including technical faults, poor monitoring coverage, equipment failure, uncomfortable devices, and the fact that devices are not tamperproof (Bottos, 2007; Gibbs & King, 2003; Vollum & Hale, 2002).

Battery

Given that one of the objectives of this pilot was to test the GPS technology, the respondents interviewed were asked to provide their views regarding the use of the EM equipment. As illustrated in Table 16, overall, offenders tended to perceive more shortcomings in terms of the use of EM equipment than did CSC staff and monitoring centre staff. More specifically, offenders more frequently disagreed that the battery was easy to charge, that the time it took to charge the battery was reasonable and that the battery charge lasted a reasonable amount of time. Furthermore, a strong majority of offenders disagreed with the fact that the EM device was comfortable and easy to wear. When asked about their overall experience with participation in EMPP, 50% ($n=4/8$) of the offender respondents indicated there were problems with the device, such as its size, comfort, and visibility. Furthermore, 47% ($n=14/30$) of CSC staff, 33% ($n=2/6$) of monitoring centre staff and 100% ($n=9/9$) of offenders disagreed that the time it took to charge the battery was reasonable. When asked whether the device never malfunctioned, 80% ($n=20/25$) of CSC staff and 83% ($n=5/6$) of monitoring centre staff disagreed. Thus,

charging the battery and electronic monitoring malfunction appeared to be a problem during the implementation.

Table 16: Respondent Agreement Regarding the EM Equipment

Response Options	Respondents	Disagree % (n)	Neither Agree nor Disagree % (n)	Agree % (n)
The battery is easy to charge	CSC staff (n=28)	36% (10)	18% (5)	46% (13)
	MC staff (n=6)	17% (1)	17% (1)	67% (4)
	Offenders (n=9)	78% (7)	0% (0)	22% (2)
The time it takes to charge the battery is reasonable	CSC staff (n=30)	47% (14)	17% (5)	37% (11)
	MC staff (n=6)	33% (2)	0% (0)	67% (4)
	Offenders (n=9)	100% (9)	0% (0)	0% (0)
The battery charge lasts a reasonable amount of time	CSC staff (n=30)	33% (10)	17% (5)	50% (15)
	MC staff (n=6)	33% (2)	17% (1)	50% (3)
	Offenders (n=9)	56% (5)	0% (0)	44% (4)
The EM device is always able to connect with the monitoring centre / It's easy to communicate with the monitoring centre	CSC staff (n=26)	38% (10)	19% (5)	42% (11)
	MC staff (n=6)	17% (1)	17% (1)	67% (4)
	Offenders (n=9)	11% (1)	0% (0)	89% (8)
The EM device never malfunctions	CSC staff (n=25)	80% (20)	8% (2)	12% (3)
	MC staff (n=6)	83% (5)	0% (0)	17% (1)
	Offenders (n=8)	63% (5)	0% (0)	38% (3)
The EM device is comfortable/easy to wear	Offenders (n=9)	89% (8)	0% (0)	11% (1)

Source: CSC staff interview; monitoring centre staff interview; offender interview

Drift - A GPS Relative Positioning Error

Another technological issue that is relevant to the implementation of EMPP is that of drift. GPS relative positioning error "drift" occurs when the plots shown on the monitoring map are subject to a margin of error or sometimes are simply wildly inaccurate (Whitfield, 2007). This remains a problem for the system and a concern in managing the release conditions of offenders in the community, particularly in relation to geographical restrictions. A small number of CSC staff members (5%; n=2), as well as 10% (n=1/10) of police services staff members indicated that addressing the issue of drift was a change that should be addressed. For instance, one police services staff member

indicated that he had experienced drifts of the range of 200 meters. Equally, in the context of communication between a respondent and the Evaluation Branch, the respondent cited two situations in which significant drift was reported and could have created problems for the offender in question. Based on the information collected, it can be concluded that signal drift occurred during EMPP.

Breach of Device and Tamper Alerts

The frequency and nature of alerts during EMPP²¹ were also assessed. Throughout the EMPP, occurrence reports were completed by the monitoring centre staff when a strap and/or device tamper alert was received, when contact with the Regional Duty Officer and/or police services was made, and to report on unusual events that occurred during a particular shift. The type and frequency of occurrence reports generated by the monitoring centre staff can be found in Table 17. During the course of the EMPP, occurrence reports were mainly generated as a result of strap tamper alerts (38%; *n*=19). Warrants of Suspension of Conditional Release and Apprehension were most frequently issued for other activities²² (54%, *n*=7) and curfew breaches (38%, *n*=5). As noted earlier in the report, the characteristics of the EMPP participants revealed that EM may not have been relevant to their effective supervision in the community. For instance, EM may be useful for monitoring an offender with geographical restrictions as a condition of release but may not be helpful in assessing and preventing offenders with a non-association condition or those with the condition to abstain from drug or alcohol use. According to the EMPP characteristics, these two categories of offenders were found to constitute the highest number of offenders on EMPP.

²¹ All of the information gathered for the EMPP alert section was gathered from data provided by the EMPP program manager, gathered from an occurrence log maintained by MC staff.

²² Included violation of conditions (e.g., positive urinalysis, possession of a weapon, etc.)

Table 17: Type and Frequency of Occurrence Reports

Type of Occurrence Report	% (n) of Occurrence Reports	% (n) of Suspension Warranted issued
Strap Tamper Alerts	38% (19)	8% (1)
Device Tamper Alerts	14% (7)	0% (0)
Exclusion Zone Alerts	4% (2)	0% (0)
Curfew Breaches	24% (12)	38% (5)
Other	20% (10)	54% (7) *
Total	100% (50)	100% (13)

Source: Data from occurrence log maintained by the monitoring centre staff as of 2009-08-11.

Note: In one instance, the local office did not advise of the issuance of a warrant, hence the warrant was executed without EM assistance. *includes urinalysis, deteriorating behavior, suspicion of possession of a weapon.

With regards to tampering alerts, it should also be noted that there was only one (5%) true strap tamper alert among the EMPP participants, where the offender went Unlawfully at Large. However, there were many alerts that stemmed from equipment sensitivity or hardware or software issues (see Table 18). Of the total 19 strap tampers that were registered by the EMPP staff, six (32%) were due to offender activities (e.g., work-related jarring or accidentally hitting the device during activities), three (16 %) were due to application or installation issues, and five (26%) were due to hardware issues. Finally, the remaining four (21%) alerts occurred because of a combination of factors such as offender activities and hardware issues.

Table 18: Type and Frequency of Strap Tamper Alerts

Type of Strap Tamper Alert	% (n)
True Tamper Alert	5% (1)
Offender Activity Related	32% (6)
Application/ Installation Issues	16% (3)
Hardware Issues	26% (5)
Combination of factors*	21% (4)
Total	100% (19)

Source: Data from occurrence log maintained by the monitoring centre staff.

*Note: A combination of factors refers to one or more of the above categories (e.g., activities and hardware) both triggering the alert.

In terms of device tamper alerts, a total of seven were registered by monitoring centre staff, all of which were concluded to be “false alarms”. Four of these alerts came from the same offender and resulted from activities in the workplace. The remaining alerts were a result of a combination of factors such as offender non-criminal activities and hardware issues.

RECOMMENDATION 2: CSC should explore alternative technologies that could address deficiencies of the current technology in order to maximize the benefits of EM particularly, with regards to reliable monitoring and supervision of offenders in the community.

Selection Criteria

FINDING 5: The characteristics of EMPP participants demonstrated that the current eligibility criteria were not consistent with the selection of offenders for participation in EMPP.

The characteristics of current EMPP participants outlined earlier in the report and research has shown that consistency of selection criteria and consensus on the type of offender for whom EM is appropriate have been identified as critical determinants of success, including completion of participation and recidivism (Henderson, 2006). The selection criteria used for inclusion in EM programs in other jurisdictions were examined in order to adequately measure the responsiveness of CSC criteria to its intended objectives. For instance, British Columbia was the first province to implement an EM program in Canada in 1987. To be eligible for participation in the program, offenders must pose only a minimum risk to society, be non-violent, and have four months or less remaining in their sentences (Bonta, Rooney, & Wallace-Capretta, 1999). While EM in British Columbia includes only lower risk offenders, Newfoundland has included offenders of moderate risk levels, while achieving similar rates of successful completion and recidivism rates (JHSA, 2006).

In contrast to the selection criteria used in Canadian provinces, in the United States GPS EM programs are increasingly being imposed for life for dangerous offenders (JHSA,

2006) or for specific categories of offenders. According to the United States Office of Program Policy Analysis and Government Accountability [OPPAGA] (2005), EM technology should be used more prevalently with those offenders who pose the greatest risk to the public, while others are using it to monitor their sex offender population. The Michigan and Florida Departments of Corrections have used their EM programs primarily for the paroled sex offender population (Florida Department of Corrections, 2008; Minnesota Department of Corrections, 2009). Similarly, the state of California has placed their entire sex offender parolee population on GPS monitoring (California Department of Corrections and Rehabilitation [CDCR], 2009). The Florida Department of Corrections has concluded that their EM program is effective for serious, violent offenders, as it has found that offenders on EM were 95.7% less likely to be revoked for a technical violation in comparison to offenders on home confinement without EM (OPPAGA, 2007).

In the context of CSC's EMPP, participating offenders had to meet at least one of the following criteria, as specified in the EMPP Results-Based Accountability Management Framework:

- Offenders for whom EM is proposed as a possible enhanced supervision approach. EM would be used as one of several community supervision tools to manage risk;
- Offenders who are subject to a curfew condition;
- Offenders currently released on Statutory Release with a condition to reside in a Community-based Residential Facility.

Overall, as indicated in the EMPP participant characteristics section (based on data originating from OMS), the majority of offenders participating in EMPP had special conditions to avoid certain persons (90%; $n=43$). Only 35% ($n=16$) had a condition to avoid certain places, and 22% ($n=10$) to reside at a specific place. Furthermore, all participants were on conditional release, with 91% ($n=42$) on statutory release and 9% ($n=4$) on full parole. Of the 42 offenders on statutory release, 22% ($n=10$) had a residency condition. Finally, 78% of participants ($n=36$) were subject to a curfew condition with an imposed local instruction. Thus, it can be concluded that participants included in EMPP met most of the admission criteria specified in the program protocol. However, the

number of offenders with a residency condition was relatively small (22%), and 35% had a condition to avoid a certain place (compared to 90% with non-association condition).

Respondent interviews were used as an alternative source of information aimed at assessing whether EMPP participants met the established selection criteria. Overall, the large majority of CSC staff (86%; $n=24/28$) and monitoring centre staff (80%; $n=4/5$) respondents agreed that the offenders participating in EMPP met the selection criteria as set out in EMPP guidelines, while only 40% ($n=2/5$) of police services staff respondents agreed that the appropriate offenders were being referred to EMPP. It is noteworthy that the majority of CSC staff (89%; $n=33/37$) and monitoring centre staff (83%; $n=5/6$) respondents indicated being at least moderately to completely familiar with the selection criteria for offenders participating in EMPP, whereas the majority of police services staff respondents indicated limited or no familiarity (70%; $n=7/10$).

The EMPP participants were further compared to the profile of the population of male offenders who were released on full parole or statutory release between September 2008 and June 2009. Overall, as indicated previously, the participant group presented a profile similar to the population on factors such as age, risk level, sentence type, scheduled offences, motivation level, and reintegration potential, as well as release type and conditions. Although the percentage of offenders on the participant group and the population serving a sentence for most types of offences was not significantly different (i.e., homicide, sexual offence, assault, drug trafficking, break and enter, robbery and other), more EMPP participants were sentenced in relation to a weapons offence than offenders from the population.

It should also be noted that a higher proportion of EMPP participants were Black in comparison to the population (30% versus 14%). Moreover, the EMPP participants had served longer sentences (5.09 versus 3.90 years), had been incarcerated for longer period of time (4.52 versus 3.13) and had significantly higher need levels with respect to criminal associates/social interaction compared to the population (52% versus 28%). In addition, a larger proportion of the EM group was convicted of an institutional charge or

was held in segregation within 90 days preceding their conditional release in comparison to the population (39% versus 21%).

FINDING 6: Certain behaviour of offenders while on conditional release demonstrated that EM might not be the most appropriate form of intervention in the community.

An analysis of Warrants of the Suspension issued during offenders' conditional release period suggested that electronic monitoring might not have been suitable for all offenders participating in EMPP. For instance, a total of 7 of 12 suspensions were issued throughout the duration of EMPP, for violations of conditions of release for which EM could otherwise not have been used as a means of intervention. The behaviour included positive urinalysis and suspicion of possession of a weapon. This suggests that the benefits associated with electronic monitoring may be minimal for offenders with a history of substance abuse, criminal associates and violent offences. Notwithstanding that five of the participants' conditional releases were suspended as a result of violation of the curfew conditions, it was noteworthy that EM was advantageous when it was used for offenders' activities in relation to their mobility. This conclusion is also consistent with the 2007 CSC research report cited earlier contending that while EM may be useful for monitoring the movement of offenders, it is less useful for assessing or preventing offender negative associations and substance use.

RECOMMENDATION 3: Given the jurisdictional variability in the eligibility requirements for EM, CSC should conduct a review of available research in order to determine the category and types of offenders for whom EM will be most suited.

RECOMMENDATION 4: CSC should review and adapt EM selection criteria, focusing on those areas in which EM could play a critical role in maximizing offenders' successful reintegration and supervision in the community.

Monitoring and Response Protocols

FINDING 7: EMPP monitoring activities were generally efficient and monitoring centre staff members took the appropriate actions when alerts were received. The monitoring activities increased the frequency of contact between parole officers and offender beyond the required number in the policy.

Monitoring

The majority of offenders interviewed indicated that, upon being counselled about EMPP, they were advised of curfew hours and geographical restrictions, where applicable [88% ($n=7/8$) and 88% ($n=7$), respectively]. They also reported that they were provided with adequate information in order to fully participate in the program pilot (78%; $n=7/9$), and that any questions they had were addressed by their Parole Officers (75%; $n=6/8$). The monitoring centre staff monitors EMPP participants on a 24/7 basis, and they have access to information about offender's special conditions. In terms of specific issues and difficulties with the GPS technology, it should be noted that the monitoring centre staff had to frequently contact the offenders to assess an alert. For example, when the monitoring centre received a strap or device tamper alert, they assessed the situation and in some cases contacted the offender to determine whether this was a true alert or a false positive generated from hardware issues or from the offender's activities. In the occurrence of drift, the monitoring centre also contacted the offender and recalibrated the device. Monitoring centre staff also monitored the battery of the device and offenders' battery charging patterns. The frequency of contact between monitoring centre staff and the offender resulted in the level of contact that was beyond CSC's prescribed policy requirements in terms of intervention with offenders under supervision.

Thirty-three percent ($n=3/10$) of offenders interviewed indicated that the monitoring centre contacted them less than five times per month, 22% ($n=2/9$) indicated contact between 6 and 30 times per month, and 44% ($n=4/9$) indicated contact from the monitoring centre more than 30 times per month. The majority of respondents indicated that contacts pertained to instructions to charge the device 89% ($n=8/9$), followed by device recalibration (38%; $n=3/8$), to schedule a meeting (25%; $n=2/8$), and to advise of

entry into and exit of an inclusion or exclusion zone (13%; $n=1/8$). Correspondingly, the majority of offender respondents (78%; $n=7/9$) indicated the need to contact the monitoring centre regarding an EM related issue or problem, and the majority 71% ($n=5/7$) also indicated that the monitoring centre staff addressed the issue or problem. As such, the majority of contacts were unrelated to supervision and were related to problems with the EM device.

Despite technical difficulties, the majority of CSC and monitoring centre staff respondents agreed that monitoring activities related to EMPP were efficient (see Table 19 for a more detailed description). This included response times and protocols, as well as the training and knowledge of field and monitoring staff on the EM device and monitoring of the EMPP participants. In spite of the prevailing views of offender respondents in relation to the frequency of their contact with the monitoring centre, a large majority of CSC staff and monitoring center staff expressed difficulties with respect to maintaining contact with offenders on EM when the offender did not have a cellular phone.

Table 19: Respondent Agreement Regarding Monitoring Activities

Response Options	Respondents	Disagree % (n)	Neither Agree nor Disagree % (n)	Agree % (n)
It is easy to communicate with offenders who are wearing the EM device (if the offender does not have a cell phone)	CSC staff ($n=24$)	83% (20)	8% (2)	8% (2)
	MC staff ($n=6$)	67% (4)	33% (2)	0% (0)
The response time of an initial alert is appropriate	CSC staff ($n=22$)	5% (1)	0% (0)	95% (21)
	MC staff ($n=6$)	0% (0)	0% (0)	100% (6)
The response protocols are efficient	CSC staff ($n=24$)	17% (4)	8% (2)	75% (18)
	MC staff ($n=6$)	17% (1)	0% (0)	83% (5)
There are enough staff to handle the task of monitoring offenders who are wearing the EM device	CSC staff ($n=22$)	9% (2)	5% (1)	86% (19)
	MC staff ($n=6$)	33% (2)	17% (1)	50% (3)
CSC monitoring staff are knowledgeable about response protocols	CSC staff ($n=21$)	0% (0)	10% (2)	90% (19)
	MC staff ($n=6$)	17% (1)	0% (0)	83% (5)
Any identified weaknesses of	CSC staff ($n=19$)	11% (2)	11% (2)	79% (15)

the response protocols have been addressed	MC staff (n=6)	17% (1)	0% (0)	83% (5)
CSC staff are well trained on how to attach the EM device to participating offenders	CSC staff (n=28)	0% (0)	11% (3)	89% (25)
	MC staff (n=6)	0% (0)	0% (0)	100% (6)
CSC field staff are well trained to prepare offenders to wear and maintain the EM device	CSC staff (n=28)	4% (1)	7% (2)	89% (25)
	MC staff (n=5)	0% (0)	20% (1)	80% (4)
CSC field staff are well trained on the use of the EM devices	CSC staff (n=28)	0% (0)	0% (0)	100% (28)
	MC staff (n=6)	0% (0)	0% (0)	100% (6)
CSC monitoring staff are well trained on the objectives of EMPP	CSC staff (n=20)	0% (0)	5% (1)	95% (19)
	MC staff (n=6)	0% (0)	17% (1)	83% (5)
CSC monitoring staff are well trained on the monitoring of offenders participating in EMPP	CSC staff (n=20)	0% (0)	10% (2)	90% (18)
	MC staff (n=6)	17% (1)	0% (0)	83% (5)

Source: CSC staff interviews; monitoring centre staff interviews

With respect to the staff response to alerts, CSC staff and monitoring centre staff respondents agreed that monitoring centre staff/EMPP staff members took appropriate actions once an alert was received (see Table 20).

Table 20: Respondent Agreement Regarding Actions Taken by Monitoring Centre Staff/EMPP Staff Once an Alert Has Been Received

Response Options	Respondents	Disagree % (n)	Neither Agree nor Disagree % (n)	Agree % (n)
Assessment of offender risk	CSC staff (n=14)	21% (3)	0% (0)	79% (11)
	MC staff (n=6)	0% (0)	0% (0)	100% (6)
Case management counsel of offender	CSC staff (n=13)	15% (2)	8% (1)	77% (10)
	MC staff (n=6)	33% (2)	33% (2)	33% (2)
Review of potential management strategies for future occurrences	CSC staff (n=15)	20% (3)	13% (2)	67% (10)
	MC staff (n=6)	0% (0)	0% (0)	100% (6)

Source: CSC staff interview; Monitoring centre staff interview

CSC staff respondents agreed that parole officers/district staff recorded alerts received (67%; n=10/15) and responded to alerts (81%; n=13/16) in OMS as required. They also agreed that parole officers/district staff conducted assessments of offender risk (91%; n=20/22) and provided case management counsel to the offenders (86%; n=19/22) once

an alert had been effectively managed. It is noteworthy that the majority of respondents equally agreed that both monitoring staff and parole officers reviewed potential management strategies for future occurrences (91%; $n=20/22$) once an alert was received and had been properly managed.

FINDING 8: The majority of respondents described several challenges facing the National Monitoring Centre, including its location, the condition of the centre and NMC operators’ knowledge of the geography of EMPP coverage area, as well as technical and communication difficulties.

Many CSC staff respondents described challenges that were encountered with monitoring activities, including technical difficulties with the EM device/technology (81%; $n=22/27$). A small number reported communication problems between staff (15%; $n=4/27$), problems reaching offenders (7%; $n=2/27$), and response protocols (7%; $n=2/27$). Monitoring centre staff also described challenges that were encountered with monitoring activities, including technical difficulties with the EM device/technology (67%; $n=4/6$), problems reaching offenders (33%; $n=2/6$), problems with response protocols (17%; $n=1/6$), motivation of offenders and parole officers (33%; $n=2$), and staff turn over due to shift work (33%; $n=2/6$). Eight-six percent ($n=19/22$) of CSC staff and 50% ($n=3/6$) of monitoring centre staff agreed that there were enough staff to perform the task of monitoring offenders wearing the EM device.

With regards to the monitoring centre itself, staff members indicated several significant challenges. For instance, all of the monitoring centre staff indicated that more could be done to improve the centre. Several staff also indicated knowledge of the geography of the jurisdictional sites, the number of monitoring staff, and the condition and location of the centre as significant challenges (see Table 21).

Table 21: Significant Challenges to Monitoring Centre Staff

Response Options	No % (n)	Yes % (n)
More could be done to improve the centre	0% (0)	100% (7)

Knowledge of the geography of the jurisdictional sites	14% (1)	86% (6)
The number of monitoring staff is too few	29% (2)	71% (5)
The condition of the monitoring centre	29% (2)	71% (5)
The location of the monitoring centre	43% (3)	57% (4)
The management of the centre	57% (4)	43% (3)
The policy/guidelines for the centre are not clear	71% (5)	29% (2)
The training of monitoring staff is not adequate	71% (5)	29% (2)

Source: Monitoring centre staff interviews

Of the monitoring centre staff who provided additional information regarding what could be put in place to enhance the operation of the monitoring centre, all (100%; $n=7/7$) indicated improving the working conditions of the monitoring centre (e.g., location, larger room and work stations, ventilation/temperature control, storage). A few, (43%; $n=3/7$) indicated that policy and response protocols were required, as well as clarification of job descriptions and better communication of these to staff. In addition, 43% ($n=3/7$) indicated improved communication (e.g., between staff and management, team building) was required. The same number of monitoring centre staff (43%; $n=3/7$) agreed that there were significant challenges to the management of the monitoring centre.

FINDING 9: CSC has established effective partnerships with police services in the catchment areas to support the monitoring of offenders and responses to alerts, although communication between these police agencies and CSC could be improved.

It should be noted that CSC has established an effective partnership with police agencies in the jurisdictions where EM is currently being implemented. For instance, all of the ten police services members interviewed indicated that they were provided with an information session on EMPP and its functionality through their police service or a parole office, and all indicated that this information session answered any questions that they had concerning EMPP. Correspondingly, the majority (60%; $n=6$) indicated that there was no need for the police information session to be modified. However, 30% ($n=4$) of police services members interviewed indicated that they were aware of specific offenders participating in EMPP in their jurisdiction and only 20% ($n=2$) indicated that they had

been personally involved with communication with the National Monitoring Centre or the National Program Manager of EMPP.

In effectively supporting CSC's EM strategy and operational requirements, 75% ($n=6/8$) of police respondents indicated that their department had protocols in place for responding to Warrants of Apprehension and Suspension. The majority of respondents (86%; $n=6/7$) agreed that their knowledge of the response protocols and procedures was sufficient to guide their responses to EMPP calls, and the majority (80%; $n=4/5$) also agreed that the response protocols and procedures in place in their police service for EMPP were appropriate in guiding the responses to EMPP calls.

Training

FINDING 10: CSC has developed and trained staff and partners who were responsible for the application and/or removal of EM devices, and the monitoring of offenders. However, there were several challenges in the collection, storage, analysis and reporting of data received in the monitoring centre.

Eighty-six percent ($n=32/37$) of CSC staff interviewed indicated having received training on electronic monitoring. The majority of respondents (90%; $n=27/30$) agreed that the current training module for staff engaged in EMPP was sufficient to convey procedures and information regarding the program, whereas only half of monitoring centre staff respondents (50%; $n=3/6$) agreed with this statement. CSC staff and monitoring centre staff interviewed noted that the training should be more practical (31%; $n=9/29$), and CSC staff indicated that it needed to be more in-depth (e.g., more information on selection criteria, details of the system and limitations) [27%; $n=6/22$].

A large proportion of both CSC staff (69%; $n=20/29$) and 83% ($n=5/6$) of monitoring centre staff respondents indicated that there were areas of EMPP in which staff should receive more training. Specifically, this included more training in data collection and report writing (60%; $n=3/5$); how to use the software and clarification regarding the limitations, and benefits of the technology (60%; $n=3/5$). Fourteen percent ($n=3/21$) of

CSC staff also indicated that staff should receive more training in terms of data analysis, how to use the software, and clarification of guidelines relating to the selection criteria and protocols.

It is evident that both the monitoring staff and the EMPP staff faced challenges in the collection, analysis and reporting of data with respect to EMPP. This was manifested in the lack of consistency in data set supplied to the Evaluation Branch, wherein evaluation analysts spent considerable time to verify the quality of data. Recognizing the importance of reliable data, it is critical that EMPP staff receive adequate training on establishing a suitable data dictionary, data collection methods and data analysis protocol that will inform decision-making.

RECOMMENDATION 5: CSC should develop and provide to all EMPP staff appropriate data management (data collection, storage, analysis, and reporting) training that will foster reporting of EM outcomes and support decision-making.

Victims

FINDING 11: The existing legislative framework does not support the monitoring centre in notifying victims when an offender is on EM unless a Warrant of Apprehension and Suspension has been issued.

Literature incorporating victim issues into electronic monitoring is limited. However, it is acknowledged that, when using GPS technology, exclusion zones can be created around the area of a victim's home, or an inclusion zone can be programmed to monitor the movement of offenders in one geographical area. For instance, if an offender enters a prohibited area, an alert is received and appropriate action can be taken.

Currently, the monitoring centre does not have a specific protocol in place to notify victims on occasions that an offender who is being electronically monitored visits an area where a registered victim resides. However, in situations in which a victim notification is required and permitted under existing legislation, the National Victim Services Program division of CSC is obligated to fulfil the required function. To date, offenders who have

victim notifications on file can be managed through the creation of inclusion zones that act as a boundary for the offender's movements with staff ensuring that the inclusion zone does not incorporate the victim area where possible. For example, an inclusion zone can be created to ensure that offender movement preclude access to where a registered victim resides. If this project is expanded across the country, special attention will be required in managing this requirement.

RECOMMENDATION 6: CSC should develop a policy bulletin to guide the monitoring centre staff in monitoring EMPP participant if and when an offender is within the registered victim's area of residence.

EVALUATION OBJECTIVE 3: SUCCESS

Evaluation Objective: Is EMPP meeting the intended outcomes?

FINDING 12: The research literature is inconclusive with respect to the rehabilitative impact of electronic monitoring. Evaluation findings were similarly inconclusive.

Outcome evaluations of EM programs have demonstrated mixed and inconclusive results in terms of achieving their goals and objectives. For instance, some studies have found lower rates of recidivism and revocation among offenders who are electronically monitored compared to offenders in the community who are not (Florida Department of Corrections (FDOC), 2003; Gainey, Payne, & O’Toole, 2000; OPPAGA, 2005; Padgett, Bales, and Blomberg, 2006), while other studies have found no such differences (Bonta, Wallace-Capretta, & Rooney, 2000a, 2000b; Finn & Muirhead-Steves; Renzema & Mayo-Wilson, 2005; Sugg, Moore, & Howard, 2001). In order to test the effectiveness of EM in reducing the likelihood of an offender’s failure on conditional release, the evaluation examined the impact of EMPP in relation to managing offenders with residency conditions, suspension for technical violations and the commission of new offences.

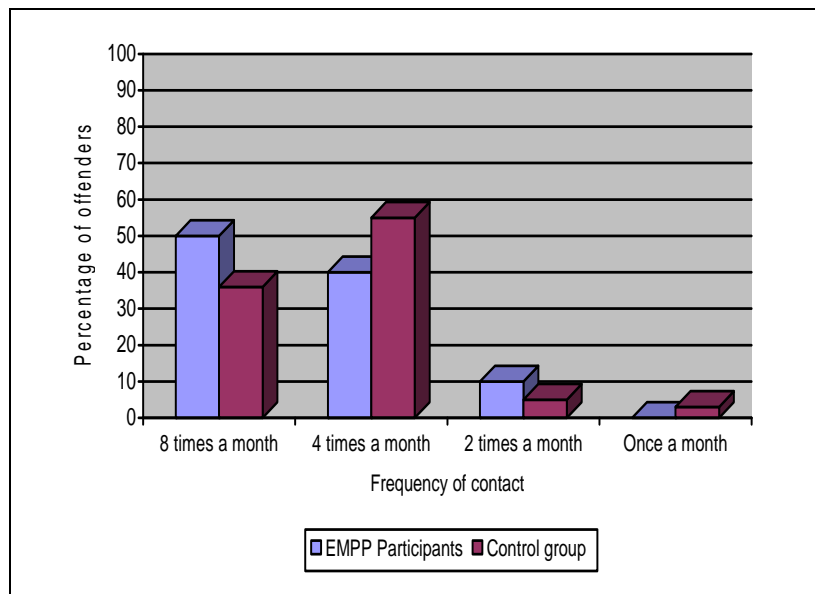
Statutory Release with Residency (SRR)

FINDING 13: The frequency of contact between offenders on SRR and their parole officers was not reduced as a result of their participation in EMPP.

As outlined previously in the report, only 22% ($n=10$) of EMPP participants who were released on SR had a residency condition. The evaluation attempted to examine whether EM played a role in the removal of the condition to reside at a specific place or the frequency of contact they had with their parole officers. In order to assess whether the use of EM was associated with a reduced frequency of contact between offenders with a residency condition and their respective parole officers, a qualitative data analysis approach was used. This analysis involved a comparison of the subset of the offenders participating in EMPP who had a residency condition ($n=10$) with non-EM participants

with the same condition. One limitation to this analysis is related to the fact that the OMS database only included the most recent recorded level of frequency of contact and, therefore, information on previous levels of frequency of contact was not available. Thus, a comparative analysis of the variations of frequency of contact throughout the EMPP timeframe was not possible. Nonetheless, the distribution of levels of frequency of contact for the two groups is displayed in Figure 3. Although EMPP participants were found to have a slightly lower percentage of frequency of contact on a 4 times per month basis, they had a higher proportion of Level 1 (8 times per month) frequency of contact than the population. Thus, electronic monitoring did not appear to be associated with lower frequency of contact between offenders with a residency condition and their parole officers²³.

Figure 3: Distribution of levels of frequency of contact for EMPP participants with a residency condition and the corresponding population.



Source: OMS: Note: Does not add to 100% due to rounding.

RECOMMENDATION 7: Given the level of contact and monitoring of EMPP participants by the monitoring centre and the increase in Parole Officer contact (see finding 7), CSC should review whether changes to the policy framework on frequency of contact between EMPP participants and their respective parole officers are required.

²³ The unavailability of appropriate data precluded the analysis of offenders' length of stay on residency because the start and end dates of participation were not consistently and adequately collected.

Impact on Warrants of Suspension

FINDING 14: There was no difference between EMPP participants and a matched comparison group on the number of warrants of suspension issued, although electronic monitoring was used in some cases to cancel the Warrants of Suspension.

A comparison of the number of suspensions between the group of EMPP participants ($n=46$) and a matched control group of non-EMPP offenders ($n=46$) was undertaken in order to assess whether the use of EM had an impact on Warrants of Suspension. Only suspensions occurring during the course of the EMPP timeframe were included in the analysis. A total of 22 (48%) of the EMPP participants had incurred a suspension, whereas 24 (52%) of the non-EMPP participants were suspended. This difference does not appear sufficient to conclude that EMPP reduced the probability that an offender would obtain a suspension. However, qualitative analyses indicated that EM was being considered as an alternative to a warrant of suspension of offenders. For instance, during the selected timeframe, EM was used in seven cases in which offenders' warrants of suspension were cancelled because EM was seen as a reasonable tool to foster the offender supervision in the community.

Impact on Apprehension

Police services or specific police divisions such as the ROPE squad have a unique involvement as they work specifically with the apprehension of offenders who have posted warrants or who are UAL. Once CSC posts a warrant of suspension and apprehension, police services in the jurisdiction are informed to execute the warrant. In the context of the evaluation, two ROPE squad members who had used CSC's EMPP to help track offenders with warrants or who were UAL were interviewed. One member indicated that EM was a beneficial tool because it provided them with the real-time location of the offender (i.e., location provided at the time) [50%; $n=1/2$] and allowed faster apprehension (50%; $n=1/2$). Both ROPE squad respondents indicated that EMPP

facilitated their job in apprehending offenders despite some technical challenges associated with the devices (i.e., drift, dead spots, etc.).

Impact on Decision-Making

The large majority of CSC staff respondents (88%; $n=29/33$) and all of the monitoring centre staff respondents (100%; $n=6/6$) agreed that electronic monitoring enhanced positive parole decisions (e.g., appropriate conditional release and/or re-incarceration). Similarly, all of the monitoring centre staff interviewed (100%; $n=6/6$) and 85% ($n=28/33$) of CSC staff respondents agreed that EM facilitated decision-making and that the implementation of EMPP allowed CSC staff to take immediate action to address technical violations [83% ($n=5/6$) and 91% ($n=30/33$), respectively].

All monitoring centre staff (100%; $n=6/6$) and 64% ($n=14/22$) of CSC staff interviewed agreed that EM could decrease residency conditions imposed by the NPB, while responses from police services respondents were evenly split between “neither agree nor disagree” (43%; $n=3/7$) and “agree” (43%; $n=3/7$). Overall, respondents agreed that EM enhanced the integrity of supervision conditions. Although respondents’ responses indicated that EM could be used as alternative to SR with residency, there were no empirical data to demonstrate that EM had contributed to a change in EM participants’ release conditions during the pilot period. Additionally, the majority of CSC staff (91%; $n=31/32$), all of the monitoring centre staff (100%; $n=6/6$), and 90% ($n=9/10$) of police services staff interviewed agreed that EM enhanced the credibility of supervision conditions.

Finally, 94% ($n=32/34$) of CSC staff, 100% ($n=6/6$) of monitoring centre staff, and 100% ($n=10/10$) of police services staff agreed that EM enhanced the overall supervision of offenders in the community. All of the police services staff respondents indicated that EMPP enhanced the supervision of conditionally released offenders and that EMPP provided a useful supervision tool to CSC and its police partners for federal offenders on conditional release (100%; $n=10/10$). Many of these respondents indicated that this was because EM provided quick and easy access to information (80%; $n=4/5$), increased

offender accountability (20%; $n=1/5$), and overall, enhanced supervision (40%; $n=2/5$). A large proportion (78%; $n=7/9$) of police service respondents reported that EM enhanced police ability to monitor and supervise offenders in the community (e.g., through visits, phone calls). The majority agreed that EMPP addressed the challenges associated with enforcing curfews (100%; $n=8/8$) and deterring offenders from entering prohibited areas (90%; $n=9/10$). Furthermore, 80% ($n=8/10$) of police services respondents reported that EMPP increased the safety of others and provides sufficient warning of a violation (89%; $n=8/9$), hence enhancing supervision of offenders in the community. However, there were no empirical data to support this conclusion.

Offender Accountability

FINDING 15: There are conflicting views regarding the impact of EMPP on offenders' accountability. Generally, CSC staff, monitoring centre staff and police officers agreed that EM had a deterrent effect on offenders and held offenders accountable. The offenders themselves did not share this view and research literature is inconclusive.

The conflicting views of CSC staff and those of EMPP participants present an interesting picture. Overall, CSC staff, monitoring centre staff and police services respondents considered EMPP to have had a positive effect on offender accountability. As shown in Table 22, the majority of respondents indicated that EM had a deterrent effect on offenders. Similarly, the majority of police services respondents agreed that offenders improved their behavior during the application of EM.

Table 22: Effects of EMPP on Offender Accountability

Response Options	Respondent group	Disagree % (n)	Neither Agree nor Disagree % (n)	Agree % (n)
Electronic monitoring has a deterrent effect on offenders	CSC Staff ($n=33$)	3% (1)	12% (4)	85% (28)
	MC Staff ($n=6$)	0% (0)	17% (1)	83% (5)
	Police ($n=10$)	10% (1)	10% (1)	80% (8)
Offenders improve their behaviour during the application of electronic monitoring	Police ($n=8$)	25% (2)	0% (0)	75% (6)

Source: CSC staff interviews, monitoring centre staff interviews, and police services staff interviews

The EMPP participants' views were vastly different when asked to rate the impact of EM on their behavior and accountability. The EMPP participants took opposing views when asked whether EMPP influenced them to consider their own actions when faced with a situation in which they might be likely to commit a crime (50% [$n=4/8$] disagreed, 25% [$n=2/8$] agreed, and the remaining 25% [$n=2/8$] neither agreed nor disagreed). Furthermore, thirty-eight percent ($n=3/8$) disagreed that EM compelled them to consider their own actions when placed in a situation where they might have been more likely to violate their conditions of release, and seventy-five percent ($n=6/8$) indicated that EM did not play a role in their consideration or decision to minimize their association with negative influences. Nevertheless, 40% ($n=2/5$) indicated that EM had a deterrent effect and 56% ($n=5/9$) agreed that EMPP contributed to their successful reintegration into the community.

In addition to examining respondents' views on the effect of EMPP on offenders' behaviour, the Evaluation Branch assessed data collected by the monitoring center in relation to reasons surrounding the removal of the EM device in the context of the termination or interruption of the EM program for each EMPP participant. Reasons for termination mainly included case management team decisions, Warrant Expiry Dates, and employment safety issues, as well as other motives relating to inappropriate conduct by the offender. In the latter case, inappropriate conduct was the main motive for removal of the device 23 out of 41 times, constituting (57%) of the removal decision. Inappropriate conduct mainly involved committing another criminal offence, positive urinalysis, deterioration of behaviour, and breach of conditions. In one instance, the offender was unlawfully at large and in another instance an offender was arrested due to a tamper alert and other information received by the police (unspecified). Thus, it did not appear that electronic monitoring had an impact on offender accountability.

Impact on Parole Officers/Parole Supervisors

FINDING 16: The integration of EMPP monitoring and response requirements with parole officers' responsibilities may potentially increase their workload.

Parole officers are responsible for the assessment of offender risks and needs and the development of a responsive correctional plan that addresses those risks and needs. Additionally, parole officers are responsible for the supervision of offenders under conditional release in the community. During EMPP, these selected parole officers assumed the roles associated with EMPP, in addition to their regular caseload. Although the monitoring centre is responsible for the actual monitoring of the offenders participating in EMPP, parole officers are responsible for responding to notifications and alerts once contacted by monitoring centre staff. Some of these alerts included tamper alerts, exclusion zone alerts and their associated clarifications when there were false positives/alarms. While the monitoring centre is responsible for tracking offenders via signals from the device, parole officers are responsible for determining whether the alert was true or false. As outlined earlier in the report, some offenders had over 30 contacts with the monitoring centre monthly, and on the occasion of a tamper alert the parole officer responsible for the case was mandated to assess the risk. In situations where the tamper alert was false, the level of effort required to manage this requirement reportedly impacted the workload of the parole officers.

Table 23 presents CSC staff views with respect to the management of work required to monitor EM participants by their parole officers. When asked whether the current parole officer's work structure allows for the incorporation of EM monitoring requirements, 50% ($n=18/36$) of CSC staff respondents agreed that EM monitoring requirements could practically be incorporated into parole officer's workload, while 39% ($n=14/36$) disagreed. The majority of CSC staff respondents (84%; $n=27/32$) agreed that the information collected through EM monitoring processes was sufficient to result in timely actions being taken by parole officers with respect to EMPP. Similarly, 92% ($n=24/26$) agreed that the information supported appropriate action being taken by parole officers.

Table 23: CSC Staff Agreement towards their Workload

Response Options	Disagree % (n)	Neither Disagree or Agree % (n)	Agree % (n)
Electronic monitoring can be practically incorporated into parole officers' daily work load (n=36)	39% (14)	11% (4)	50% (18)
The analysis of incoming data results in timely actions being taken by parole officers (n=32)	6% (2)	9% (3)	84% (27)
The analysis of incoming data results in appropriate actions being taken by parole officers (n=26)	4% (1)	4% (1)	92% (24)

Source: CSC staff interviews

Finally, the majority of CSC staff interviewed (81%; n=25/31) indicated that the implementation of EMPP had increased their workload by up to 25%, whereas 13% (n=4/31) perceived a workload increase ranging from 26 to 50%, and 6% (n=2/31) perceived a workload increase ranging between 51-75%.

RECOMMENDATION 8: CSC should review EM monitoring requirements and potential impacts on the responsibilities of parole officers, and adjust parole officer workload formulas accordingly.

Perception of Public and Staff Safety

Because the current EM program pilot has not been implemented for a duration sufficient to conduct recidivism analysis, further study is required before drawing conclusions on the rehabilitative effect or basing policy decisions on such an effect. Available research indicates that many agencies using EM neither build rehabilitative components into their programs nor expect an enduring impact (Padgett et al., 2006). In some jurisdictions, EM is used for serious offenders, some for property and drug offenders and others as a cost-saving measure to reduce the increase in the prison population. Given the potential surveillance value of EM, the use of EM in the community may well prove an effective public safety alternative to prison. The large majority of CSC staff interviewed (91%; n=32/35) and all of the monitoring centre staff interviewed (100%; n=6/6) and police services staff (100%; n=10/10) shared this view. Respondents agreed that EM contributed

to public safety. Similarly, the majority of monitoring centre staff (83%; $n=5/6$) agreed that EM contributed to staff safety; however, only 47% ($n=15/32$) of CSC staff respondents agreed with this statement. In addition, 100% ($n=9/9$) of police respondents agreed that EM enhanced the collaboration between CSC and the police in enhancing public safety.

RECOMMENDATION 9: If EM is expanded or implemented on a national basis, it should be integrated into CSC's community supervision policy framework in order to enhance the supervision of offenders, particularly those with appropriate level of risk and needs, and suitable release conditions.

EVALUATION OBJECTIVE 4: COST-EFFECTIVENESS

Evaluation Objective: What is the relationship between the amount spent and the results achieved relative to alternative design and delivery approaches?

FINDING 17: Cost-effectiveness of EMPP has not yet been demonstrated given the short period of implementation; however, EM has potential cost-saving value for CSC. Furthermore, the surveillance and monitoring value could provide opportunities for offenders to enhance their independent community living.

One of the traditional objectives of any evaluation is the calculation of the cost of a program relative to its benefits or the cost of implementing an alternative program that may achieve similar program outcomes. In examining the cost-effectiveness of EMPP, the expected values of net benefits of the program to the organization and to the offender were calculated using the EMPP calculated expenditure of \$856,096²⁴ and the projected average annual operating budget of \$1M. The Cost of Maintaining Offenders (COMO) provided by CSC's Finance Department was also used. Several different analyses/situations were explored in order to determine the cost-saving value of electronic monitoring relative to: supervision of an offender on statutory release with a residency condition; maintaining an offender in a Community Correctional Centre; and maintaining an offender in a minimum-security facility.

Statutory Release with Residency (SRR) requires a level of monitoring that is consistent with the use of EM. Statutory Release (SR) requires that offenders (with the exception of offenders serving life and indeterminate sentences) serve the final one-third of their sentence in the community under supervision and conditions of release. The community supervision and the conditions of release are similar to those that are imposed on

²⁴ EMPP's budget was calculated for the period from September 2008 to August 2009 and was based on the following expenditures: \$282,067 in EM project staff salaries, \$ 237,441 in startup costs for the National Monitoring Centre, including the cost of agreement with the Province of Nova Scotia, \$45,000 in EM device related costs and \$291,588 in salaries as a portion of the total NMC staff salaries (\$395,727) that was related to EMPP monitoring. The latter was calculated as a percentage of monitoring centre staff expenses, taking into account the distribution of their level of effort on the community staff safety (12hrs daily/5 days weekly) and EMPP projects (24 hrs/7 days weekly). Specifically, a level of effort per week per employee was determined based on the total number of hours with respect to both projects (i.e., 12x5 = 60 hours/week on community staff safety and 24x7=168 hours/week on EMPP). The salary dollar (\$395,727) amounts were thus allocated accordingly - \$291,588 for EMPP and \$104,138 for Community Staff Safety. The overall EMPP expenditure during the program pilot amounted to \$856,096.

offenders who are released on full parole. An offender may be denied statutory release if a detention hearing determines that an offender will likely commit an offence that will cause harm or death to an individual, a sexual offence against a child, or a serious drug offence²⁵. SRR ensures that offenders reside in a community residential facility (CRF) (e.g., half-way house) or a community correctional centre (CCC)²⁶. This type of condition allows for a more structured and safer offender reintegration into the community (Grant, Johnson, & Muirhead, 2000).

As demonstrated earlier, 35% ($n=16$) of EMPP participants had a release condition to abstain from a specific place. Among the participants of the EM pilot, there were 22% ($n=10$) who were on SR with a residency condition. For those offenders, EM may be a useful tool in monitoring their activities in relation to the release conditions to reside at a specific place. Therefore, it is expected that EM must have a positive impact on the number of SRR cases for the program to be cost-effective. Two residency conditions of the 10 EMPP SRR cases changed during the supervision period and there were 7 of 12 cases in which offenders' Warrants of Suspension were cancelled as a function of EMPP and as an alternative to their return to a correctional facility.

Research has shown that EM has surveillance value which is consistent with the requirements of supervision of offenders on SR with a residency condition. Given a budget of \$856,096, EM would prove to be cost-effective if 23²⁷ offenders for whom a residency condition would otherwise be imposed are released and maintained in the community for 365 days without the residency condition if EM will be a sufficient tool to manage their level of risk. With an operating budget of \$1 Million, EM would prove to be cost-effective if 27 offenders were maintained in the community for 365 days without the residency condition.

²⁵ Source: www.csc-scc.gc.ca/text/faits/03-04-eng.shtml

²⁶ Correctional Service Canada (2007). *Commissioner's Directive (CD) 712-2. Detention*. Retrieved from <http://infonet/Corporate/National/Navigate/NavigateTopic/CD.htm?lang=en>

²⁷ The number is achieved by subtracting regular parole yearly cost (\$23030) from COMO yearly cost for CCC/CRF (\$60,656); then dividing \$856,096 and \$1M by the difference, respectively.

Traditionally, when an offender's conditional release is suspended, the offender is returned to a medium security institution and the case management team assesses risk and explores alternatives to revocation. Given that the annual cost of maintaining an offender in a medium security facility is \$87,498, each day the offender spends in the facility would have amounted to \$239²⁸. The effectiveness of EM in preventing the suspension of those offenders may have proven to be cost-saving for the organization.

In terms of the benefits for the offender, the effective application of EM as alternative to suspension in those 7 cases proved beneficial for the offender as they were able to remain in the community and continued their gradual transition and adaptation to community living.

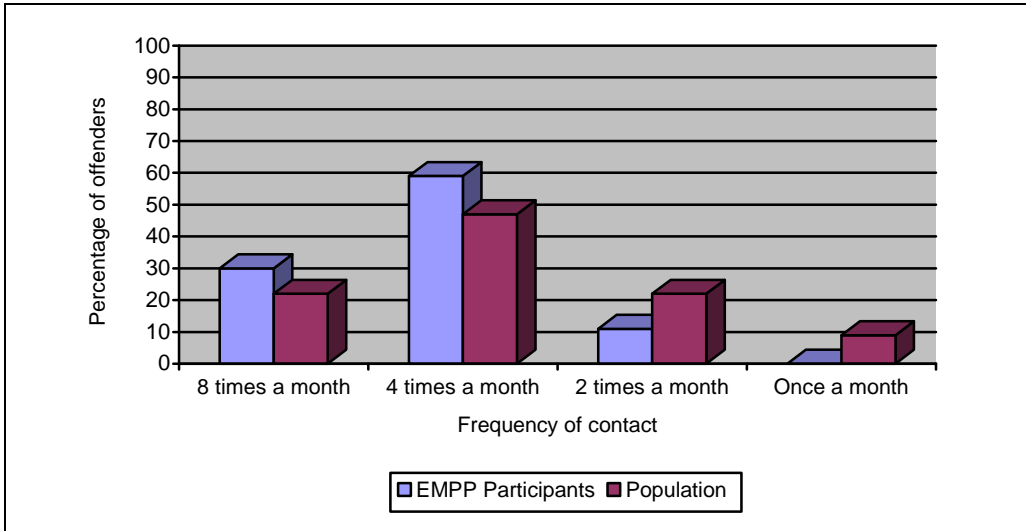
According to the Cost of Maintaining Offenders, CSC spends an average of \$60,656 annually to maintain an offender in a Community Correctional Centre (CCC) compared to \$23,030 for each offender living in the community. This implies that those offenders who were released into the community with a residency condition had resided in a CCC or an approved CRF where CSC continued to maintain its obligations for their sentences and accommodation in the community. For every offender in this category for whom EM is effectively used as an alternative to residency, this could translate to an average cost saving of \$37,626 annually. EM would therefore prove to be cost-effective if 22²⁹ offenders for whom a residency condition would otherwise be imposed are released and maintained in the community for 365 days without a residency condition granting that EM will be a sufficient tool to manage their level of risk.

Figure 4 represents the frequency of contact between offenders and their parole officers while on conditional release. Overall, the EM participants were required to meet with their parole officers more frequently as compared to the population.

²⁸ The value was achieved by dividing the COMO value by 365 days.

²⁹ Divided EMPP expenditure of \$856,096 by \$37,626 to obtain the number of offenders who should be released and maintained.

Figure 4: Frequency of contact between EMPP participants and Population with parole officers



Note. EM = EMPP Participants, P = Population; $\chi^2(3, N = 46) = 9.21, p < .03$

Given that an EMPP participant had between 15 to 30 contacts with the monitoring centre on average during the course of one month, maintaining the traditional frequency of contact between parole officers and offenders may be an unwarranted and unnecessary duplication of efforts and resources that could otherwise be used to manage other offenders in the community.

There were data indicating that two SR with residency cases were reduced to regular SR as a function of EM. As outlined in Table 24 below, it should be noted that, of the 10 EM participants on SRR, there was no difference between this group and the sub- population despite their participation in EM at the required level of contact with their parole officers. This has been previously assessed in the report. Consequently, in order for EM to be cost-effective, the frequency of contact between the parole officer and the offender should be reduced to reflect the value of monitoring provided by the monitoring centre.

Table 24: Frequency of Contact between EMPP Participants and Population (SRR cases) with parole officers

	Once a Month		Twice a Month		Four Times a Month		Eight Times a Month		X ²
	n	%	n	%	n	%	n	%	
EM	0	0	1	10	4	40	5	50	1.64
P	13	3	21	5	213	55	141	36	

Note : EM = EMPP Participants, P = Population; df = 3; *p < .05, **p < .01, ***p < .001

CSC spends an average of \$89,377 to maintain an offender in a minimum-security facility and \$60,656 annually in a CCC or CRF. An offender on day parole will ideally reside in a CCC or CRF, which implies that CSC would spend \$60,656 to maintain such an offender. Given CSC’s traditional gradual release principle, for every offender released into the community from a minimum security facility on day parole and for whom EM is used as a monitoring tool, this could also translate into a cost saving of \$28,721 each annually.

Using EMPP pilot’s budget of \$856,096; for the EM project to be cost-effective, it must be a primary contributing factor to the release of 30³⁰ offenders and it must sustain them on day parole in the community for more than 365 days. As the budget increases, so does the required number of offenders. For example, when the EM projected operating budget increases to \$1 million, a total of 35 offenders must be released and maintained on day parole in the community for more than 365 days.

RECOMMENDATION 10: CSC should review the policy framework guiding the frequency of intervention between parole officers and adapt the required frequency of contact taking into consideration the collateral monitoring and surveillance value of EM in the supervision of offenders in the community.

RECOMMENDATION 11: CSC should develop a strategy to increase the number of offenders who are monitored using EM so as to be cost-effective, and should regularly monitor results.

³⁰ The number is achieved by subtracting COMO yearly cost for a minimum security institution from a CCC/CRF yearly cost. Divided EMPP expenditure of \$856,096 by \$28,721 to obtain the number of offenders who should be released and maintained.

EVALUATION OBJECTIVE 5: UNINTENDED / OTHER FINDINGS

Evaluation Objective: Does EMPP create or encounter any positive or negative impacts that were unintended?

FINDING 18: Despite technical challenges associated with EM, some offenders indicated that it provided personal benefit and supported their reintegration potential.

Impact on Offenders

The views expressed by offenders participating in CSC's EMPP were consistent with those expressed by offenders in British Columbia, Saskatchewan and Newfoundland when they were asked to provide their opinions (Bonta, Ronney & Wallace-Capretta, 1999). Specifically, only a small minority of offenders interviewed stated that participation in the program was more difficult than they had envisioned. The majority of offenders pointed to at least one personal benefit as a result of participation in an electronic monitoring program. For example, 86% of the British Columbia participants, 79% of Saskatchewan participants, and 89% of Newfoundland participants indicated that the program was beneficial because it provided them the ability to maintain close contact with their family members (JHSA, 2006). Although most of the CSC EMPP participants had divergent views regarding the benefits of their participation, for those with negative views, when probed, it became apparent that the negative assessment of the project resulted from the challenges associated with the device such as its size, comfort, and visibility. The majority of offenders interviewed indicated that there had not been any negative impacts on their ability to function daily while participating in EMPP (63%; $n=5/8$). Overall, the majority of offenders interviewed indicated that they would encourage other offenders to participate in EMPP to support their release into the community (88%; $n=7/8$).

All of the offenders interviewed indicated that they would suggest improving EMPP by modifying the EM device (e.g., making the device smaller and more comfortable, having an automatic shut-off for charging, implementing a wireless charger, having a memory

box closer to charger, reducing charging time and have charging wire lock into the device) [77%; n=7/9].

Long-Term Supervision Orders and EM

In 1995, the Task Force on High-Risk Violent Offenders recommended the Long-Term Supervision Order provision³¹. Since 1996, there has been an increase in the number of LTSOs imposed throughout Canada (see Table 25). In 1996, there was only one LTSO designation; however, during subsequent years, the number of designations substantially increased. By 2003-2004, the number of designations had reached 65 per year. Between the years 2001-2002 and 2006-2007, there was slight fluctuation in the number of LTSO designations, but by 2007-2008, LTSO designations peaked at 74 per year. The reason behind this increase in designations is unknown; however, given its relatively new implementation, the increase and use over the years following 1996-1999 was expected. Given the increasing number of LTSO cases in Canada, the use of EM as a surveillance and monitoring tool may be a reasonable proposition.

Table 25: Number of LTSO Designations over the past ten years

Sentence Date – Fiscal Year	Total
1996-1997	1
1997-1998	1
1998-1999	19
1999-2000	30
2000-2001	39
2001-2002	57
2002-2003	52
2003-2004	65
2004-2005	52
2005-2006	65
2006-2007	64
2007-2008	74

³¹ Correctional Service of Canada. *Long-term offenders, long term supervision orders and the role for the Correctional Service of Canada*. Retrieved from: <http://www.csc-scc.gc.ca/text/pblct/lts/o/e.pdf>

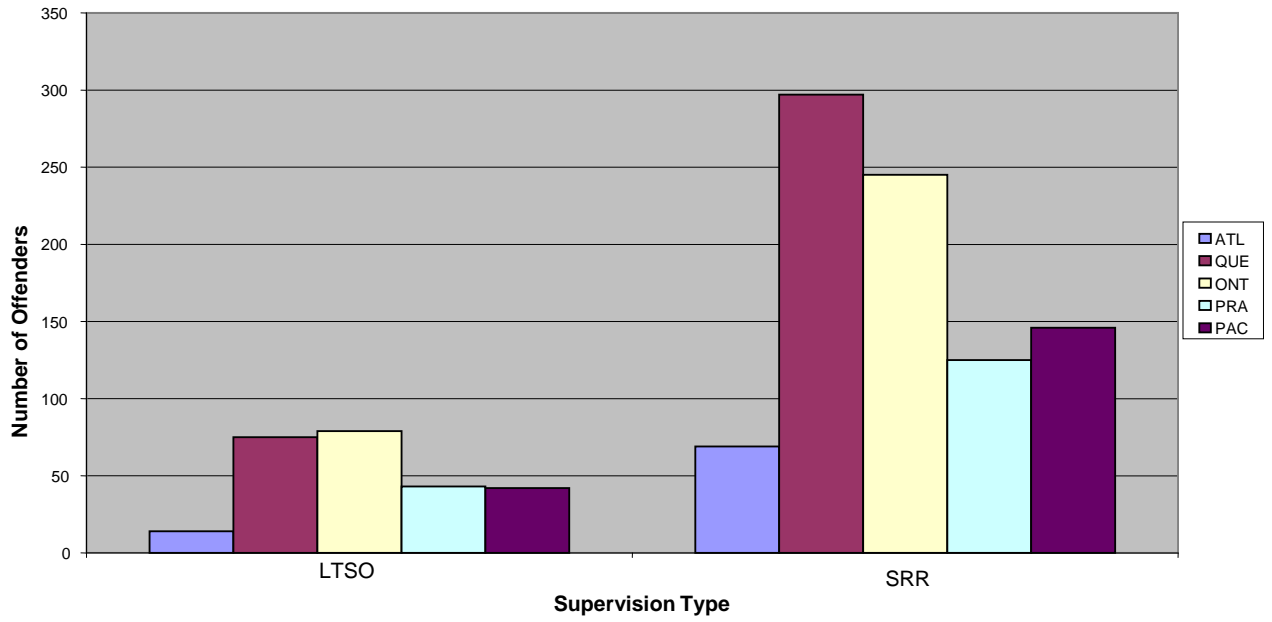
2008-2009	67
2009-2010	9
Grand Total	595

Source: Extracted from OMS by Performance Measurement Branch.

Note: Includes all offenders who have ever received an LTSO designation, regardless of whether they were active or not at the time of the evaluation.

Figure 5 below provides an overview of the distribution of SRR cases across CSC regions. As outlined in the chart, the majority of SRR cases are situated in the Quebec Region (171), followed by the Ontario (143) and Pacific (130) Regions. The majority of CSC staff (91%; $n=32/35$), monitoring centre staff (100%; $n=7/7$), and police services (100%; $n=10/10$) respondents shared this view. They agreed that EM could be an appropriate tool for offenders under LTSOs. More specifically, CSC staff and police service respondents indicated that EM could be a useful information-gathering tool for LTSOs [20% ($n=7/35$) and 50% ($n=5/10$), respectively], primarily because LTSOs are a high risk and high need population [23%, ($n=8/35$) and 30% ($n=3/10$), respectively]. In addition, CSC staff and monitoring centre staff considered EM as an enhanced supervision tool for LTSOs [11% ($n=4/35$) and 86% ($n=6/7$) respectively]. Similarly, the majority of respondents agreed that EM would be an appropriate tool for high-risk violent offenders [83% ($n=30/36$) of CSC staff; 83% ($n=5/6$) of monitoring centre staff; 90% ($n=9/10$) of police services staff]. Police services staff respondents indicated that EM could act as a deterrent for offenders (33%; $n=3/9$).

Figure 5: Current Number of SRR and LTSOs by Region



Source: The data were extracted from OMS by Performance Measurement Branch
Note: LTSO includes only offenders who are past WED, supervised on their LTSO.

References

- Barry, M., Malloch, M., Moodie, K., Nellis, M., Knapp, M., Romeo, R., & Dhanasiri, S. (2007). *An evaluation of the use of electronic monitoring as a condition of bail in Scotland*. Edinburgh: Scottish Executive.
- Black, M., & Smith, R. G. (2003). Electronic monitoring and the criminal justice system. *Trends and Issues in Crime and Criminal Justice*, 254, 1-6.
- Bonta, J., Rooney, J., & Wallace-Capretta, S. (1999). *Electronic monitoring in Canada*. Ottawa, ON: Public Works and Government Services Canada.
- Bonta, J. Wallace-Capretta, S., & Rooney, J. (2000a). Can electronic monitoring make a difference? An evaluation of three Canadian programs. *Crime & Delinquency*, 46, 61-75.
- Bonta, J., Wallace-Capretta, S., Rooney, J. (2000b). A quasi-experimental evaluation of an intensive rehabilitation supervision program. *Criminal Justice and Behavior*, 27, 312-329.
- Bottos, S. (2007). *An overview of electronic monitoring in corrections: The issues and implications* (No. R-182). Ottawa, ON: Research Branch, Correctional Service Canada.
- California Department of Corrections and Rehabilitation. (2009). *CDCR places entire sex offender parolee population on GPS monitoring*. Retrieved March 25, 2009, from http://www.cdcr.ca.gov/News/2009_Press_Releases/Jan_12.html
- Correctional Service of Canada. *Long-term offenders, long term supervision orders and the role for the Correctional Service of Canada*. Retrieved from <http://www.csc-scc.gc.ca/text/pblct/ltso/e.pdf>
- Correctional Service Canada. (2007). *Commissioner's Directive (CD) 712-2. Detention*. Retrieved from <http://infonet/Corporate/National/NavigateTopic/CD.htm?lang=en>
- Correctional Service Canada Review Panel. (2007). *A Roadmap to Strengthening Public Safety* (Cat. No. PS84-14/2007E). Ottawa, ON: Minister of Public Works and Government Services Canada.
- Correctional Service Canada. (2008). *Electronic Monitoring Program Pilot: Results-based Management and Accountability Framework*. Ottawa, ON: Author.
- Correctional Service Canada. (2009-2010). *Report on Plans and Priorities*. Ottawa, ON: Author.

Correctional Service of Canada. (2009). *Commissioner's Directive (CD) 719. Long-Term Supervision Orders*. Retrieved from <http://infonet/Corporate/National/NavigateTopic/CD.htm?lang=en>

Corrections and Conditional Release Act (CCRA), R. S. C. 1992, c. 20.

Eley, S., McIvor, G., Malloch, M., & Munro, B. (2005). Reducing imprisonment in Scotland: Lessons from Finland, Sweden and Western Australia. Edinburgh: Report Commissioned by the Scottish Parliament Justice 1 committee.

Finn, M. A., & Muirhead-Steves, S. (2002). The effectiveness of electronic monitoring with violent male parolees. *Justice Quarterly*, 19, 293-312.

Florida Department of Corrections. (2003). A report on community control, radio frequency (RF) monitoring and global positioning satellite (GPS) monitoring. Tallahassee, FL: Florida Department of Corrections Bureau of Research and Data Analysis.

Florida Department of Corrections. (2008). *Florida's supervised population: Monthly status report*. Retrieved February 11, 2009, from <http://www.dc.state.fl.us/pub/spop/2008/11/tab02.html>

Gainey, R. R., Payne, B. K., & O'Toole, M. (2000). The relationships between time in jail, time on electronic monitoring, and recidivism: An event history analysis of a jail-based program. *Criminal Justice Periodicals*, 17, 733-752.

Gibbs, A., & King, D. (2003). The electronic ball and chain? The operation and impact of home detention with electronic monitoring. *The Australian and New Zealand Journal of Criminology*, 36, 1-17.

Henderson, M. (2006). *Benchmarking study of home detention programs in Australia and New Zealand: Report to the National Corrections Advisory Group*. Melbourne, VIC: National Corrections Advisory Group.

John Howard Society of Alberta. (2006). *Electronic (radio frequency) and GPS monitored community based supervision programs*. Retrieved August 18, 2009, from <http://www.johnhoward.ab.ca/PUB/PDF/monitorupdate.pdf>

McGibbon (2006) What is the Chi Square Statistics? <http://cnx.org/content/m13487/latest/>. Retrieved Sept 14, 2009.

Minnesota Department of Corrections. (2006). *Electronic monitoring of sex offenders: 2006 report to the Legislature*. St. Paul, MN: Minnesota Department of Corrections. Retrieved February 2, 2009, from <http://archive.leg.state.mn.us/docs/2006/Mandated/060146.pdf>

Office of Program Policy Analysis & Government Accountability. (2005). *Electronic monitoring should be better targeted to the most dangerous offenders*. Research Report No. 05-19. Retrieved August 18, 2009, from <http://www.oppaga.state.fl.us/reports/pdf/0519rpt.pdf>

Office of Program Policy Analysis & Government Accountability. (2007). *Electronic monitoring expanded to target communities' more dangerous offenders*. Research Report No. 07-42. Retrieved April 1, 2009, from <http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/0742rpt.pdf>

Padgett, K. G., Bales, W. D., & Blomberg, T. G. (2006). Under surveillance: An empirical test of the effectiveness and consequences of electronic monitoring. *Criminology and Public Policy*, 5, 61-92.

Public Safety Canada. (2008). *Government initiates electronic monitoring for federal offenders*. Retrieved August 18, 2009 from <http://www.publicsafety.gc.ca/media/nr/2008/nr20080811-eng.aspx>

Renzema, M., & Mayo-Wilson, E. (2005). Can electronic monitoring reduce crime for moderate to high-risk offenders? *Journal of Experimental Criminology*, 1, 215-237.

Sugg, D., Moore, L., & Howard, P. (2000). *Electronic monitoring and offending behaviour – reconviction results for the second year of trials of curfew orders*. London: Home Office Research, Development and Statistics Directorate.

Vollum, S., & Hale, C. (2002). Electronic monitoring is a popular alternative to imprisonment. *Corrections Compendium*, 27, 1-9.

Whitfield, D. (2007). *Electronic monitoring: Ethics, politics, and practice*. A keynote address delivered by John Scott.

Appendix 1 – Evaluation Strategy

Key Results	Questions	Analyses	Information Sources	Responsibility Center
Objective #1: Continued Relevancy – Does electronic monitoring remain and continue to be consistent with departmental and government-wide objectives and priorities?				
<p>1. There is and continues to be a need for the enhancement of supervision for offenders with National Parole Board (NPB) imposed special conditions regarding geographic restrictions.</p>	<ul style="list-style-type: none"> • What is the trend in the number of offenders released to the community with NPB imposed special conditions regarding geographic conditions? Is the proportion substantive/increasing/decreasing over time? How often do they breach this special condition? What is the risk profile for this group, and are the rates of return to federal custody higher/lower/the same when compared to others? • Does EM address any of the issues and/or challenges associated with the supervision of this group of offenders? 	<ul style="list-style-type: none"> • Review of offender releases to the community with NPB imposed special conditions regarding geographic restrictions, identifying: <ol style="list-style-type: none"> i) trend in proportion of these releases; ii) breaches of conditions (within and between group comparison); iii) risk level profile; • Identification of issues and / or challenges associated with the supervision of offenders with NPB imposed special conditions regarding geographic restrictions. 	<ul style="list-style-type: none"> • Correctional Service Canada’s (CSC’s) automated Offender Management System (OMS). • Document review • Key informant interviews • EMPP Documentation 	<ul style="list-style-type: none"> • Evaluation Branch, CSC

<p>2. EM is consistent with departmental and government-wide policies and procedures.</p>	<ul style="list-style-type: none"> • Does EM promote procedural fairness and effective redress? • Does EM adequately protect offender rights? • Does EM increase transparency and accountability (e.g., include relevant external stakeholders in the dissemination of program information)? 	<ul style="list-style-type: none"> • Evidence of due process, Instruction Form, and appropriate disclosure and use of information. • Verification that the selection process is based on appropriate eligibility criteria and ensures the principle of least restrictive measure. • Examination of the number of offenders who successfully complete EM/who requested to be removed from EM. • Examination of the number of grievances and complaints. Analysis of any legal challenges, compliances, or grievances. 	<ul style="list-style-type: none"> • Review EMPP Documentation • Literature review on EM 	<ul style="list-style-type: none"> • Community Reintegration • Research Branch
---	---	--	--	--

Key Results	Questions	Analyses	Information Sources	Responsibility Center
Objective #2: Implementation: Has the Electronic Monitoring Program Pilot (EMPP) been implemented in such a way that goals and objectives can be realistically achieved, and have implementation issues been adequately considered?				
<p>1. Policy, procedures and response protocols are modified to reflect lessons learned from the training and testing phases EMPP.</p>	<ul style="list-style-type: none"> • Are response protocols efficient? Were identified weaknesses improved? • Is the current staff training module sufficient to convey procedures and responses to EMPP flags? 	<ul style="list-style-type: none"> • Opinions as to key implementation and delivery issues (e.g., technical challenges, HR issues, challenges related to policies, procedures and protocols). Identification of technical malfunctions and analysis of key weak points in equipment communication, storage, display, and processing stages (GPS blockages and communication challenges). Analysis of project records for errors in data processing, signal strength, GPS device not picked up by 	<ul style="list-style-type: none"> • Project participant interviews • Monthly reports from Parole Officer Supervisors • Interviews with POs, police, and other stakeholders regarding adequacy of response times. • Interviews with project authority regarding protocol changes. • OMS data 	<ul style="list-style-type: none"> • Community Reintegration

		<p>monitoring device for extended period, equipment malfunction, loss, theft, or damage.</p> <ul style="list-style-type: none"> • Review of response times by type of flag. Interpretation of “buffer zone” adequacy, time to response by OIC. Improvement in response times / process from training and testing phases. Response times for: <ul style="list-style-type: none"> ➤ Confirmation of initial alert (and number of times responses not provided to monitoring center) ➤ Initial notification ➤ Regional decision-maker ➤ Police response where warranted ➤ Comparison of above data for different types of 	<ul style="list-style-type: none"> • EMPP Documentation 	
--	--	---	--	--

		geographic restrictions (e.g., solely curfew, some additional restrictions)		
2. Offenders participating in EMPP meet the selection criteria as set out in EMPP guidelines.	<ul style="list-style-type: none"> • Do offenders meet the selection criteria? • What are the social-personal characteristics and risk profiles of EM participants and are the EM offenders different from those of a comparison group of offenders? 	<ul style="list-style-type: none"> • Verification through examination of offender sentencing and parole information that the offender met inclusion criteria. • Examination of the profile of EM participants and comparison with the profiles of non-participants. 	<ul style="list-style-type: none"> • OMS data • Correctional Plan Progress Report (CPPR) • Key informant interviews with POs • EMPP documentation 	<ul style="list-style-type: none"> • Correctional Operations and Programs Sector, CSC • Evaluation Branch, CSC
3. Parole Officers record information about an offender's involvement and progress in OMS as required.	<ul style="list-style-type: none"> • Are POs recording the details regarding alerts received and the reaction to alerts in OMS as required? 	<ul style="list-style-type: none"> • Comparison of alerts sent by agency with that captured in OMS casework records. 	<ul style="list-style-type: none"> • Alerts by OMNILINK • OMS data • Key informant interviews with Pos • EMPP Documentation 	<ul style="list-style-type: none"> • Correctional Operations and Programs Sector, CSC • Evaluation Branch, CSC

Key Results	Questions	Analyses	Information Sources	Responsibility Center
Objective #3(a): Success (Effectiveness): Is EM meeting the intended results?				
<p>1. EM facilitates and enhances the current range of supervision and monitoring tools for offenders in the community.</p>	<ul style="list-style-type: none"> • How does EM augment and improve upon the current range of monitoring and supervision tools? • How does EM impact case management and release decisions? Does EM enhance parole decisions/facilitate decision-making (appropriate conditional release/re-incarceration)? • Does EM enhance integrity and credibility of supervision conditions? • Will EM enhance the supervision offenders in the community? • Could EM be an appropriate tool for high risk violent offenders? • Does EM decrease residency conditions imposed by NPB? 	<ul style="list-style-type: none"> • Parole Officer and offender perspectives on the value of EM to offender supervision and monitoring and opinions as to improvements in timeliness and quality of information for use in the case management and parole decision-making processes, and as to whether EM leads to increased confidence in decisions and/or results in more appropriate offender interventions. • Examination of the type of case management decisions and release decisions. • Comparisons of “success” indicators for specific types of 	<ul style="list-style-type: none"> • Key informant interviews with POs • OMS data • EMPP Documentation 	<ul style="list-style-type: none"> • Evaluation Branch, CSC

		offenders (e.g., sex offenders, violent offenders).		
2. EM encourages positive offender behavioural changes. There is increased offender accountability.	<ul style="list-style-type: none"> • Does EM enhance the level of monitoring and supervision of offenders in the community (e.g., visits, phone calls)? • Does the implementation of the EM program allow CSC staff to take immediate action to address technical violations (non-compliance with conditions involving a curfew requirement or geographical restriction)? • Do EM participants positively engage in their community correctional plan? <ul style="list-style-type: none"> ➢ Does EM have a deterrent effect (i.e., cause offenders to consider their actions and assist them in not committing crime or violating the conditions of their release)? ➢ To what extent do offenders improve their behaviour during the application of EM and following EM? ➢ Does EM increase the 	<ul style="list-style-type: none"> • Analysis of changes in reintegration potential or level of motivation through the course of the project. • Assessment of improvements in offender life skill, employment, and personal relationship maintenance. • Number of contacts through EM staff and PO's (Constant contact) • Evaluation of improvements in POs' efficiency to address violations. • Number of geographic boundary violations. • Number of times offender is late or misses an appointment with Parole Officer or for a rehabilitation program. 	<ul style="list-style-type: none"> • Key informant interviews with POs, offenders, and collaterals (family/peers) • Key informant interviews with offenders and POs • Exit surveys with offenders • OMS data • EMPP Documentation 	<ul style="list-style-type: none"> • Correctional Operations and Programs Sector, CSC • Evaluation Branch, CSC

	<p>likelihood that offenders maintain community-based programming, allowing them to benefit from their participation?</p> <p>➤ Does EM increase the likelihood that offenders maintain employment?</p>	<ul style="list-style-type: none"> • Analyses of the impact EM has on offenders' successful completion of rehabilitation programs. • Comparison of behaviour of offenders on EM to a comparison group of offenders under other forms of supervision. • Examination of offender perceptions as to the impact on their behaviour (compared to other supervision tools and/or previous conditional release). 		
3. EM enhances staff safety.	<ul style="list-style-type: none"> • Does EM effect a level of contact between staff and offenders in a way that public safety is maintained and staff safety is enhanced? 	<ul style="list-style-type: none"> • Examination of the number of incidents of threats and assaults (Sensational Incident Reports). • Examination of the number of unannounced curfew checks and requests for surveillance per participant. 	<ul style="list-style-type: none"> • OMS data • Key informant interviews with POs 	<ul style="list-style-type: none"> • Evaluation Branch, CSC

		<ul style="list-style-type: none"> • Perception of staff safety (compared to other supervision tools). 		
4. The EM equipment is properly functioning to allow for offenders to be continually monitored.	<ul style="list-style-type: none"> • Is the EM equipment properly functioning to allow POs to properly supervise offenders? 	<ul style="list-style-type: none"> • Verification that the EM equipment is properly functioning (e.g., comparison of technical challenges such as GPS blockages between rural and urban areas). 	<ul style="list-style-type: none"> • OMS data • Key informant interviews with Pos • EMPP Documentation 	<ul style="list-style-type: none"> • Correctional Operations and Programs Sector, CSC

Key Results	Questions	Analyses	Information Sources	Responsibility Center
Objective #3(b): Success (Efficiency) – Is EMPP producing its planned outputs in relation to expended resources?				
1. Alerts are efficient.	<ul style="list-style-type: none"> • What is the ratio of false alerts to alerts acted on? 	<ul style="list-style-type: none"> • Review of alerts received and reactions to alerts (e.g., time to respond by type of alert, action taken). 	<ul style="list-style-type: none"> • Alerts by OMNILINK • OMS data • Key informant interviews with POs 	<ul style="list-style-type: none"> • Evaluation Branch, CSC
2. EM impacts the role and responsibilities of Parole Officers.	<p>Can EM be practically incorporated in POs' daily workload? Are POs overwhelmed by the number of false alerts? Is the number of alerts placing a burden on POs' caseload?</p> <ul style="list-style-type: none"> • Are CSC staff competent and adept to monitor incoming data for analysis? Do those analyses lead to actions being taken in the supervision process in a timely and efficient manner? 	<ul style="list-style-type: none"> • Evidence as to changes in workload, roles and responsibilities. • Examination of time spent on EM related activities (e.g., number of participants per PO, number of hours per participant, frequency and type of contact). • Assessment of POs' perspectives on the implications of EM on their caseload. • Examination of how's analyze the data (e.g., temporal patterns), interpret the findings and follow-up on the 	<ul style="list-style-type: none"> • Alerts by OMNILINK • OMS data • Key informant interviews with Pos • EMPP Documentation Review 	<ul style="list-style-type: none"> • Evaluation Branch, CSC

		<p>outcomes (e.g., share information with police).</p> <ul style="list-style-type: none">• Impact of EM on individual workload to identify increased supervision costs		
--	--	--	--	--

Key Results	Questions	Analyses	Information Sources	Responsibility Center
Objective #4: Cost-Effectiveness: What is the relationship between the amount spent and the results achieved relative to alternative design and delivery approaches?				
1. Correctional outcomes are cost-effective	<ul style="list-style-type: none"> • Does EM serve as an effective alternative to other supervision options yielding the same or better outcomes at less cost? <ul style="list-style-type: none"> ➤ Re-incarceration (suspension/revocation) ➤ Curfew checks ➤ Residency condition 	<ul style="list-style-type: none"> • Comparison of expenditures on EM program training, maintenance, equipment, monitoring, and response with the costs associated with appropriate housing condition or incarceration. <ul style="list-style-type: none"> ➤ Re-offending rates of offenders based on SIR scale. • Assessment of the degree to which CSC, NPB and offenders feel EM is used as an alternative to other forms of supervision/intervention, and of the degree to which EM factored in release/supervision decisions. 	<ul style="list-style-type: none"> • OMS / CMS data • Program authority records • OMS / CMS data 	<ul style="list-style-type: none"> • Evaluation Branch, CSC

<p>2. Delivery designs and approaches are cost-efficient.</p>	<ul style="list-style-type: none"> • Does EM serve as an efficient alternative to other supervision procedures yielding the same or better outcomes at less cost? <ul style="list-style-type: none"> ➤ Re-incarceration (suspension/revocation) ➤ Curfew checks ➤ Residency condition 	<ul style="list-style-type: none"> • Comparison of costs incurred with EM as outlined in 1, but with those costs accrued solely through regular supervision procedures replaced by EM protocol. 	<ul style="list-style-type: none"> • Program authority records 	<ul style="list-style-type: none"> • Evaluation Branch, CSC
---	--	--	---	--

Unintended Impacts: Does EMPP create or encounter any positive or negative impacts that were unintended?				
EM yields unintended outcome.	<ul style="list-style-type: none"> • Does EM improve information for criminal justice processes? Does EM help police rule offenders in or out as alleged suspects in relation to the commission of new offences? • Does EM unintentionally increase stigma or impact on the offenders' privacy? 	<ul style="list-style-type: none"> • Police Officers opinions as to the usefulness of EM as a tool to identify and track offenders. • Assess impact of EM on offenders and significant others (e.g., impact on employment, ability to perform day-to-day functions and activities). • Offender perception of "readiness" for the effect of wearing and maintaining EM equipment. 	<ul style="list-style-type: none"> • Key informant interviews with police and offenders • Exit surveys with offenders 	<ul style="list-style-type: none"> • Evaluation Branch, CSC