McLaughlin, Patricia

2014

QLS front-line retention manual: methods for achieving a 94% cohort retention rate in longitudinal research

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QLS Front-line Retention Manual: Methods for Achieving a 94% Cohort Retention Rate in Longitudinal Research

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with

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Assisted by

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REPORT PREPARED FOR THE ONTARIO PROBLEM GAMBLING RESEARCH CENTRE
Citation


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Companion Report

The main project report is


Acknowledgements

There are several additional people who were quite helpful in the full QLS project. Dr. Jan McMillen, Dr. Earl Grinols, and Dr. Robert Wood contributed to the original questionnaire design. Danny Rose was a part-time Research Assistant in the Quinte office throughout the assessments. Cody Foss was our original technical support person at the University of Lethbridge who created the original programming for the project support systems resident on the University of Lethbridge servers.
Principal Investigator’s Introduction

The QLS Study  The QUINTE Longitudinal Study (QLS--formerly known as the QERI project) —is one of the world’s largest and most rigorous longitudinal studies of gambling. Beginning in 2006, a cohort of 4121 Quinte-area (in Ontario, Canada) residents aged 17 to 89 were asked to complete five annual comprehensive assessments on all variables of etiological relevance to gambling and problem gambling.

94% retention  Next to the amount and quality of information collected, among the most remarkable features of the QLS is a five-year cohort retention rate of 94%, a rate that is virtually unprecedented in large scale longitudinal research.

The study team  The QLS was undertaken under a contract between the Ontario Problem Gambling Research Centre and Robert Hann & Associates Limited (RHAL), a private company with head office in Grey Highlands, Ontario.

Dr. Robert Williams (University of Lethbridge) and Robert G. Hann (RHAL) were the principal investigators and managers of the project. However, 10 team members from different parts of Canada, the United States and Australia made significant contributions to the project’s success.

A special contribution was made by the staff of the project office in Belleville, in the Quinte area of Ontario, who had originally been hired for the five-year duration of the study to administer our initial data collection protocols and to interact with the roughly 4,000 survey participants to ensure that they continued to remain in the sample and complete the annual surveys.

Special contribution by the front-line Quinte members of the team to longitudinal survey design and implementation  Given the usual challenges faced by longitudinal studies and the fact that the QLS was even more intensive, sensitive, comprehensive, and time-consuming than most other studies, these responsibilities were considered by the principal investigators as challenging enough. However, it soon became obvious that the “front-line” Quinte team would be making important contributions far beyond their original mandate. More specifically, from the very beginning of the project they began to suggest new and innovative procedures and strategies for improving the administration of the surveys, and in particular, encouraging participants to continue to fill out those surveys throughout the project. In addition, they also took on the tasks of identifying the need for and building the extra operational tools (e.g., new process data bases, automated progress reporting tools, to-do systems) to support the new retention strategies and procedures.

Since these innovations were in large part responsible for the QLS attaining a retention rate significantly higher than most other longitudinal studies, they represent major contributions to the science of designing and implementing longitudinal surveys.
The purpose and perspective of this document

It is therefore important to provide a mechanism for communicating to other researchers what we (and especially the front-line staff of our Quinte office) did—and the lessons we learned—regarding the day-to-day research strategies, procedures and tools. This document begins this communication process.

Given their key role in developing and implementing many of the processes—and their unique understanding of what transpired—it was decided that the front-line staff would themselves take the lead in writing this document. It is written from their perspective, including the choice of and importance assigned to different topics. Certain topics included in other reports are also addressed in the current document if doing so provided an important perspective of the front-line staff on those topics. Any additional comments from the two principal investigators are clearly marked as “PI Note…”

This document as part of a larger dialogue

It should, however, be noted that we have found that—especially given the nature of many of the strategies, procedures and operational tools—a written, stand-alone “how-to” manual is often not the best way of conveying sufficiently well the “QLS approach”. Instead, it is clear that a considerably preferable approach would involve direct dialogue or discussion in workshops or seminars involving both the Principal Investigators and the front-line staff who had critical roles in the development, refinement and implementation of the QLS procedures.

This document therefore is designed as a reference or companion piece to that dialogue and discussion.

Researchers interested in taking advantage in their own studies of the techniques in the QLS are therefore encouraged to communicate directly with members of the QLS team. In particular, they are encouraged to contact:

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Other Project Documentation

Additional information describing the design, analysis and results of the QLS can be found in a number of sources, including:


and the project Website, www/qeri.ca
Summary

Among the most important methodological lessons learned and demonstrated by the Quinte Longitudinal Study (QLS—formerly known as the QERI project) were:

a) It is possible to achieve a very high retention rate in longitudinal studies (a cumulative retention rate of 94% over five annual surveys of over 4,000 participants);

b) To achieve this result requires rigorous use of and adherence to a long list of principles, strategies, tools and tactics—none of which are sufficient by themselves, and the effect of many are directly dependent on the effectiveness of others; and

c) Some of the most important of these principles, strategies, tools and tactics apply to what is done by the front-line researchers (those in direct contact with research participants) and, equally important, “how” they do it.

This Front-Line Manual, written mainly by and from the perspective of the QLS front-line staff describes how they developed, tested, and put into practice the methodology to achieve their extremely high retention rate. By discussing the underlying rationale for different approaches and tools, as well as providing numerous specific practical examples, this manual will hopefully assist other longitudinal studies in improving retention rates, and thus the strength of the results of those studies.

The manual is presented in four parts:
   1. Introduction
   2. Strategic Design
   3. Specific Tools
   4. Tactics to Put the Strategies and Tools into Practice.

Part I: Introduction describes the general purpose, intended audience and recommended use of the manual.

Part II: Strategic Design has three chapters and focuses on describing the project at the general, strategic, level. The first two chapters are concerned with understanding the environment in which the project is to be undertaken. The first considers the importance of understanding the physical, social, historical, economic, etc., environment from which the participants will be recruited. The second emphasizes the importance of determining and developing an explicit consensus on the priorities to be given to different aspects of “how” the project is to be undertaken, aspects in important categories as diverse as staff safety, due diligence, degree of flexibility and level of technology. Only after understanding and explicitly addressing both types of environmental considerations should one finalize general retention strategies and specific operational tools.
The Third Chapter of Part II then presents a summary of the main strategic principles and approaches that guided the design and implementation of the project. Two over-arching themes are paramount:

- the importance of taking a “customer/participant”-centred approach, and
- the extremely thorough way in which that approach must be implemented.

However, that Chapter (starting on page 8) also emphasizes that the high retention rate has been achieved by applying not a few, but many, more general principles, strategies and tactics. All were important, and the effectiveness of each was enhanced by, and often dependent on, the effectiveness of others. Further, their ranking in terms of importance varied: with the stage in the project, within each of the data collection phases, and the individual staff member’s perspective.

Nonetheless, the 22 main factors responsible for this retention rate are listed in the following checklist, under five categories:

A. Design of the Longitudinal Questionnaire
   1. Have an efficient and well-tested questionnaire.
   2. Conduct the assessment at the exact same time of year, each year.

B. Focus on Encouraging and Facilitating Questionnaire Completion by Participants
   3. Ensure a customer service focus.
   4. Be responsive to the characteristics of each and every participant.
   5. Provide different options for survey completion.
   6. Establish and maintain a project website.
   7. Provide incentives for participants.

C. Building and Utilizing an Effective Research Team
   8. Hire the ‘right’ people to recruit and maintain the cohort.
   9. Create a work environment that best utilizes the skills of very competent staff.
   10. Provide (monetary and non-monetary) incentives for staff.
   11. Retain specific skills for specific positions.
   12. Maintain a positive attitude.

A Checklist of 22 Key Factors for Achieving High Retention
(N.B. all are important and all are inter-dependent, with importance varying over time)

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<tr>
<th>A. Designing an Effective Longitudinal Questionnaire</th>
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<tr>
<td>☐ 1. Have an efficient and well-tested questionnaire.</td>
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<th>B. Focus on Encouraging and Facilitating Questionnaire Completion by Participants</th>
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<tr>
<td>☐ 3. Ensure a customer service focus.</td>
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<tr>
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<td>☐ 5. Provide different options for survey completion.</td>
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<tr>
<td>☐ 6. Establish and maintain a project website.</td>
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<td>☐ 7. Provide incentives for participants.</td>
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<tr>
<th>C. Building and Utilizing an Effective Research Team</th>
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<tr>
<td>☐ 8. Hire the ‘right’ people to recruit and maintain the cohort.</td>
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<tr>
<td>☐ 9. Create a work environment that best utilizes the skills of very competent staff.</td>
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</table>
A Checklist of 22 Key Factors for Achieving High Retention
(N.B. all are important and all are inter-dependent, with importance varying over time)

D. Providing Staff with the Retention Tools and Tactics Needed to do the Job
- 13. Establish and maintain a permanent office in the region.
- 14. Develop and always use an easily-remembered project logo.
- 15. Develop and use a comprehensive and versatile ‘Contact Database’.
- 16. Develop and have available a full range of retention tools.
- 17. Constantly monitor whether various technologies are working as expected.
- 18. Use staff time efficiently.
- 19. Be attentive to the format, content and timing of assessment invitations/reminders.
- 20. Maintain contact between assessments.
- 21. Secure adequate project funding.

E. Flexibility: Responding Quickly and Effectively to Challenges
- 22. Meet challenges with flexibility and innovation.

Part III: Specific Practical Tools then moves to a more specific operational level. In retrospect it is very clear that success at conducting a large scale longitudinal study is not due to a few critical things, but a thousand little things and the ongoing ability to quickly identify and rectify the many issues that continually arise. Part III therefore also identifies and provides specific examples and templates for each of a wide range of more specific types of practical tools utilized by the front line QLS staff to achieve their very challenging retention rate objectives. Separate Chapters are devoted to specific tools within each of the categories shown in the following Figure.

Specific Types of Practical Tools needed for High Retention Rates
(N.B. the numbering corresponds to Chapter headings in Part III)

- 2. Organizational Tools for linking the Front-Line Office with the rest of the Project Team
- 3. Staffing the Project (from the staffing model to recruitment strategies)
- 4. Setting Up the Project Office (from location to service tone)
- 5. Cohort Recruitment (from setting parameters to messaging)
- 6. Service Philosophy (general approach to dealing with troublesome interactions)
- 7. Survey Designed to Retain Survey Interest
- 8. Survey Completion Options
- 9. Assessment Planning (from building on lessons learned to setting timelines)
- 11. Planning and Monitoring Tools
Abstract and Key Findings

Specific Types of Practical Tools needed for High Retention Rates
(N.B. the numbering corresponds to Chapter headings in Part III)

- 12. Cohort Tracking and Management (systems, components and uses)
- 13. Cohort Payments (from amount to tracking payment)
- 14. Motivating Staff (common and individualized motivators)
- 15. Motivating Cohort/ Participants (financial and non-financial)
- 16. Effective Internal and External Communications Tools and Practices (from mass media to individualized specific notices—with specific examples and templates presented in Appendix A)
- 17. Due Diligence and Safeguarding the Integrity of the Research
- 18. Financial and Budgeting (from setting to dynamic management, to auditing expenditures)

Part IV: Tactics to Put the Strategies and Tools into Practice. Parts II and III make it clear that success at conducting a large-scale longitudinal study requires, not just a few, but rather a large number of, important strategies and tools. However, to make those strategies and tools more than words on paper and unused tools in a toolbox, the project also needed specific practical tactics for effectively and efficiently implementing them—as well as to monitor and quickly make improvements to them as the inevitable challenges arise.

Part IV therefore concludes the manual with a detailed practical demonstration of the specific tactics used by the Quinte office project staff to successfully translate the broad range of general strategies and approaches, specific tools, personnel resources, and management practices described throughout this manual into the 94% retention rate. ¹

¹ This discussion draws heavily from slides prepared by the Belleville front-line staff for presentation at the 20th Annual NAGS (National Association for Gambling Studies) conference in Gold Coast Australia, December 1 – 3rd, 2010.
### TABLE OF CONTENTS

**PRINCIPAL INVESTIGATORS’ INTRODUCTION**

**ABSTRACT**

**PART I: INTRODUCTION**

1. Purpose .......................................................................................................................... 10
2. Objectives ...................................................................................................................... 11
3. Potential Audiences for whom the Document May Be of Interest ......................... 11
4. Anticipated Use of this Document ............................................................................... 11
5. Vision for the Future .................................................................................................... 12
6. Style of this Manual ..................................................................................................... 12

**PART II: STRATEGIC DESIGN: SETTING THE OVERALL DIRECTION**

1. Knowing Your Customers/Participants ...................................................................... 13
   1.1 Importance of an Environmental Scan ................................................................. 13
   1.2 An Important Specific Project Experience ......................................................... 14
2. Key Design Criteria .................................................................................................... 15
3. Strategic Principles and Approaches: Factors Responsible for High Retention .... 17

**PART III: SPECIFIC PRACTICAL “TOOLS”**

1. Project Office and Front-line Team in Context ......................................................... 28
   1.1 Staff and Support Resources within the Project Team ...................................... 28
   1.2 Geography ............................................................................................................. 29
   1.3 Two Decision-Making Structures ...................................................................... 30
2. Staffing the Project ..................................................................................................... 34
   2.1 Choose a Staffing Model ....................................................................................... 34
   2.2 Recruiting the “Right Type” of Staff ................................................................. 35
   2.3 Recruitment Processes ......................................................................................... 37
3. Setting Up the Project Office - Important Considerations ................................. 39
   3.1 Temporary or Permanent .................................................................................... 39
   3.2 Location ............................................................................................................... 40
   3.3 Project Logo ......................................................................................................... 41
   3.4 Buy Locally-Owned ............................................................................................ 42
   3.5 Atmosphere and Service Tone ......................................................................... 42
4. Cohort Recruitment .................................................................................................... 44
   4.1 Methodology for Cohort Recruitment ............................................................... 44
   4.2 Messages Used During Cohort Recruitment ...................................................... 44
   4.3 Orientation and Monitoring of a 3rd Party Cohort Recruitment Service ......... 46
Table of Contents

Chapter 5: Project Office Service Philosophy and Approach ........................................... 47
  5.1 Project Office Service Philosophy ........................................................................ 47
  5.2 Service Approach ................................................................................................. 47
  5.3 Participant Needs - Before and/or Following the Assessment Questionnaire .......... 48
  5.4 Communications of Any Troublesome Interactions with Project Participants .......... 49

Chapter 6: Longitudinal Survey: More than Just a set of Questions .................................. 51
  6.1 Survey Design Impact on Retention ...................................................................... 51
  6.2 Development, Familiarity and Testing ................................................................... 52
  6.3 Key Structural Characteristics of the QLS Survey Questionnaire ......................... 53
  6.4 Introducing Variety to Retain Survey Interest ...................................................... 56
  6.5 Designing for Diversity in Participant Technology and Expertise ......................... 57
  6.6 The importance of Continuous Testing and Validation ......................................... 59
  6.7 Our Help Screen ................................................................................................. 62

Chapter 7: Longitudinal Survey Completion Options ....................................................... 64
  7.1 Why Include Options for Survey Completion ...................................................... 64
  7.2 Track the Use of Each Longitudinal Survey Option ............................................ 65

Chapter 8: Assessment Period Planning ........................................................................ 66
  8.1 Introduction .......................................................................................................... 66
  8.2 New Priorities Resulting from the Previous Assessment ....................................... 66
  8.3 An Operational Model for Planning the Assessment Period ............................... 67
  8.4 Tentative Timelines and Targeted Tasks ............................................................. 69
  8.5 Track Everything! And Adjust Tasks with Confidence ........................................ 73

Chapter 9: Scheduling Testing and Validation Processes ............................................... 74
  9.1 Introduction .......................................................................................................... 74
  9.2 Scheduling Testing and Validation Activities ...................................................... 74
  9.3 Survey/Systems Validation and Testing Protocols .............................................. 76

Chapter 10: Planning and Monitoring Tools: (Keeping Track of—and Responding to—Things) 82
  10.1 Introduction ........................................................................................................ 82
  10.2 Manageable Size Considerations ...................................................................... 83
  10.3 Track Everything ............................................................................................... 83
    10.3.1 What to look for—and what to adjust to? ...................................................... 83
    10.3.2 What Information to Collect? .................................................................... 85
    10.3.3 How Can the Information be Tracked? ....................................................... 86
  10.4 Analyze Regularly ............................................................................................. 90
  10.5 Proactive Interventions ...................................................................................... 91
  10.6 Linked Monitoring Tools .................................................................................. 91

Chapter 11: Building Your Cohort Tracking/Management ............................................. 93
  11.1 Importance of a Customizable Contact Database ............................................. 93
  11.2 Overview of the Contact Database .................................................................. 93
    11.2.1 Key Technical Features ........................................................................... 93
  11.3 Access to Contact Database Information .......................................................... 94
  11.4 Design Lessons .................................................................................................. 94
    11.4.1 Main Lesson: ............................................................................................ 94
    11.4.2 Other Key Lessons: .................................................................................. 94
Table of Contents

11.5 Contact Database Details (and Examples) ................................................................. 95
  11.5.1 Main Sections ........................................................................................................ 95
  11.5.2 Contact Status Flags ............................................................................................ 95
  11.5.3 Common Reports .................................................................................................. 96
  11.5.4 Current Assessment Status .................................................................................. 99
  11.5.5 Current Status ....................................................................................................... 100
  11.5.6 Appointment Information .................................................................................... 101
  11.5.7 Paper Survey ........................................................................................................ 103
  11.5.8 Technical Reports ................................................................................................ 103
    a. Financial Report ........................................................................................................ 103
    b. Website Information ................................................................................................. 105
    c. Contact Information Update .................................................................................... 106
    d. Web Archived Contact Information ........................................................................ 108
    e. Mass Communication History .................................................................................. 111
    f. Participants Password Recovery ............................................................................... 111

Chapter 12: Cohort Payments ............................................................................................ 116
  12.1 Why Provide Compensation? .................................................................................. 116
  12.2 Compensation Payment Structure .......................................................................... 116
  12.3 Compensation Processes ........................................................................................ 117
  12.4 Signing Authority/Signature on Compensation Cheques ........................................ 118
  12.5 Lost and/or Stale-dated Compensation Payments .................................................. 119
  12.6 Tracking Compensation Payment Cheques ........................................................... 120
  12.7 Storage of Cheque Stock and the Cheque Issuance Software .............................. 120

Chapter 13: Staff Motivations ............................................................................................ 121
  13.1 Introduction to Staff Motivation .............................................................................. 121
  13.2 Determining Unique Motivators ............................................................................ 121
  13.3 The Good News and the Bad News ....................................................................... 122

Chapter 14: Cohort/Participant Motivations ................................................................... 126
  14.1 Introduction to Participant Motivations .................................................................. 126
  14.2 Impacts on the Motivations of Participants ........................................................... 127
  14.3 The Alignment of Project Communications .......................................................... 128

Chapter 15: Establishing Effective Communications ..................................................... 130
  15.1 Introduction ............................................................................................................. 130
  15.2 Project Participants ................................................................................................. 130
  15.3 The QLS Project Office ........................................................................................... 132
  15.4 Project Co-Workers ............................................................................................... 133
  15.5 Participant-to-Participant Communication ............................................................. 135
  15.6 Co-Domiciled Persons and Alternative Contacts .................................................. 135
  15.7 Community Contacts and Partners ...................................................................... 135
  15.8 Project Funders ...................................................................................................... 136

Chapter 16: Due Diligence for Retention Validation ......................................................... 137
  16.1 Introduction ............................................................................................................. 137
  16.2 Objectives .............................................................................................................. 137
  16.3 Evolution of Due Diligence Practices ..................................................................... 137
  16.4 Description of Due Diligence Activities to Ensure Retention Validation ............... 138
Table of Contents

3. Personalized (individual Participant/Event or Status-Specific) Communications........... 217
   1) Notice to Participants (Invitation to Complete)................................................................. 218
   2) Reminder Notice to Participants Who Have Not Completed.............................................. 221
   3) Reminder Postcard Notice .................................................................................................... 222
   4) Personalized Note cards to Participants Who Have Not Completed .................................. 224
   5) Specialized Contact with Participants Who Have Not Completed ..................................... 225
   6) Mailing Paper Version of Assessment ............................................................................... 227
   7) Payment Notices .................................................................................................................. 231
   8) Life Events Journal ............................................................................................................. 232
   9) Personalized Notice re. Assessment and Project Wrap-up and Thank You ...................... 236
PART I: INTRODUCTION

Chapter 1: PURPOSE OF THIS DOCUMENT, POTENTIAL AUDIENCES AND USE

1.1 Purpose

The QLS (formerly QERI) Project obtained a 93.92% retention rate at the end of the 5 years of its longitudinal research with a cohort of 4,121 participants. This document details the key special QLS Project processes and approaches that lead to these significant retention rates.

The QLS Project, with its 4,121 person cohort that lived throughout a 70 km radius circle in Eastern Ontario, Canada, attained a 96.20% retention rate in its 2nd assessment period (2007-2008), a 95.64% retention rate in its 3rd assessment period (2008-2009), a 94.19% retention rate in its 4th assessment period (2009-2010) and 93.92% in its 5th (final) assessment period (2010-2011). (See the main report on further details of how these retention rates were calculated.)

2 PI Note: The project was originally named the “QERI” (Quinte Exhibition and Raceway Impact) project to reflect the fact that one of the initial goals of the project was to assess the social and economic impacts of a new gambling venue (Quinte Exhibition and Raceway) that was to be built in the centre of the study region. However, when the venue did not get built the study’s exclusive focus became the natural course and etiology of gambling and problem gambling and the project name was changed to the Quinte Longitudinal Study (QLS). In the current document, the term “QERI” may therefore be found in describing earlier project events and materials.
1.2 Objectives

- To delineate the QLS processes and approaches that lead to a 94% retention.
- To share the document widely and invite feedback and new ideas for cohort retention consideration.

1.3 Potential Audiences for whom the Document May Be of Interest

The document has been prepared anticipating interest (in all or parts of the document) by the following audiences:

- Principal Investigators – in designing Longitudinal Research, and providing strategic orientation to newly-recruited front-line project staff
- Front line staff, especially Site Managers-- involved in the detailed operational design and day-to-day management and operation of Longitudinal Research Projects
- All project team members—for finding ways to improve Retention Rates
- Funders of Longitudinal Research Studies—for assessing proposed designs
- Educators/trainers—for classes and workshops in retention issues related to Longitudinal Research and other types of Surveys.

1.4 Anticipated Use of this Document

This is not a stand-alone “how-to” manual. To document every aspect of the QLS processes seemed daunting as well as unnecessary and excessive. Nonetheless, should interest be expressed to have additional documentation on particular chapters, sections or not-included aspects, the authors would consider future development.

This document is designed as a reference or companion piece to direct dialogue or discussion about some or all chapters and sub-sections. The authors also envision providing workshops or seminars about the document, in order to further animate the processes and the QLS experience. For such workshops or seminars, training slides and summary bullets (e.g., Power Point) could also be provided. Phone calls of inquiry and clarification are welcomed and through such dialogue the document and its utility can be tweaked and refined—in keeping with the dynamic processes that were the underpinning of the QLS approach.

Longitudinal research requires much simultaneous activity. Each study will have its unique circumstances that will necessitate sequencing and timing. Thus, this document addresses key
decision points and factors that were considered, including the resulting activities or steps taken. Wherever possible, the document captures lessons learned—particularly adjustments introduced as the project moved through its five assessment periods—as well as those identified for future process refinement considerations.

There are many generally understood practices and processes within a longitudinal study. This document does not focus on those, but rather addresses the dynamic aspects of the study processes and procedures. Through rigorous data collection, analysis and monitoring of the QLS Project performance, iterative communications and frequent tweaking, the project processes remained dynamic.

1.5 Vision for the Future

The authors encourage the use of these documented processes (some or all, as appropriate), in order to determine if 94% retention can be consistently replicated and to raise the bar for retention rate expectations—for researchers, project teams and funders.

1.6 Style of this Manual

Given the purpose and audiences of the document, this manual has a format and style different from many other types of research reports.

In particular, throughout the project, we found that it was more efficient and effective to communicate information through lists, charts or point form—as opposed to complete sentences in paragraph form. This approach is therefore also used throughout this manual.

The manual also provides examples of actual tools, charts, templates, communications, etc. that were used during the over six-year course of the project. The dates, statements and data shown in different materials presented here may therefore not be current as of today, but are current at the specific time the material was prepared.\(^3\)

The document is also intended to be useful to readers who would consult the document many times, but would want to address only a particular section or topic at each consultation. To make sure particular topics are addressed within the required context, a certain amount of repetition is, therefore, intentional.

\(^3\) The timing of the five (5) survey assessment periods is noted in section 1.2 above (and in detail in the main report). Cohort recruitment and the setting up of the Quinte project office began in late spring and early summer of 2006, prior to the first (baseline) assessment in 2006-2007. Operational wrap-up by the Quinte Office staff after the fifth survey continued through the spring of 2012.
Finally, it should also be noted that this manual is written primarily by, and from the perspective of, the Quinte front-line members of the QLS project team.  

PART II: STRATEGIC DESIGN: SETTING THE OVERALL DIRECTION

Chapter 1: Knowing Your Customers/Participants

1.1 Importance of an Environmental Scan

A longitudinal research project should not commence any contacts with people, agencies or businesses within the study’s catchment area until an environmental scan has been completed and the project is aware of the demographics of the area. In this way, mistakes—especially communication mistakes—that could have significant impacts on retention rates will be minimized.

In particular it is important that the review of the demographics be completed before:

- the contract for participant recruitment is tendered
- the participant recruitment begins
- the recruitment script is finalized
- the recruitment personnel training is designed and/or delivered

\(^4\) However, at points at which the principal investigators feel that additional comments might be useful to other researchers, such comments are added in a footnote beginning with the phrase “PI (Principal Investigators’) Note”.

QLS Manual: Achieving a 94% Retention Rate: page 13
Part II: Strategic Design

Principles

- the text of the recruitment letter to participants is confirmed and
- the project office staffing is finalized.

Plain language in general communications, formal questionnaires and interviews is critical, but what may seem to be “plain” and appropriate in one environment (e.g., that of academic researchers or people in one part of a country) may not be plain and appropriate in another environment. An intensive and extensive knowledge of the demographic, cultural, history and stylistic nature of the geographic area(s) in which project participants reside is critical to tailoring communications effectively. Communications are fragile, and early mistakes in a project can directly affect participant satisfaction/interest/happiness and thereby retention.

Local political boundary sensitivities or historical situations that have never been forgotten are examples which caused problematic situations for our project (e.g. the use of the term “Quinte”—which caused us to change our project name to the initial acronym, “QERI”).

Including a step early in a project to explicitly draw on the knowledge of local staff, who are more aware of the local area, can avoid local sensitivities and troublesome situations.

1.2 An Important Specific Project Experience

The catchment area of the QLS Project was a 70-kilometre radius circle around the site of a proposed new racetrack-with-slots in the City of Belleville, Ontario, Canada. The catchment circle includes portions of four separate county governments, three separate health service delivery jurisdictions, six separate education service delivery authorities, one Canadian Military Base, one First Nation Community territory, eight urban centres and a broadly distributed rural population of over 220,000 people. Less than ten years ago, the provincial government legislated the amalgamation of many towns and cities (to form regions with a minimum of 100,000 residents), and the project catchment area included segments of those jurisdictions. As well, the catchment area has a high proportion of senior citizens (young people move away as there is little activity to sustain their interest), limited ethnic mix, and a high proportion of the population with low income levels. This backdrop is provided as it guided our communications (in-person, phone and written) and our interactions with our participants and our community.

This project stumbled at the outset, as the separate call-centre firm hired to recruit our over 4,000 participants was located in a large urban, multi-cultural centre, almost 200 kilometres away from our study area. Most of the call agents at the recruitment area had significant ethnic accents and the households that they were calling were unaccustomed to the accents and often misunderstood the call or its significance. When complaints were received by the project, the local Belleville/Quinte project staff—who were more familiar with the area—identified the sources of the problems and three remedial strategies were instituted. First, an ongoing dialogue was started directly between the manager of the Belleville project office and the call centre site manager. Second, a visit of the Belleville project staff to the call centre was undertaken to explain the local geography and culture. Third, a policy was implemented to always call the Belleville office if questions arose. All three strategies helped greatly in providing the required further
training, orientation and ongoing assistance to the recruitment call centre staff in facilitating understanding and a positive call experience.

This improved the situation immensely, but underscores the importance of addressing these matters before beginning any community contacts/communications.

Chapter 2: Key Design Criteria

Prior to negotiating a project office location, recruiting front-line personnel, or purchasing project technologies, it is important to consider the project approaches toward each of the following questions:

- how do you wish the project to be branded?
- what project image do you want to showcase to your local/regional communities?
- what level of process documentation do you expect at the project conclusion?
- will the project needs be best met with a high-tech or a low technology approach?
- what level of risk can the project accept?
- what service approach will be provided to the project participants, staff and the community stakeholders (if relevant)?

Dialogue and debate about these ideas is critical in order to determine a list of Guiding Principles that will serve as the underpinning of the project.

In the QLS project, we found it helpful, first, to identify eight specific project Design Principles that would guide the project, and, second, to use a 10-point continuum to benchmark those principles.

The eight Design Principles were:

**Staff Safety** (e.g., location in the community, lighting, proximity to parking, isolation, alarm system, hours of operation, staff scheduling)

**Participant Safety** (e.g., emergency exits and orientation, location in the community, lighting, proximity to parking, hours of operation, staff training)

**Data Security** (e.g., project vulnerability if participant and/or project data/information is accessed, local or distant data storage, strategies for data back-up and storage of backed up discs or files, storage of paper-based records, waste disposal of paper-based info)

**Due Diligence** (e.g., vigilance to minimize contamination of longitudinal data, to maximize stewardship of project funds, to maximize confidence in the project processes and data integrity)
Part II: Strategic Design

2: Key Design Principles

**Friendliness** (e.g., style of operations between staff and participants, between project and community, between project and its experts [funding and research science], openness/hierarchical rigor, laissez-faire/professional, reception—physical, atmosphere and attitude, style of communication [for branding] and for content)

**Flexibility** (e.g., rigor in the chain of command and operations—go with the flow, yet ever mindful of retention objectives and project long-term goals, or procedure-driven data collection to support ongoing analysis and change of direction)

**Technologies** (e.g., paper-based, high tech, forward-thinking computerized technologies to maximize staff resources but moderated for cost containment and staff confidence, or mixed mode)

**Accessibility** (e.g., inclusive or exclusive approach to participants; if inclusive then strategies to accommodate special needs ranging from visible ones such as deaf, blind, mobility, literacy, mental health, to those that are much less visible and may link to self-confidence/fear)

Setting these benchmarks early provides guidance for the type and location of a project office, the nature of staff to recruit, the equipment to purchase, the information systems to develop, and the management and delegations of authority processes.

**QLS Project Guiding Principles** (and benchmarked scores (1 to 10)):

- Staff Safety (10)
- Participant Safety (10)
- Data Security (10)
- Friendly Professionalism – “we care” messaging (10)
- Accessibility (8)
- Flexibility wherever and whenever possible, without compromising science (7)
- Due Diligence (7)
- Technologies: Paper-based systems until confidence, then multi-product computerization, most built or customized by project—must collect and measure everything to promote flexibility and adjustment (7)
Chapter 3: Strategic Principles and Approaches: Factors Responsible for High Retention

The 94% retention rate achieved in this study is exceptionally high for large scale longitudinal research. This result has been achieved by staying on top of and applying—in a relentlessly thorough manner—not a few but many different principles, strategies and specific tactics. All were important, and the effectiveness of each was enhanced by, and often dependent on, the effectiveness of others. Further, their degree of importance varied with the stage in the project, within each of the data collection phases, and the individual staff member’s perspective.

The most important ones are described below under the following five headings: 5

A. Designing an Effective Longitudinal Questionnaire
   - Having an Efficient and Well-Tested Questionnaire. Both of the Principal Investigators and all staff were administered the questionnaire prior to each assessment wave (the Quinte office staff, repeatedly and exhaustively) to ensure the programming was robust, the meaning of each question was clear, the logical flow of the questions was correct, and there were no unnecessary redundancies in the questions. Considerable effort was also made to make the questionnaire interesting and relevant to participants. In fact, a significant number of participants indicated that they enjoyed or felt rewarded personally by filling it in annually.

   - Conducting the Assessment at the Exact Same Time of Year, Each Year. Although our annual assessment periods ran from November 1 to March 31, all participants were notified about and by far the majority completed the assessment in November and December. This facilitated retention because participants learned to expect contact and survey completion in this circumscribed period. There is also scientific value of survey completion in a narrow temporal window, as it a) decreases seasonal influences in the observed changes from year to year, and b) it better ensures that the inter-assessment

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5 PI Note: This section represents a consolidation of contributions from both the PI’s and the Quinte office staff. An analogous section can also be found in the main project report.
B. Focus on Encouraging and Facilitating Questionnaire Completion by Participants

- **Maintaining a Customer Service Focus.** The specific needs and characteristics of our participants were the focus and driving force behind all our data collection planning efforts, our design of specific tools and the manner in which the plans were carried out and the tools used on a day-to-day basis. In particular, we believed participants when they made a commitment to participate in the study and said that they wished to continue to remain involved in the project. It was therefore up to us to make certain: that they knew the survey was ready; that they had the tools and information needed to get connected to the survey; that we were available and anxious to assist them if they encountered a difficulty; and that they were paid in a timely and appreciative way for their participation.

The customer service role of the Quinte Office staff was also reinforced to participants by defining for them a clear boundary between the roles of local Quinte Office staff (whose “customer service” role was to assist them in providing data) and the “other” project staff (whose “research” role was to analyze the data). These roles were emphasized to participants through tactics such as using one colour (page or screen) in the questionnaire for questions dealing with simple contact information (which participants knew Quinte staff needed to keep in touch with them) and another colour for questions whose answers local Quinte staff would be prevented from seeing (but which could not be associated with specific participants by non-office project staff). It is felt that this “Virtual Fire Wall” that we created within the project staff significantly improved the credibility and ability of the Quinte staff to provide a confidential support role to participants, with the concomitant increase in retention rates.

In many ways this “Virtual Fire Wall” also allowed the Belleville staff to break down the “them versus us” mentality and to instead develop a “team or joint approach” with participants—with project staff assisting and working with participants to achieve their common goal of completing the surveys.

Throughout, it was important to remember that the experience of each completed assessment shaped the participant’s motivation for the next one.

- **Being Responsive to the Individual Characteristics of Each and Every Participant.** It is important to recognize that participants are unique individuals with often differing attitudes, interests, motivations, resources and capabilities. We therefore designed our interactions

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6 Gambling tends to increase to some extent during the summer months and Christmas. Thus, because our analysis focuses on changes from year to year, it would be disadvantageous if assessments occurred in December one year, February the next year, May the next year, and perhaps December again the following year. Also, an assessment period that is spread over several months will result in widely different inter-assessment intervals between people within each assessment and both between people and for specific individuals from one assessment to the next over the course of the study (i.e., not the 12 month period that is desired).
Part II: Strategic Design

3: Strategic Principles and Approaches

(both through the formal survey and through direct regular and \textit{ad hoc} personal communications) to either cater to a participant’s particular characteristics or to allow for variations in those characteristics.

Keeping and using a “contact database” (see later) that documented the characteristics of each participant and their past interactions with the project was especially important in combating those situations in which participants were finding the project to be emotionally draining, somewhat boring, and time consuming—despite how interesting and valuable it was to the researchers. Positive interactions with staff who are professional, enthusiastic, supportive and caring are always important. The impact of those interactions is enhanced considerably if they reflect a knowledge of and concern for the specific characteristics and experience of the particular participant. For example, staff often recorded and showed that they remembered events in the participants’ lives (e.g., sicknesses, children’s milestones) that were not necessarily recorded by participants in the longitudinal survey.

- \textit{Providing Different Options for Survey Completion.} Consistent with the variability in participant characteristics—and how those characteristics might change over time—flexible data collection methods improve retention (Prinz \textit{et al.}, 2001; Salyer \textit{et al.}, 1998). Thus, all participants had the option of doing their self-administered survey electronically (i.e., online via their home computer, one of our Belleville office computers, or some other computer), or in a paper version mailed to them (this latter option being utilized by 1.2% - 1.9%, depending on the survey year). This flexibility in assessment format and location also improved the representativeness of our sample, many of whom would not have participated if more limited options had been available.

- \textit{Having a Website.} The secure \url{www.qeri.ca} website, as well as being the vehicle through which many participants logged on to do their survey, also provided reassurance of legitimacy; a means of communicating to the cohort and for cohort participants to communicate to us; and a transparent presentation of the purpose and status of the project for the funder and the general public.

- \textit{Providing Incentives for Participants.} Financial incentives to participants are known to improve retention (Collins \textit{et al.}, 2000; Prinz \textit{et al.}, 2001; Rudy \textit{et al.}, 1994). Thus, for the five assessments conducted, participants were paid $50 for Assessment 1, $30 for Assessment 2, $30 for Assessment 3, and $35 for each of Assessments 4 and 5.

C. Building and Utilizing an Effective Research Team

- \textit{Hiring The ‘Right’ People to Recruit and Maintain the Cohort.} Research indicates that the degree to which participants are personally engaged with the people conducting the study is probably the most important factor in retention (Boots-Miller \textit{et al.}, 1998; Cotter \textit{et al.}, 2002; Salyer \textit{et al.}, 1998). This has been our experience as well.
Part II: Strategic Design  

3: Strategic Principles and Approaches

It is typical for longitudinal studies to hire a large number of part-time employees who are often university students. However, a) hiring a large number of part-time employees decreases the likelihood of the cohort developing personal engagement with the project; b) the cohort may have greater difficulty relating to university students because of differences in age and educational level; c) students may not be from the local area; and d) students are less likely to stay for the duration of the study.

In contrast,

a) the QLS front-line team throughout the five years of data collection was composed of only four staff, one of whom worked full-time, two who worked part-time throughout the year but nearly full-time each year during each four-month questionnaire period, and one who was available as a back-up at all times;

b) all staff had sound academic qualifications, but were all also mature individuals (three of the four had adult children and all had long work careers) who therefore were comfortable and skilled (through a lifetime of personal and work experience in a variety of practical work experiences in government, health care and the private sector) in dealing with persons of all ages—and in working productively as a team in a quite challenging and dynamic work environment;

c) all staff were also long-time residents of the Quinte region and were able to enhance communications with participants with their common knowledge of and interest in the history of and current developments in the region. Further, since they would continue to live in the region after the study, they had a strong incentive to have the project seen as a positive experience for the people with whom they would continue to have contact in the future;

d) all staff had an interest in learning about the subject matter (gambling) and research related to the study—and a desire to apply their particular skills (e.g., statistics, nursing, project management, business, community development) to improve the planning and execution of the project; and

e) most importantly, all staff members were individuals who clearly demonstrated a history and ability to see a job done successfully to conclusion. It had been our expectation that they would stay for the duration of the project—which they did.

- Creating a Work Environment that Best Utilizes the Skills of Very Competent Staff. Our front-line staff brought to the QLS a variety of ideas and approaches they had found useful in their previous work. They also all brought a strong sense of commitment to and pride in doing their job well. However, a hierarchical, authoritarian and rigid organizational structure often employed in other large scale research projects would not have allowed the project to benefit as much as the QLS did from these resources. In particular, we developed processes to encourage and institutionalize regular and ad hoc multi-way communications among all levels and areas within the full project team (e.g., weekly teleconferences attended by all team members involved in data collection and system development, and open-line communications on administrative matters between the manager of the Quinte office and a designated principal in charge of that office). Because of these ongoing process-monitoring tools and communications, we identified and responded to challenges early. As well—although individual responsibilities and authorities were always clearly defined—as the skill and success
Part II: Strategic Design

3: Strategic Principles and Approaches

of the Quinte Office staff became more evident, they were given increasing authority and decision-making power concerning improvements to procedures and strategies. The result ultimately was a significant improvement to cohort retention. As well, the collective skills, personality characteristics, talent and passion for excellence by the front-line personnel proved to be energizing and creative.

- **Ensuring Specific Skills for Specific Positions.**

In addition to the above general skills and experiences, it was also important that:

a. Senior project team members with considerable research skills and experience were readily available to advise Quinte office and other staff regarding staff and participant concerns. Being able to deal internally with questions and challenges quickly and decisively was instrumental in dealing with issues before they had significant impacts on the project.

b. Senior project staff with strong strategic planning, budgeting and financial expertise—and the required flexibility and authority—were necessary to design administrative and control systems capable of ensuring that all team members, and the manager of the Quinte office in particular, had the information and other project resources necessary to stay on focus despite the inevitable challenges that would arise. It was also important that the planning tools necessary to support high-level decisions—for instance, a sophisticated budgeting/project planning/resource estimation simulation model—were custom-built and frequently utilized by senior staff.

c. The Quinte Site Manager was an experienced project/operations manager with exceptional people management skills who also came from and lived within the catchment area.

d. A Quinte office Research Assistant had strong informational technology skills which were essential for developing important staff/participant contact-management tools for enhancing retention, as well as for maintaining all office computer systems and links of local systems to the central computers in Lethbridge.

e. The University of Lethbridge technology support personnel were talented and interested in this longitudinal study, and worked with local Quinte staff and other members of the research team to assist in building the centralized technical supports required to keep track of our cohort of 4121 participants.

- **Providing Monetary and Non-Monetary Incentives for Staff.** A bonus of $3,000 was paid to the Quinte Office Manager and one of $4,000 was paid to the Quinte Research Assistants (collectively) if they attained 95% retention from the previous assessment period. Given the retention rates achieved by previous longitudinal studies this 95% target was meant to provide a clear and challenging goal to work toward. In point of fact—although the achievement of the 95% provided a specific opportunity each year for the Principal Investigators to recognize formally the (continuing) extraordinary achievements of the front-line staff—there was some feeling among those staff that the “low 95%” target was actually a disincentive to achieving the levels that were possible to achieve. (Staff exceeded the 95% rate each year, sometimes achieving a year-over-year rate of over 97%.)
In fact, in the Quinte office we were fortunate to have in the chosen staff a group for whom non-monetary rewards (e.g., being recognized for successfully completing a difficult task) were far more important than special monetary rewards. For instance, provision of the authority and tools needed to do the job, knowing themselves that they had done an excellent job, and recognition from other project team members for their contribution to the project seemed to be the strongest motivators. In particular, as the skill and success of the Quinte Office Team became more evident, it was important to the success of the project that they were given increasing authority and decision-making power concerning procedures and strategies for cohort retention.

- **Maintaining a Positive Attitude.** Although the Quinte office manager utilized an array of modern management techniques to maintain a very productive local work environment, one strategy is worth noting. Throughout the project it was always felt there was a solution to any difficulty encountered. For instance, all strategies and tools were designed on the assumption that 100% of the participants would complete the survey. Any triggers for remedial action were therefore “tripped” when we were not progressing toward that goal. In fact, there was even some concern among staff—at least in the very last stages of each round—that the staff bonus based on a retention rate of only 95% might inhibit efforts in achieving an even higher retention rate.  

**D. Providing Staff with the Retention Tools Needed to do the Job**

- **Having a Permanent Office in the Region.** Having a centrally-situated storefront office in the community significantly increased the public profile of the project. It also allowed people to drop in at any time during the year and to indicate any change in their contact information. For the purposes of cultivating goodwill in the community, the local office also purchased all office supplies locally (furniture, food, computers, etc.). Finally, without a permanent office to meet and work in, the Quinte region staff could not have had the detailed and extensive ongoing internal communications necessary to develop improved protocols and tools and to provide the myriad survey support services in an efficient and consistent manner.

- **Having an Easily Remembered Project Logo.** The QERI logo was used on exterior office signage; website; and all outbound communications (including cheques) to participants and other stakeholders in the community. This “branding” allowed participants to easily identify project mailings (and to distinguish them from the large volume of junk mail/email they receive).

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7 **PI Note:** The overall 94% retention rate quoted elsewhere for the project was cumulative over all five assessments. The 95% used for the yearly staff retention bonus referred to the number who responded to a particular year’s assessment expressed as a percentage of the number responding to the previous year’s assessment. Thus, staff could have earned each of their yearly bonuses while achieving a much lower overall cumulative retention rate of “only” 77% (.95^5) by the end of the study.
Part II: Strategic Design

3: Strategic Principles and Approaches

- **Developing and Using a Comprehensive and Versatile ‘Contact Database’.** One of the manifestations of giving staff authority to devise improved techniques for retention was the development of a comprehensive and versatile database of information pertinent to each participant. Having multiple means of contacting and tracking participants improves retention (Cotter et al., 2002; Morrison et al., 1997). Consequently, we obtained each participant’s home, cell, and work phone numbers; home and work addresses; home and work emails; vacation home address and phone number; ID on any social networking sites (e.g., Facebook, Flickr); and complete contact details for two people the person identified as being most likely to know how to contact him/her.

Over the course of the project this Contact Database evolved to include many of the additional tools needed to maintain the high retention rate. It eventually included an appointment scheduler; registered the time and content of all phone calls made, emails sent, and mailed invitations; registered whether any email bounce-backs or non-deliverable mail were received; the participant’s preferred method of contact; times the participant logged in and logged off of the survey; when their cheque was sent, who issued it; whether the last assessment was completed in the QLS office or some other place (e.g., home, library); identification of any special assessment needs (i.e., wheelchair, visual problems, etc.); whether technical difficulties were previously encountered and the likely source of the problem (e.g., Internet browser, ISP); and a ‘Notes’ field for the Research Assistants to document any other relevant issues.

The Contact Database also had a very sophisticated set of “progress indicators” that calculated retention and completion rates as a function of several different variables (e.g., whether participants received either an email or mailed invitation first, the day of the week the invitation was sent, the day of the week the invitation was likely received, the number of reminder phone calls made, length of time it took the person to complete previous surveys, etc.). Providing the Quinte Office staff with these data—as well as the tools to analyze the data, and the authority to undertake and act on the ongoing analysis of the data—enabled them to continually fine-tune and optimize our re-recruitment approach and on the basis of mathematical models that accurately predicted completion rates and retention.

- **Having Available a Full Range of Retention Tools.** In addition to the Contact Database, staff in the Quinte Office developed a number of specific tools to schedule project resources and tasks and monitor results. Some of these tools used manual techniques (e.g., paper files and binders of materials), while others used fairly sophisticated computer-assisted techniques (e.g., data-base query tools, and internet-based document collaboration and progress reporting tools). In general, having a range of tools monitoring activities at the local level and providing results to staff at the local level, allowed us to carefully watch and measure everything we were doing (at the front line).

- **Constantly Monitoring Whether Various Technologies Were Working as Expected.** As noted above, not only did success depend on a large number of strategies and tactics—a “lot of big and little things”—it was equally important that those techniques were applied thoroughly and relentlessly throughout the project. For instance, mass e-mailings required ongoing

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8 The QLS project maintained a presence on both of these sites.
attention and working with the Internet Service Provider to avoid spam filter triggers and capacity limitations. Every mass or batch email communication sent out (e.g., a notice that the survey was on line and available for completion) was an automatic trigger for a check soon after that the likely response was starting to occur in appropriate volumes (e.g., that completions were happening at the expected rate). Similarly, whenever mailings were sent out by the postal service, analogous checks were made to ensure that inappropriate delays had not happened in postal service sorting or distribution activities.

- **Using Staff Time Efficiently.** The Contact Database allowed us to use an evidence-based approach to developing custom-tailored and more efficient strategies for further encouragements to survey completion. For instance, analysis of data in the contact database identified that roughly two-thirds of participants completed their assessment with one invitation, and one-third required multiple reminders. Within this latter group was a portion of people who were “repeat procrastinators”. Significant time and monetary savings were achieved by analyzing the characteristics of the cohort (i.e., procrastinators; in-office people; people needing assistance) and not wasting resources on those who would likely complete early without assistance, but instead concentrating efforts on the people who needed help and encouragement.

- **Being Attentive to the Format, Content and Timing of Assessment Invitations/Reminders.** An analysis of the impact of invitations and reminders led to a protocol whereby the initial invitation consisted of a personalized letter invitation (returned mail also alerted staff to participants who had moved). If this was insufficient, it was followed with a personalized email invitation; followed by a personalized postcard reminder; followed by an email reminder; followed with a phone call(s). Invitations/reminders were usually sent at the beginning of the week, as people were much less likely to complete the assessment on weekends and holidays. The analysis of contact database information also allowed staff to schedule the timing of each of these types of assistance to when each would be most effective.

- **Maintaining Contact between Assessments.** A newsletter was mailed each summer. It talked about the importance of the project, progress to date, and reminded people to contact the office if their address changed. In addition to maintaining rapport, returned mail allowed staff to identify changed addresses well in advance of the next assessment. Such mailings also provided (through mail returned as undeliverable) staff with an early notice to start the search for updated participant contact information.

- **Ensuring Adequate Project Funding.** We were fortunate that our project funding from the Ontario Problem Gambling Research Centre (OPGRC) was reasonable and sufficient to support the project work—at least during the first four assessment periods.9, 10

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9 **PI Note:** It should, however, be noted that, even at the level of funding we were fortunate to have, there were times—especially during the beginning and end of the annual intensive survey periods—when the Belleville staff (especially the Site Manager) were required to work at levels beyond which one would normally ask staff to work.

10 **PI Note:** Because of an unexpected change instituted in the budget by OPGRC, to complete the final data collection phase required significant amounts of pro bono time donated by the Quinte Site Manager, other Quinte Office Staff and
E. Flexibility: Responding Quickly and Effectively to Challenges

- **Meeting challenges with Flexibility and Innovation.** The normal difficulty and complexity of a longitudinal study such as ours would have been enough to demonstrate the importance of all of the above principles and approaches. However, their worth was even more evident when a number of times unexpected developments occurred that threatened not only maintaining the high retention rates, but the viability of the project itself. For instance:
  - Our original plan and budget assumed all questionnaires would be filled out by all participants in-person in our Quinte office. Instead, it was found necessary to develop other options—including using sophisticated software and obtaining a secure computer centre to host completion on-line through the internet from the participant’s home or office.\(^{11}\)
  - Originally, we expected that a new “racino” would be opened very soon after project start-up and we accordingly rapidly initiated a pre/post survey design. However, the opening was delayed, making it mandatory to redesign the timing and balance of pre-post assessments to maintain resources and ensure that, whatever happened, the project would collect the data needed to meet the key project objective of developing an etiological model of gambling behaviour. In fact, the rebalancing and refocusing of the survey schedule continued to the end of the project since the uncertainty regarding opening the new racino has continued to this day.
  - The original project plan and budget did not envisage the development of the complicated and extensive automated participant contact management database that became an essential tool for many of the retention tasks performed by the Quinte office staff.\(^{12}\)
  - A number of our participants were members of the local armed forces base. Canada’s participation in the Afghanistan war and the deployment introduced the need for new strategies to ensure their continued participation.
  - Funding for the project was unexpectedly cut short by the funding agency before the fifth and final year of data collection. Given the scientific importance of having that final year of data, a number of strategies involving a combination of process re-engineering, use of alternative partner resources and pro bono contributions from project staff allowed us to complete the data collection.

Thus, when these and other challenges arose, instead of accepting a lower level of success, having in place the overall approach and resources described above allowed us to anticipate such challenges, to be confident that we could find alternative work-arounds, and to be

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\(^{11}\) **PI Note:** We gratefully acknowledge the significant contribution made by the Information Technology department of the University of Lethbridge in making this option technically and financially viable.

\(^{12}\) **PI Note:** Again, we gratefully acknowledge the significant contribution made by the Information Technology department of the University of Lethbridge in making this option technically and financially viable.
Part II: Strategic Design

Approaches

sufficiently flexible, capable and willing—as a co-ordinated, focused team—to change direction and implement the required solutions.\(^\text{13}\) In fact, in nearly all cases we found that the changes implemented not only retained, but *improved* the scientific integrity and practical worth of the project.

**Conclusion**

To sum up this sub-section, clearly success at conducting a large-scale longitudinal study is not due to just a few, but rather to a large number of, important strategies, tactics and tools—and the ability to monitor and quickly make improvements to them on an ongoing, *relentlessly thorough* basis as the inevitable challenges arise.

\(^{13}\) **PI Note:** We were also fortunate that when major challenges arose that had implications for budget reallocations among budget line items (during the first four assessment periods), OPGRC approved our requests for such reallocations through annual budget submissions.
The general principles, strategies and approaches described in Part II were critical to the success of the project. However, they were far from sufficient.

For the principles to have a practical impact at the front lines of the research requires another equally important set of far more specific operational tools. This third part of the manual therefore identifies and provides specific examples and templates for each of a wide range of more specific types of practical tools utilized by the front-line QLS staff to achieve their very challenging retention rate objectives. Separate Chapters are devoted to specific tools within each of the categories shown in the following Figure.

### Specific Types of Tools needed for High Retention Rates
(N.B. the numbering corresponds to Chapter headings in Part III)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organizational Tools for linking the Front-Line Office with the rest of the project Team</td>
</tr>
<tr>
<td>2</td>
<td>Staffing the Project (from the staffing model to recruitment strategies)</td>
</tr>
<tr>
<td>3</td>
<td>Setting Up the Project Office (from location to service tone)</td>
</tr>
<tr>
<td>4</td>
<td>Cohort Recruitment (from setting parameters to messaging)</td>
</tr>
<tr>
<td>5</td>
<td>Service Philosophy (general approach to dealing with troublesome interactions)</td>
</tr>
<tr>
<td>6</td>
<td>Assessment Planning (from building on lessons learned to setting timelines)</td>
</tr>
<tr>
<td>7</td>
<td>Testing to Retaining Survey Interest</td>
</tr>
<tr>
<td>8</td>
<td>Survey Completion Options</td>
</tr>
<tr>
<td>9</td>
<td>Planning and Monitoring Tools</td>
</tr>
<tr>
<td>10</td>
<td>Cohort Tracking and Management (systems, components and uses)</td>
</tr>
<tr>
<td>11</td>
<td>Cohort Payments (from amount to tracking payment)</td>
</tr>
<tr>
<td>12</td>
<td>Motivating Staff (common and individualized motivators)</td>
</tr>
<tr>
<td>13</td>
<td>Motivating Cohort/ Participants (financial and non-financial)</td>
</tr>
<tr>
<td>14</td>
<td>Participant Communications tools (from mass media to individualized specific notices)</td>
</tr>
<tr>
<td>15</td>
<td>Due Diligence and Safeguarding the Integrity of the Research</td>
</tr>
<tr>
<td>16</td>
<td>Budgeting (from setting to dynamic management, to auditing expenditures)</td>
</tr>
<tr>
<td>17</td>
<td>Effective Communication Mechanisms (internal, with participants and with external partners)</td>
</tr>
<tr>
<td>18</td>
<td>Tools for Identifying and Managing change</td>
</tr>
<tr>
<td>19</td>
<td>Testing and Validating strategies and practices.</td>
</tr>
</tbody>
</table>
It becomes clear that from the QLS experience that success in conducting longitudinal studies come from using, not just a few but rather, a large number of, critical strategies, tactics and tools. However, what also requires separate emphasis is the ability to monitor and quickly make improvements to them on an ongoing, relentlessly thorough basis as the inevitable challenges arise.

Chapter 1: Project Office and Front-line Team in Context

1.1 Staff and Support Resources within the Project Team

The QLS project required the concerted and co-ordinated effort of many parts of the QLS team. All parts were essential, and the effectiveness of each one depended directly on the effectiveness of the others. Project staff and support resources included:

- **Front-line project staff in Quinte consisted of 2.5 part-time Research Assistants and 1 full-time Site Manager.** The Research Assistants worked primarily 5 months per year during the Assessment (questionnaire administration) Period, as well as task-specific hours during the rest of the year (e.g., development and distribution of a Participant Newsletter, and planning for and clean-up of the assessment period).

- **Information Technology (IT) support was provided under contract by the University of Lethbridge (U of L).** While at the start of the Longitudinal Study, the project purchased about four months of dedicated development time, the project has been sustained by purchased services from one IT staff member at the U of L. There are periods of high demand (preparations at the start of each new Assessment Period), and then periods of minimal demand (systems trouble-shooting assistance during the Assessment Period). On average, during the Assessment Period we required about four hours of IT support per week (this included a one-hour weekly teleconference).

- **Overall financial budgeting, accounting, bookkeeping and financial reporting services were provided by Robert Hann & Associates Limited (RHAL), which held the contract for the project from the Ontario Problem Gambling Research Centre (OPGRC).** That support was provided from RHAL offices first in Toronto then in Grey Highlands, Ontario. Although both offices were in the same province, they were a considerable physical distance from the Quinte office.

- **By year three, virtually all of the day-to-day operational financial transactions** (e.g., purchasing and invoice payments, payment of survey participants, and scheduling staff and other resources within overall budgets—but excluding certain aspects of payroll) was carried out by the Project Site Manager.
Part III: Specific Tools

1: Project Office in Context

- **Overall project leadership** was provided by the two Principal Investigators (PIs): one a clinical psychologist/professor with a specialization in social science and extensive experience in gambling research; the other an economist/criminologist also with experience in gambling research but with a specialization in justice studies and project management.

- **Analytic support** was provided by a full-time Research Assistant located at the University of Lethbridge.

- **Senior Research Advisors** included four international gambling research experts. An epidemiologist from Edmonton Alberta; an economist from Texas; a sociologist from Lethbridge; and a social scientist and gambling policy expert from Australia. These individuals supported the project through email, teleconferencing (on an as-needed basis) and through participation in project meetings (annually).

It is interesting to note that, before the project started, the PIs had never worked together and the front-line personnel were unknown to each other.

1.2 Geography

The project cohort lived in communities within a 70-kilometer radius circle around the site of a proposed new raceway and slots gambling facility in Belleville, Ontario, Canada. All front-line project staff lived in or near Belleville (an Eastern Ontario city with a population of 48,821 (according to 2006 Census Data provided by Statistics Canada)).

The PI supervising the front-line project staff lived in Toronto and then Grey Highlands, Ontario (a rural community in the northern section of Central Ontario - about 213 miles from Belleville).

The PI overseeing the Longitudinal Study lived in Southern Alberta – a Canadian province three provinces and 2176 miles west of Belleville and the cohort/study area. The Research Analyst and the IT support were similarly situated.

The geographic location of the international experts has already been described—continents and countries apart.

What is exciting about this reality is that with the wonders of the internet, SKYPE phoning, good long distance phone plans and emailing, communications and staying-in-touch were really easy. The geographic realities pushed us to establish regular times to collectively talk—and if we did not have issues requiring resolution, we affirmed that good news and went about our business. We did, however, commit to convening those communication opportunities.
1.3 Two Decision-Making Structures

Other sections of the manual describe the importance of:

- utilizing the different skills, expertise and experience of all project team members
- maintaining the enthusiasm and commitment of all project team members, and
- ensuring that project resources were both focused on key objectives and used efficiently.

To accomplish this, the project utilized two (2) different organizational decision-making structures.

- The first (shown in Figure 1), a very hierarchical structure was used:
  - for designing overall strategies and guidelines for the project, and
  - for resolving disputes

  e.g., at the strategic and senior management level, while agreement of both PI's was ultimately required for all project decisions,

  - the PI based in the University of Lethbridge had lead responsibility for decisions regarding the design and implementation of the longitudinal survey, for research and Information technology support, for the scientific analysis of the longitudinal data, and the preparation of the main analytic project report.
  - the PI based from Robert Hann & Associates Limited in Ontario had lead responsibility for financial planning and control, the community organizational impact analysis, and (through the on-site manager) the management of the Quinte office and the documentation of the project implementation process.

At the day-to-day operational level,

- the full-time Site Manager had responsibility for day-to-day site management and planning of the operations of the Quinte office (including managing, scheduling and other human resource management (HRM) issues related to the local staff) and of initiatives emanating from the local office.
- The Site Manager in turn reported directly
  - to one PI (the principal of Robert Hann & Associates Limited) for administrative and HRM office matters, and
  - to the other PI (from the University of Lethbridge) for technical matters related to the longitudinal survey.
- The Research Assistant and the IT support (both located in Lethbridge) took direction from the University of Lethbridge PI.

- The second (shown in Figure 2), a more decentralized, communal, decision-making structure was used:\(^{14}\)
  - for the design and detailed operation of many front-line retention support systems

\(^{14}\) PI Note: this second figure was prepared earlier in the project to describe a particular assessment period.
o for day-to-day operations

  e.g.,

  ▪ the on-site manager and her staff were responsible for the design and day-to-day operations of many overall approaches and the manual and computerized systems which were used in the on-site office and which were essential to the high retention rate
  ▪ (after extensive tests over two years) as much as possible, administrative and financial tasks were successfully delegated to the on-site manager by the PI in charge of such matters (such de-centralization greatly improved efficiency and effectiveness while freeing up the PI in-charge to spend more time on overall financial monitoring and control)
  ▪ communications were improved considerably when staff members from one part of the team discussed issues directly with members from other part of the team (e.g., on-site staff with computer programmers) — although in certain instances communications were best done through more formal, hierarchical channels.
Figure 1

QERI Project: Formal Organizational Structure

Ontario Problem Gambling Research Centre: Funding Agency (Guelph, Ontario)

Dr. Rob Williams: Principal Investigator (Lethbridge, Alberta)

Robert (Bob) Hann: Principal Investigator (Grey Highlands, Ontario)

Patricia Mclaughlin: Research Associate/Quinte Site Manager (Belleville, Ontario)

Nick White
Kate Mazur King
Danny Rose: Research Assistants (Belleville, Ontario)

Bev West: Research Assistant (Lethbridge, Alberta)

UofL Computer Centre IT Services (Lethbridge, Alberta)

Consumer Contact Recruitment (Toronto, Ontario)

4 Experts: International Advisory Panel (Australia, United States, Canada)
Part III: Specific Tools

1: Project Office in Context

Figure 2
QERI Project: Functional and Geographical Structure: Longitudinal Survey

Survey Research DataBase Cleaning and Maintenance (U of Lethbridge, Alberta)
- Planning & Development
  - design of data cleaning and database management protocols
- Operational
  - cleaning data from each survey
  - development, and maintenance of research database
  - creation of constructed variables
  - creation of common procedures (e.g. bootstrapping)
  - writing statistical programs

Mainframe System Development and Data and Network Maintenance <U of L Computer Centre (Lethbridge, Alberta)>
- Planning & Development
  - Program Web-based version of Questionnaire
  - Program Web-based version of Participant Contact Database
- Operational
  - host & maintain web-based version of questionnaire
  - host & maintain web-based version of participant database
  - handle Web related questions from participants

Provision of Advice and Resources plus Analysis and Technical Papers (Alberta, Texas & Australia, Ontario)
- Planning & Development
  - Advice re: Design of Longitudinal Questionnaire
  - planning of technical papers
- Operational
  - Advice re: Continuous Improvement of Questionnaire and Operational Processes
  - Write-up of technical Results

Overall Project Planning & Management (Lethbridge, Alberta & Grey Highlands Ontario)
- Planning & Development
  - Design of Longitudinal Questionnaire
  - General Design of Operational Principles and Procedures
  - Creation of Budgets for Project
- Operational
  - Overall Operational Planning, Management and co-ordination
  - Liaison with Client and other external groups
  - management support to all parts of project

On-Site Development and Research Implementation (Belleville, Ontario)
- Planning & Development
  - assist in design of detailed local processes
  - develop computerized tools to support local planning and operational processes
  - Document processes and lessons learned
- Operational
  - All Direct Communications with Participants (from survey initiation to thank-you)
  - Maintain Office for On-site Survey Completion
  - Write Cheques for all Participants
  - Handle/forward Participant Questions
  - Document and Monitor Participant Progress
  - Maintain Participant Contact Database
  - selected expenditure/financial functions
  - write-up of operational retention procedures

Sample Recruitment (Toronto, Ontario)
- Operational
  - RDD recruitment of sample

Financial Control and Support (Grey Highlands, Ontario)
- Planning & Development
  - development of overall budget planning and simulation program
  - assist in preparation of budget
- Operational
  - bookkeeping and accounting
  - financial control
  - Banking
  - purchasing
  - payroll

QLS Manual: Achieving a 94% Retention Rate: page 33
2.1 Choose a Staffing Model

Longitudinal research has an uneven workflow. During the “assessment periods” the workload is intensive and there is some preparatory and wrap-up work associated with each assessment period. But the assessment periods are followed by significant “between assessment period” times.

Under ideal circumstances, a multi-pronged research project which allows for considerable project work during the “between assessment periods” provides for easier staffing models. Such ideal circumstances are often outside the funded project model.

As such, it is likely that full staffing will be required only periodically throughout the life of the longitudinal research project. Yet research has shown that longitudinal research retention rates are improved with continuity of staffing throughout the duration of the project. This need for staffing continuity coupled with the periodic nature of the work, poses a considerable challenge to longitudinal research.

Continuity of staffing may suggest the recruitment of a small, full-time staff for the duration of the project; yet the periodic nature of longitudinal research requires considerable staffing during the assessment periods and potentially little to no staffing between the assessments. How does a project balance these pressures?

A longitudinal project cannot be successful without adequate staff coverage during each assessment period—this factor is paramount. During the assessment period, the hours of work are long, the number of days per week when services need to be provided are high (possibly six days), and the work pressure is immense.

To ensure consistency of approach and an ongoing community presence, in our project, 1 full-time person was recruited to provide site leadership and supervision.

To meet occupational health and safety considerations, and because the participants are likely to represent all walks of life and life issues, whenever the project office was open to the public, there would be a minimum of two staff. As well, because of the participant support (including one-on-one support) that could be required any time when the project office was open, gender balance in staffing was required. Given the sensitive questions within a longitudinal questionnaire, older people seemed to prefer one-on-one support by female staff, yet some men seemed to prefer support by male staff. Because longitudinal retention rates are so dependent on participants having a positive experience while doing the longitudinal questionnaire, it was important to ensure participants were comfortable with the staff support. Scheduling staff with gender balance, whenever possible, is recommended.
Part III: Specific Tools

2. Staffing

Estimating the number of staff (Research Assistants) required per work shift was challenging, as the only thing that was predictable was that participant behaviour is difficult to predict.

This project decided that maximizing staffing flexibility and hours of operation in order for project participants to complete their questionnaires was paramount. Yet the weekly hours of work for staff had to be reasonable to guard against burn-out. This project sought to recruit contract workers who would agree to work the equivalent of full-time hours, five months per year, for the duration of the longitudinal study and they were paid based upon an hourly rate. The project had wondered if anyone would commit to such an unusual work approach.

Fortunately, we received a number of qualified applicants to our advertised positions.

2.2 Recruiting the “Right Type” of Staff

The Principal Investigators recruited the Site Manager and empowered that person to determine the project support needs (within the limitations of the project budget) and to recruit the necessary Project Assistants. A Site Manager who is a thoughtful extrovert and very organized, may encompass the ideal personality characteristics to lead the front line of a longitudinal study.

Project teams must have a collective skill set bigger than the sum of the talents of the individuals. The staff members should not be mirror images of one another, but rather complement one another’s strengths and challenge one another’s experience. This mix will provide opportunities for growth, innovation and project success.

Recruitment for a small project team is not a one-off task, but rather a careful consideration and balancing of the likely effect of the total number of Research Assistants, coupled with the skills of the Site Manager.

It is especially important that all staff members have the following characteristics:

- Gentle people skills - active listener, thoughtful, respectful, sense of humour (if possible, as things do go wrong from time to time)
- Attention to detail

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15 **PI Note:** The PI’s would strongly advise that the PI’s do not hire the staff that will report to the Site Manager. If the Site Manager is to be accountable for the effectiveness and efficiency of the team, she/he must be able to choose (and release) them. This latter strategy certainly worked to the advantage of the QLS project.

16 **PI Note:** In a manner typical of the Site Manager’s work throughout the project, in pulling together this manual the Site Manager downplayed the role of the Site Manager. In fact, the Site Manager position was critical to the success of the project. In addition to the skills noted in the text above, our Site Manager exhibited exemplary management and supervisory skills—skills that were extremely important in developing the enthusiasm and commitment needed by all staff, and in finding solutions to differences that are bound to arise when one brings together any group of highly competent people each with their own valuable approaches and strongly held perspectives. Both PIs feel that finding a site manager who is both a highly skilled manager and who is a pleasure to work with (by her/his staff, colleagues and superiors) was essential to the project’s level of success.

17 **PI Note:** See also Chapter 13 following for additional material on the qualities of the staff that were hired for the QLS project.
• Neutral with respect to the subject to be studied during the longitudinal research (in our project the subject of study was gambling)
• Maturity and breadth of life experience
• Resident of the project catchment area for a minimum of five years—adds credibility to the project
• Good oral and written communication skills
• Passion to try new things

At least one staff member must have strength in the following areas:

• Data base management and information technologies
• Extensive knowledge of the support service sector associated with the issues under study within the research
• Public relations and marketing
• Research methodologies and practices

The Unique Skills of our Front-Line Project Team

• 4 out of 4 were recently “retired”
• 4 out of 4 were parents
• 4 out of 4 lived within the catchment area
• 4 out of 4 had extensive community support networks
• 4 out of 4 were fun-loving and passionate about trying new ideas
• International Business Entrepreneur/Consultant with a specialization in transport of dangerous fuels and concomitant high regard for safety and security of persons and systems--also, advanced Information Technology design and support skills, and publishing skills
• Registered Nurse with experience in hospitals, community health, Home for the Aged, health research, and ASL communication skills
• Local Businessman/Entrepreneur who recently sold his company and was returning to school to commence a new career direction in social services
• Social Worker/Manager with a 30 year career in health and social services management and community development

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18 PI Note: The PI’s believe that hiring staff who were either retired or semi-retired gave us people that had a wealth of experience dealing with people of all ages and walks of life. This is exactly the type of experience and skill that one needs to maintaining the types of relationships with longitudinal participants needed to retain their commitment to the project.
2.3 Recruitment Processes

The project advertised for the Research Associate/Site Manager position in all major newspapers throughout the project catchment area. This five-year contract position had over 300 applicants.

The Site Manager was hired and empowered to commence the establishment of a project office, including the recruitment of Research Assistants (RA’s) — the design of the staffing model was an early task for the Site Manager.

Unsuccessful, yet short-listed candidates from the Site Manager competition were invited to be considered in the Research Assistant (RA) recruitment process.

Once the staffing model was determined, a job description was prepared and a newspaper advertisement was placed in all regional newspapers throughout the project catchment area. The project received more than 215 applications.

Twenty-one interviews over a three-day period followed and the diversity of candidates was heart-warming: recent college and university graduates looking for work experience; under-employed people with amazing professional credentials; young yet retired teachers, engineers, nurses and military personnel; freelance writers and consultants; and current students who saw the ad as one of the more interesting job postings in the media. It is humbling to observe the talent among those looking for work.

Seven candidates were invited for a second interview, this time with one of the Principal Investigators participating in the interview process. Four people were initially offered (after a probationary period)
Part III: Specific Tools

2. Staffing

a five-year contract for up to five months of work per year. However, within a few weeks of start-up it was decided to continue with a three-RA model. Contracts between 700 and 1050 hours of work per year were negotiated individually, to accommodate changes in personal circumstances and preferences.

The job advertisements and the contract negotiations also included an annual performance bonus if 95% of the cohort completed the longitudinal questionnaire during each assessment period (retention rate incentive).

The numbers of contracted individual hours also varied from year-to-year. For instance, when one RA took on a separate job and the project work became his secondary employment, it was decided that, rather than hire a new RA, it would be preferable to maintain consistency of approach to have the remaining two RA’s take on a larger portion of the workload and to have the third RA become an on-call and back-up resource.

This model with its inherent flexibility worked throughout the project.

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**Successful Recruitment Strategy for QERI Project Staffing**

Choosing mature, enthusiastic, retired professionals who want to remain involved in their community through interesting and meaningful part-time (i.e., project-driven) work certainly was the best recruitment strategy for this Longitudinal Project.

We retained the interest and support of the site manager and the three front-line team members (one RA left six weeks before the end of the 4th assessment for personal reasons but returned for assessment 5). The team worked exceedingly well together, the participants related easily to the staff, and the staff enjoyed the professional and caring connection with the participants. This continuity of staffing was awesome and incredibly valuable.

Our project journey was a great learning adventure for all.
3.1 Temporary or Permanent

If the project budget can support a permanent office, this is advisable.

A permanent address with regular office hours increases visibility to the public and the project participants, shows continuity and certainty of the project, communicates a professionalism, facilitates ease for participants to keep their contact information current (albeit emailing and phones can be monitored from anywhere, by anyone), and facilitates warm communications such as “drop-in to the project office whenever one is in the area or has questions for the project staff; and join us for a cup of tea or a cold drink”.

![Image of a project office](image-url)
3.2 Location

The project budget will provide the parameters for negotiating a suitable location.

Many real estate agencies provide knowledgeable access to available commercial rental properties. The project will need to know the allowable and affordable dollars per square foot and the duration of the project, in order to negotiate the length of the lease (the longer the period of time for which the project has certainty of funding, the greater the negotiating strength).

Public and staff accessibility and safety are important factors. Choose a location that ensures that people of all special needs can be included in the project and welcomed to the project office. It must:

- Have easy access to the public transportation system in the community
- Be centrally located within the project catchment area
- Be in a safe neighbourhood (low crime)
- Be in close proximity to other public services such as restaurants, library, walking trails, as many participants have friends/family who will drive them to the project office and who then await survey completion by the participant. Those drivers may wait at the project office but some prefer to use nearby services.
- Have easy and direct access from major highways throughout the catchment area (as this promotes ease of directions and access to those travelling to the project office to complete their survey)
- Be well lit from the parking area to the project office door (as most research projects include evening and week-end office hours)
- This lighting and open visibility in the parking area is also important to ensure staff safety when leaving the project office, especially at night
- Have ample parking availability - and no cost, if at all possible
- Have no steps between the parking and the project office door (elevators can be considered but project participants like to see the project office from the street)
- Recognise that placing a project office within a mall or office building may pose access limitations for evenings and week-ends - some buildings require the tenant to hire security personnel to provide public access from the street to the project office during evenings and week-ends
- Have visible signage from the street
- Have a clear and discrete street address (to promote ease of communications)
- Have a second door for emergency exit, if needed (for fire, health and safety)
- Ensure that heat and cooling systems are effective, as the project days are often long and good ventilation and office comfort promote staff performance and good humour/well-being by the participants
Part III: Specific Tools

3. Setting up the Project Office

- Have wheelchair-accessible washrooms and door handles designed for people with upper extremity mobility limitations
- Have versatile interior space as the project activities shift considerably from assessment to assessment, and having an ease of rearranging the interior space promotes flexibility with minimal cost

3.3 Project Logo

Once a project office (headquarters) has been negotiated, it is important to design a logo that can “brand” the research study.

Use the logo on:

- exterior signage for the project office
- the project web-site
- outbound communications including letters to participants and community stakeholders, newsletters, compensation cheques for the research participants, newspaper notices about the status of the research project, and if possible, include the project logo with the return mailing address on outbound envelopes.

In this way, project participants will easily identify Project Mailings—and hopefully that is a good thing; separating them out from the high volumes of “junk mailings” that land in most mailboxes today.

![QERI Project Logo](image)

*Used Everywhere to Identify or Brand our Research Study*

**Note:** The concept behind our logo was that we were attempting to fill in the pieces of the puzzle. As well, we were having a bit of fun with the word “query” or inquiry. When our project was established, we were also studying the Impacts of adding a slots venue to the longstanding raceway (horses) known as QER (Quinte Exhibition and Raceway).
3.4 Buy Locally-Owned

Setting up a project office (headquarters) is likely to require the purchase or leasing of considerable office furniture and equipment (including phone and computer systems).

In order to quickly build project rapport and credibility with the community, it is useful to negotiate/purchase supplies from locally-owned businesses. While in today’s times of internet purchasing and “big box stores” with minimal links to the local host communities, this buy-locally-owned approach may cost a bit more, yet it will certainly build community contacts and good-will on behalf of the research project.

It is amazing to discover in a longitudinal research study, how many project participants are managers or employees of the community businesses that the workings of the project will depend upon. 😊

3.5 Atmosphere and Service Tone

The physical project office (with its location in the community and its furnishing within the office) is only about 50% of the equation. These decisions must be matched with a determination of the feel of the headquarters location—does the project want a clinical feel, a casual feel, a business feel or a professional ambience, for example.

A clear decision must be made about the atmosphere you want the office to exude. This feel is more than the decorations, the paint colour, the upholstery choice and the office accents. It is the alignment between the office look and the actions of the staff. It is one integrated package.

Warmth and welcome to a very professional, clean and tidy environment was the theme we aspired to create.

The personal stress that many project participants experience as they answer the somewhat intrusive questions of a longitudinal survey can be ameliorated or moderated by a warm and relaxing office environment. Live plants, natural sunlight, colourful artwork, magazines, tastefully-presented and healthy food snacks and beverages for the participants, comfortable chairs, and calming yet uplifting colour choices for carpet/fabrics and walls further augment the feeling of professional warmth. If possible, we encourage the inclusion of a non-allergenic cat or puppy, as participants noted how this added to the sense of welcome and proved to be a great tension reliever. (“Ebony” was our on-site miniature schnauzer.)

It’s the people factor that brings the atmosphere and service approach together!

As a participant approaches the project office, the warm and welcoming professional environment should be evident. It is further communicated as the door is opened. Participants must be immediately greeted by a smiling, caring and welcoming staff member.
Part III: Specific Tools

3. Setting up the Project Office

No matter what is going on within the project office, the top priority must be the enthusiastic and responsive welcome to each person who enters the office location. It must be clearly evident that the project cares about its participants and its physical environment.

It is also important that all interactions between staff are similarly warm, enthusiastic, professional and respectful. The pattern of communications and behaviour between staff and participants must be mirrored between staff.
Chapter 4: Cohort Recruitment

4.1 Methodology for Cohort Recruitment

The random selection of the research cohort is a time-intensive and expensive component of any longitudinal research. It must be done correctly for otherwise the entire study will be jeopardized.

While it may be appropriate and possible for the project team to do the cohort recruitment, there are now many specialized agencies/businesses in the market place that are better equipped to provide this service. These call centres which specialize in market research as well as recruiting the correct representative sample for longitudinal research, have the necessary computer software, call agents and supervisory/management staff to oversee the cohort recruitment.

The research team must define the cohort parameters and write the very specific recruitment speech with its branching pathways. Each critical response will generate a point value and the call centre software will calculate the score for each respondent and determine whether or not she/he is suitable for the cohort. If the person called qualifies (attains the adequate score), the person is invited to participate in the research and a confirmation notice is sent (by snail mail or email) AND a list of the recruited cohort candidates is sent to the project team daily (or with whatever frequency is negotiated).

Given the demographics and rural geography of the catchment area for the QLS Project, it was necessary to randomly phone 115,331 numbers in order to recruit the 4,121 research participants. (See the main report for details.)

A third party specialized call centre (Consumer Contact, now known as Corsential) conducted this random-digit dialling over a 20 week period.

Nightly, the new cohort recruits and their contact information were posted to the project database.

4.2 Messages Used During Cohort Recruitment

Every word of the recruitment phone call and the follow-up confirmation notice to those who are recruited must be carefully scripted as the participants in the cohort will recall and review those messages frequently during the longitudinal study.

Facts that authenticate the study, emphasize the cohort requirements during the study (including its duration), the project commitment to data security and confidentiality, the delineation of an appeal
Part III: Specific Tools

5: Service Philosophy and Approach

process for the resolve of any complaints/concerns, the purpose of the research, and the contact information for the Principal investigators of the study must be clearly included. (These are also the minimal requirements necessary for ‘informed consent’ and for ethical approval from a Human Subjects Ethics Committee.)

On the other hand it is also important to be cautious and delineate what you can provide with certainty over the duration of the longitudinal study. The project will live with the information that is communicated during the recruitment process - and if 3rd parties change their timelines or deliverables, the project may not be in a position to deliver what it committed to at the outset. Protect your project from such difficulties, by carefully charted communications and commitments.

Beware that the longitudinal study interventions may change, shift or even “morph” into something quite different and with a different timeline than anticipated during the Project Design.19

It is a fine balancing act: determining enough credible information to engage the cohort while withholding uncertain or potentially non-deliverables in order to protect the study from later being seen as misrepresenting the scope or timelines of the research.

At cohort recruitment, QERI Longitudinal study was described as:
• 5 year project
• baseline assessment followed by 5 subsequent assessments at 9-month intervals
• timing was defined based upon publically-announced (and confirmed) construction of a new racetrack-with-slots venue

Project timing was then dependent on the venue construction timing i.e. a 3rd party completely separate and apart from the research study.

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19 PI note: As discussed in more detail in the main project report--for a number of scientific, budgetary and logistical reasons, as well as political decisions far beyond the control of the project—a number of the initially described project characteristics (see following box) changed over the life of the project. Fortunately, changes resulted in enhancements to the worth of the project. However, communicating and dealing with these changes in an efficient and professional manner were important tasks of the local project team.
4.3 Orientation and Monitoring of a 3rd Party Cohort Recruitment Service

When defining the contract expectations of the 3rd party Cohort Recruitment Service, state that project personnel will provide:

- Orientation to the staff of the 3rd party service who will be recruiting participants for the longitudinal study
- Recruitment call monitoring and observation at the Cohort Recruitment Service so that support is available to the different shifts of personnel, questions clarified, and trouble-shooting done, as early in the recruitment process as possible.

While a person can be trained to read a recruitment screening script and to do the database entries that result from the dialogue with the potential cohort participants, the outcomes are very different if the recruiting agents meet, connect to and understand how the project and its staff will use the information that the recruiters provide. Direct face-to-face contact brings the Project Research to life for the 3rd party call centre staff and human nature then increases the quality of performance.

Cohort recruitment services may use random-digit dialling systems and thus there is little need for the recruitment personnel to know anything about the region that they are calling. By providing the call agents with a general understanding of the demographics of the region they are calling, coupled with an understanding of the value of the longitudinal research, the quality of the script delivery will be improved. For example, if the project catchment area is primarily English-speaking and rural, considerably removed from large metropolitan centres, many people answering the recruitment call may have little experience with different languages, accents or speaking practices. Confusion may be interpreted as rudeness and thus putting unnecessary distance between the caller and a potential cohort participant. Increased understanding of the value of one’s work always leads to improved performance.

The orientation about the project should also emphasize the significance of scientific integrity in every aspect of the project. The research results are dependent upon this certainty.

Have fun with call centre staff during the project orientation—photos of the project office, and examples of a few funny project situations (while fully respecting client confidentiality) breathes life and meaning into the research initiative. Help the recruitment personnel understand the pivotal importance of their work within the duration of the longitudinal research.

Provide the orientation and training to the 3rd party recruitment service personnel as early as possible—perhaps during week 2 of the recruitment. In this way, the staff of the recruitment service will have some confidence about the script and the database systems and be more likely to have questions about their 1st week of call experience.

Set up a friendly and straightforward follow-up system, pursuant to the orientation, for supervisory and management staff of the Cohort Recruitment Service to contact the project. Ensure that dialogue, trouble-shooting, questions and suggestions for improvement are welcomed. The Project must also always respond to any such inquiries with immediacy, to emphasize the project’s appreciation for their call/work.
As well, minimally the project should make contact with the Cohort Recruitment Service at least every 10 days— to keep the lines of communication open, to reinforce how well recruitment is progressing and to share positive feedback (perhaps received from the recruited cohort). This approach will facilitate communications and early resolution if a difficulty is encountered. Always deal with any concerns as quickly as possible.

When negotiating a cohort recruitment contract with a 3rd party recruiting service, make certain to include the requirement for project staff site visits during calling time. This will facilitate communications, monitor consistency of the recruitment scripts delivery and data capture, build a feeling of project inclusion and troubleshoot issues as early as possible.

Chapter 5: Project Office Service Philosophy and Approach

5.1 Project Office Service Philosophy

Embracing retail sales service philosophies may serve longitudinal research effectively. The participants are the equivalent to its customers, and a project wants to ensure their continued business/participation over the course of the longitudinal research.

It is all about providing care, support and service to those participants and whenever possible, at the convenience of the participants.

All connections with the participants must be enthusiastic (yet gentle), warm and caring, thoughtful, professional, respectful, clear and concise, and provided in the most efficient way possible so not to waste the time (by phone or in person) of the participant. The participant’s time is precious and they must know that a project believes and respects that.

5.2 Service Approach

While a project knows it must administer the assessment periods within defined time periods, those timelines are really of no concern to the participants. Pushing the project’s urgency for completing the longitudinal assessments is likely to alienate more participants than it will motivate. It was in our 3rd assessment period that this reality crystallized for this project.
As in retail sales, ensure your product is consistent with your information communiqués—and ensure that it is delivered as you say it will be delivered. Most participants have signed on (or promised) to stay with the longitudinal research for its duration and the project will be much better served if the staff can similarly stick with the project. In this way, the project can be confident that there is consistency of service; a certainty that the history of the project can be accurately communicated; and that rapport and familiarity with the participants can be felt. Consistency of service will, in turn, be greatly facilitated by the project having an effective “contact database” (described later) wherein interactions with the participants can be noted and dated, and used subsequently to prepare staff for further interactions with the participants. These “prompt notes” also augment the friendliness and feelings of personal connections.

Ensure the project headquarters are clean, inviting and free of garbage and clutter. A project asks participants to work with it for many years and the environment must show that the project is committed to the participant’s health and safety. Every time a participant chooses to complete a questionnaire at the project office, the return visit orientation must include information about the washrooms, the food and beverage options (which are provided for the participant and his/her driver or accompanying friend/family member), the emergency exit protocols/whereabouts, and the reassurance that project staff is on-site to help and welcomes the opportunity to help. This information should always be repeated, no matter how familiar the participant may seem, as it reinforces the priority of professionalism and caring.

Completing longitudinal research questionnaires affects participants differently. Some become introspective, while others become verbose as they work through their emotions. Project staff must be prepared and trained to handle these differences. Staff needs to be attentive to these needs and offer whatever support seems relevant before a participant leaves the project environment.

*Remember, the experience of each completed assessment is really the participant’s motivation for the next one.*

To this end, it is important that the experience is positive—and even if the participant has had a very emotional time with the assessment, their experience will be remembered as positive if they received and felt sensitive and caring concern from project staff before they left the project office. Respecting the privacy of the participant’s experience is another tightrope for project staff and the project office needs to have a number of work areas where private and sensitive debriefing discussions can occur - and this may very much include chairs outside the office space - or a bench in a nearby park. The project needs to have these options in mind so that staff can comfortably handle whatever may emerge.

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**5.3 Participant Needs - Before and/or Following the Assessment Questionnaire**

From time to time, a participant may require this sensitive one-on-one time before completing the assessment, so once again, it is important for project staff to be watchful and listening for indicators of such needs.
Project staff must never compromise the integrity of the longitudinal research during these preparatory or debriefing conversations—but effective active listening, reassurance and caring will likely allow time for the participant to work through the thoughts. Project staff also needs up-to-date reference materials so that agency/support service pamphlets can be shared, if appropriate.

Guided by the service approach that *the Project Cares* about each participant and that each participant is an individual with unique needs, project staff can draw upon their life experience to best address the presenting situation. While there are essential and reasonably-scripted messages during each assessment, the over-arching customer service principals of *warmth, caring, respect and professionalism* will ensure that participants have a positive experience.

### 5.4 Communications of Any Troublesome Interactions with Project Participants

Consistent with these service philosophies, any troublesome issues that emerge need to be addressed in a timely way. *Avoiding difficulties or burying one’s head in the sand, is no way to ensure a positive customer service experience. Unresolved issues fester and always spring up when one least expects them.* The project must follow-up with caring and concern—and as quickly as possible.

The participant’s opinions are important—even if at first glance the project feels the opinions are foolish. Listen, listen, listen and show concern.

A clearly articulated chain of command within a project ensures that staff always feels supported by the project. While most interactions with project participants are handled by the Research Assistants, the staff needs to feel that they can always hand-off to the Site Manager, who can in turn hand-off to the Principal Investigators—if needed. The tone and the timeliness of response directly affect the chances for positive resolution.

While a project is likely to have thousands, if not tens of thousands of participant interactions per year, it is likely that less than 2% of those contacts will be contentious and requiring escalation to management for involvement.

- 100% of the contentious matters need to be reported to project management and the project principals (and very quickly).
- It is unlikely that more than a few isolated cases will require intervention by the principals with participants.
- Without timely resolution of all participant issues, the retention rates of a project will be compromised.

Customer satisfaction follow-up practices are also well suited to longitudinal research. When participants have a negative experience with an assessment, and considerable staff time has been provided during the exit, it is recommended that project management follow-up with a brief phone call to the participant the following day—just to let the participant know that the project is concerned.
Part III: Specific Tools 5: Service Philosophy and Approach

It is a good opportunity to confirm that the participant is okay and to discuss if there is any other way the project can help. This practice takes but a few minutes and builds wonderful good-will. Each time we followed up in this way, the participant expressed great appreciation and thanks.

Some concerns about a project may be received in writing (post or email). These need to be handled in the same timely and sensitive way as in-person concerns. If possible, a phone call of response is recommended, followed by a written communication confirming the resolution that occurred by phone.

Written communications which address project concerns should be vetted by the Principal Investigators, as there are often implications for Ethics Committee Approvals, funder contracts and/or the media.

Dealing with matters quickly and in a straightforward and sensitive way is likely to resolve 99% of the project issues, quickly and positively.

Diverse business / professional employment and life experiences of a project team will position a project for effective customer service and participant relations. This will in turn reinforce the project goals of cohort participation and high retention.😊
6.1 Survey Design Impact on Retention

The survey instrument is more than a tool for collecting the research data. It is a significant communication with the participants.

The tone of the questions, the look of the pages, the language and phrasing, the page headers, the footers, the numbering, the colour of the pages, the print colour, font choice and size, the speed with which each page of the questions loads (if web-based), the clarity of instructions (including what to do if difficulties are encountered), all communicate a project attitude to the reader (participant). It is so important that the language is friendly, clear, respectful, professional and welcoming. It is important that the look is welcoming, professional, and motivating. There cannot be mistakes—in the numbering or the spelling. Everything must be accurate and communicate professionalism so that the participant knows they are participating in something significant.

If a participant sees anything unprofessional in the survey instrument, they will begin to question the processes and their involvement.

We cannot stress enough the importance of the survey instrument to achieving high retention rates. The participant spends the most time with the questionnaire and will therefore decide about their continued participation based upon it—no matter how great their in-person or phone connection with project personnel. The survey sets the lasting impression, and to that end, it is very important that each assessment questionnaire conclude with a very upbeat question/section.

If the questionnaire is web-based, the system must be robust and easy to use. We want the participant’s time used for sharing their answers, not waiting for pages to open and data to be transferred. A robust and speedy system will communicate to the participant that we value their time and their experience with our questionnaire.

If system problems occur, and they cannot be corrected quickly, participants must be notified and the online questionnaire should be shut down until the problems are corrected. Participant frustrations with problematic technology will lead to withdrawals or lack of response by participants. It is very difficult for a project to recover from participant frustrations with project tools. Retention will be negatively affected.
6.2 Development, Familiarity and Testing

In longitudinal studies, the assessment questionnaire is likely to be developed by the Principal Investigators well in advance of any recruitment for front-line personnel. Prior to seeking funding, the research methodology typically requires approval from the Research Ethics Committees of the host university and that review will include an in-depth review (i.e., line by line of each question) of the survey instruments.

If at all possible, it is important to invite public people of a similar background to those who may be included in the research cohort to try the survey instrument, in order to ensure that the questions are written in language that can be easily understood. This review, if at all possible, should precede the Ethics Committee approval because any subsequently identified changes will require a re-submission to the Ethics Committee and that can be quite time consuming.

Front line staff also needs adequate time to become very familiar with the survey instrument. By completing the questionnaire as if they are participants (and each time changing their participant characteristics), staff learn how the questionnaire branches. By following the questionnaire branches, staff can evaluate whether the project branches make sense and work as designed. The costs associated with staff testing the questionnaire and becoming very familiar with the questions and their sequencing is a very worthwhile investment. It will also give the staff confidence.
6.3 Key Structural Characteristics of the QLS Survey Questionnaire

The QLS Questionnaire is a very complex instrument with a structured architecture; modular sections and branching so that each participant will take their own journey through the questions dependent on previous questions. A suite of security features protect data integrity, prevent participants jumping around or accidentally deleting information and ensuring secure data transfer to the main server in Lethbridge.

At different points, the Questionnaire also presents previously entered demographic data (and medications) and asks the participant to review these and update them where necessary.

One of the most important features from the Quinte office perspective was The Firewall. The information being collected is very sensitive to many people and both staff and participants need to know that confidentiality is being protected at every step. And, this needs to be conveyed to everyone in a simple fashion. We used colour coding.

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Footnote:

The remaining sections of this Chapter are based on (and reflect the style used in) a presentation of the retention methodology prepared by the Quinte office front-line staff for a workshop they hosted at the 20th Annual NAGS (National Association for Gambling Studies) conference in Gold Coast Australia, December 1 – 3rd, 2010. Additional materials based on that presentation are provided in Part IV of this document.
Confidentiality

It is clearly identified which data goes to Belleville (blue) and which goes to Lethbridge (yellow).

The answers on the Blue screens in the questionnaire are data that is accessible to project staff in Belleville (keeping in touch with you information). And the answers on the Yellow screens are data used by the staff in Lethbridge (the research and project data). There is a special table, accessible only to the Principals Investigators that links the two. Project staff cannot ever link answers in a questionnaire to an individual and all participants are aware of this.

While not a confidentiality feature, there was also a (rough) % completion bar across the bottom of every page in the questionnaire. Many participants appreciated a visible indicator that they were making progress.
The slide above illustrates some of the complexity of the questionnaire. The log-in routine not only sets up a new record for that survey but also pre-loads some data from previous surveys and logs these details to the database. Knowing when, using what technology and how often a participant logs in can be crucial to trouble-shooting problems. The log-in routines must also allow for resumes when a questionnaire is not completed.

There are 40 general topic areas covered in the questionnaire and it is possible [and not infrequent] that a questionnaire is interrupted – whether participant induced (i.e. deliberate or from a life interruption that causes the survey to time-out), or triggered by technology failures (such as power failures or ISP hiccups). A great amount of time, effort and thought went into the routine that handles disconnects and made recoveries smooth. This was important because even after 4 surveys, we still got calls or emails from participants who disconnected after almost completing the survey and they were worried they would have to start over again from the beginning--not trivial to a person who takes several hours to complete a survey!

Our resume feature allows the participant to log back in and resume from the last question completed and logged in the database (technically this is one question back from the screen the participant just saw).

It is a great design. The log-in routine detects that a survey was previously started and (if appropriate - an interruption during the initial log-in on each survey can result in scrambled data) loads all of the previous answers, recalculates the branch points and positions the participant back where they need
to be. As we can now confidently tell participants, “Your system crashed? No problem, just log back in😊”

This is crucial for retaining the less-than-fully-committed participants or those participants who found the questionnaire emotionally or physically challenging. Careful programming and attention to communication details gives both encouragement and sometimes even more important – no excuse to quit.

The time and cost to develop the code for a single question can be considerable, but we believe these investments are worthwhile. An example is the Medications Taken question: the program code was re-written for Survey #4 to provide the participant with the list of medications (purpose and start year) entered during the previous survey, so the participant could now delete the row, edit it, and add new medications, rather than re-entering all their medications. This was complex, costly programming that involved setting up additional tables in the database and involved the Belleville staff working closely with our lead programmer.

But the result got rave reviews from the participants – removing survey frustrations helps with retention.

6.4 Introducing Variety to Retain Survey Interest

Longitudinal research, as mentioned earlier, is about asking the same questions over an extended period of time. Participants understand the need for the repeated questions but they complain bitterly about their boredom.

While formatting changes (e.g., colour, graphics, font) add some interest, it is recommended that new questions be introduced with each assessment. This project had arranged for a short, standardized IQ test to be administered during one assessment period (3rd), and this generated much renewed interest among the participants. Any new sections or questions in subsequent assessments must be consistent with Ethics Committee approvals.

This project also introduced a few questions to seek feedback on the technologies the participant had used to complete the questionnaire; and on project communications.

Inviting participant feedback (albeit limited) communicated that the project was listening and welcoming of their suggestions. This nurtured interest and retention😊
6.5 Designing for Diversity in Participant Technology and Expertise

The questionnaire must be built with the participant’s technology as the basis. And what a range of technology that is. The survey will not run on Windows 3.1 or Windows 95, but it will run on all recent versions of Windows, Mac iOS, different builds of Linux and smart phones. The testing required to validate the code against different operating systems, versions of java script and browser technologies was a challenging task in itself. We found out that code that ran really well at U of L on the latest technology failed miserably when asked to perform on ancient technology, low resolution screens or dial-up telephone lines. So we changed the problem code.

During Survey #3, which included a Puzzles section to benchmark the cohort IQ, one participant did the survey on her Blackberry parked beside the road just north of Belleville. Unfortunately, the puzzle pages would not show on the tiny screen but she was sufficiently impressed and drove to the office to resume and complete the questionnaire and share her experience with us. In longitudinal studies, the technology changes every year and you have to stay with it.
Computer Skills

Senior programmers

- Used a computer exactly 4 times in life

With 4,000 people expect everything

Similarly, the range of computer skills among the cohort (and we might add, among the staff) is wide.

Expect every imaginable level of knowledge and be prepared to support the full range of comfort levels if you want to maximize retention. But be honest and never try and “snow” anyone. We had at least two very experienced programmers in the cohort.

How do we know? They were impressed and phoned to talk about how the survey was coded!

At the other end of the spectrum, we had participants who, while they are no longer fearful of computers and the questionnaire, liked to remind us that the only time they had ever touched a computer in their life was when they had done their QLS Surveys!
6.6 The importance of Continuous Testing and Validation

This is critical to project retention.

The greatest challenge and most expensive and time-consuming task in the project was getting an extremely complex questionnaire to work for a diverse set of people and technologies and getting them to like doing it enough to want to do the next one!

But we did it – although it did take until Survey 3 before we started to feel comfortable and relaxed – and for that matter, we were still tweaking the survey and its programming code during the final assessment period.
Questionnaire Validation

Validation is More Than Just Testing

1. Use a structured approach to cover all aspects from the data collection and participant’s viewpoint
2. Use flow charts to map out all the possible paths through the questionnaire (Monte Carlo approaches are very expensive)
3. Verify functionality using different technologies and software
4. Re-check entry, re-entry and exit procedures again after all other changes have been made
5. Design a tool kit for the persons doing the validation work

Validating a survey before going live is much cheaper than providing help to participants

Similarly, we evolved our testing and validation protocols. The validation must include all 5 aspects. As we conclude, validating EVERYTHING before going live with each survey is much cheaper than providing help to participants.

Other Chapters in Part III (especially 8 and 9) provide more details on the scheduling of tasks and protocols used for that testing and validation.
Help is Expensive

<table>
<thead>
<tr>
<th></th>
<th>Base Cost</th>
<th>Help Once</th>
<th>Help Twice</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Line</td>
<td>$5</td>
<td>$17.50</td>
<td>$30</td>
</tr>
<tr>
<td>In-Office</td>
<td>$50</td>
<td>provided</td>
<td>provided</td>
</tr>
<tr>
<td>Paper</td>
<td>$40</td>
<td>included</td>
<td>included</td>
</tr>
</tbody>
</table>

Having participants use their own machine and complete surveys “elsewhere” is a great cost saving (and retention builder), but if you have to help people, these savings are quickly eroded.

We estimated the base staffing costs of three types of completed surveys (i.e., not including the reimbursement the participant received)–and then we estimated the costs if an on-line completer ran into difficulty.

Helping people is a necessity but expensive. There are emails and phone calls to connect directly with the participant; there may be contacts with U of L IT staff to troubleshoot the problem; there may be other analyses to sort out the matter; there is likely time to mitigate the participant frustration; and then there are data entry case notes to be written. These are all time-consuming. . . And, if the participant encounters another problem, the impact is compounded.

A robust and well-functioning survey instrument is certainly worthwhile!
6.7 Our Help Screen

Make Help Easy

Key help messages
1. Don’t worry
2. Try again in a few minutes
3. Try re-starting your computer
4. Call us 😊

The approach we now use

We now have four Technical Support Messages – they may seem basic, but we got here by Survey 3.

Sometimes participants call us to tell us they like our Help Screen. It is easy to understand and it works😊. It is better for retention to have those phone calls than to wait until a participant gets frustrated and we have to call them to find out why they abandoned a half-completed questionnaire.
Brand “X” Survey

The help menu has:
• 2,579 words
• 187 paragraphs
• 485 lines

It’s technically very sophisticated

We doubt if any QERI participant who needs help would read down to the bottom to see the phone number to call

We took a peak at another longitudinal questionnaire and looked at its Technical Support Screen. We quantified that Help Menu. Wouldn’t you agree that the QLS simplicity is likely to resonate with more participants?
Chapter 7: Longitudinal Survey Completion Options

7.1 Why Include Options for Survey Completion

Longitudinal survey completion is not a particularly rewarding way for people to spend time—in fact, many research participants describe the task as emotionally draining, somewhat boring given the repetitive questions, and time-consuming. Many participants push themselves to complete the subsequent surveys simply because they signed up and committed to do them and they want to honour their word.

Given this backdrop of motivational challenges, it is important to provide a range of ways by which the longitudinal survey can be completed. In this way, participants may use different options during the various survey periods, possibly minimizing their boredom.

To ensure that all recruited people can participate, if they so choose, it is important to maximize convenience, minimize unnecessary travel, and accommodate special needs and personal circumstances (while not compromising the scientific consistency of administration). An inclusive approach requires that a project think outside the box in order to provide as many options as possible for completing each longitudinal survey. The following options were offered by our project:

- Secure, online, internet access from a computer of the participant’s choice e.g., home, office, family or friend’s home, internet café or a local library/school. This allows for 7x24 hours of access.

- Secure, online, computer access at the Project Office. Provide many computers, with screening and distance for privacy of use, and ensure that the office hours are extensive with offerings in the morning, afternoon, evenings and week-ends. Consider the demographics of your participants in order to estimate the most suitable number of days per week, which specific days each week and the specific time periods each day to be open. The staffing budget will provide the maximum coverage parameters.

- In-office, one-on-one assistance for participants who are willing to use the office computers but who may have special needs that limit their ability to use the computer unassisted e.g., fine-motor limitations, vision impaired, fearful of computer technology. This may mean that the project staff does the data entry: it also requires considerable privacy of the work area so that the participant’s answers can remain confidential and other participants are not disturbed by the staff help. If at all possible, try to schedule appointments during low volume times, for those participants requiring one-on-one assistance.

- Paper version of the on-line survey questionnaire, for any persons who refuse to use the computer technology, no matter what degree of assistance the staff provides.
Part III: Specific Tools

7. Completion Options

Note: With this latter option due diligence for data entry is required to ensure the confidentiality of the client data. We recommend that either management does the data entry or that management enters the personally-identifying data and then a Research Assistant completes the remainder of the data entry. Data entry should be completed as soon as possible, locked up if not done immediately, and then the questionnaire shredded as soon as the data entry has been completed. Longitudinal research data is so detailed and the project will fail if there is a breach of confidentiality.

- Paper version can also be used for out-of-country or out-of-province participants who will not return within the assessment period, who do not have computer access but who are willing to complete and mail back a completed questionnaire. In some situations of hospitalization or medical issues (time-limited), our project also offered the paper survey.

- Project staff travel to a participant’s house to assist with the survey completion on a computer. This option was used sparingly, and not advertised as an option. Under very unusual circumstances (e.g., participant age, injury, health) it was employed and only if it seemed that there were no staff safety and security risks. The project needed to determine if there were staff insurance issues prior to introducing this practice.

- Project staff travel to defined public locations at scheduled times to facilitate survey completions in more distant sectors of the longitudinal research catchment area (i.e., essentially replicating the services of the project office, at defined times in defined communities - thereby reducing participant travel, in order to increase survey completions)

Participant special needs can be linked to mental health issues, self-confidence/esteem, and fears. With active listening to all reluctant participants, project staff was able to design a way to administer the longitudinal questionnaire in a way that accommodated the special needs of the participant.

Throughout the five assessment periods, given changing life circumstances, confidence and self-esteem, some participants used a number of a survey options. This flexibility served the project well.

7.2 Track the Use of Each Longitudinal Survey Option

Monitoring the use of the various options for longitudinal survey completion is important. Try to ensure that 80% or more of the surveys are completed without any direct involvement by project staff. A good rule of thumb is that the greater the degree of staff assistance, the less frequently the approach should be used.

The integrity of project data can be compromised when efforts to ensure participant inclusion moderate the answers by a participant.
Chapter 8: Assessment Period Planning

8.1 Introduction

Longitudinal research is fundamentally a study wherein a series of repeated assessments with the same cohort participants and the same assessment questions are administered so that patterns of behaviour and attitudes can be examined over time. This suggests that with each assessment period, the project can dust off the previous assessment instrument and reactivate the previous procedures, practices and timelines, and as long as the participants can be contacted, they are likely to perform as they did the previous time.

But that experience does not align with human behaviour. Longitudinal research is challenged by boredom factors and life circumstances.

While planning for subsequent assessment periods may appear formulaic or prescriptive, that is not the experience of this project. Rather, implementation plans for each assessment period have been a thoughtful list of ideas, matched with a full understanding of what worked and did not work effectively in the previous assessment period, plus knowledge of the budget realities for this assessment period and the hours and days of the week availability for work by each staff member.

The overarching guideline for planning an assessment period is flexibility and adaptability. The project team must embrace a willingness to change strategy or action, on a moment’s notice, when the process data indicates that change is required. Flow with the ideas, as success emerges with careful tracking and analysis. The planning is fluid; the implementation is dynamic.

8.2 New Priorities Resulting from the Previous Assessment

At the conclusion of each assessment period, it is likely that the expert advisors will meet with the PIs and project office staff to review the process outcomes from the previous assessment period. Suggestions for improvement/change may be determined.

Through attentive listening to the project participants, subtle changes may be recommended in order to demonstrate that the project welcomes input.

The research design may include unique features in defined assessments and these, no matter how complex, are welcomed by the participants. Any noticeable change to the longitudinal questions serves to reduce the participant boredom factor. Other subtle ways to reduce participant boredom are to change the background colour of the questionnaire pages, the questionnaire font, the page layouts of the survey instrument, or to introduce process comment questions to inform the project staff about the processes they are using to administer the study.
Part III: Specific Tools

8: Assessment Period Planning

Ethics Committee approvals must be adhered to in longitudinal research, so there may be very little room for instrument adjustment or change. If major difficulties have been encountered in earlier surveys, it is important to make an application to the Ethics Committee for changes in the subsequent assessment periods. This must not be ignored, as cohort retention is likely to be compromised, if not addressed.

During the 3rd assessment period, the questionnaire included testing to benchmark each participant’s IQ. Many participants loved these “spatial recognition puzzles” and requested that subsequent questionnaires similarly include questions that were equally challenging—they suggested number puzzles. This did not occur as the bench-marking was a one-time inclusion. Participants strongly expressed that they were glad to have something very different to contemplate within the annual assessment.

All scientifically acceptable efforts/innovations to make the assessments seem different than earlier assessments will generate participant support and a willingness to stay with the research initiative.

8.3 An Operational Model for Planning the Assessment Period

Based upon the process analyses and outcomes of the project’s 3rd assessment period, the project determined a predictive model for participant survey completions (within individual assessment periods). It was tested again during the 4th assessment and due to some unexpected community and project matters the project experienced some slippage at levels 4 through 6. The predictive model was again studied and substantiated during the 5th assessment.

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21 **PI Note:** One of the relatively unique features of the QLS project is the effort that was spent on collecting and storing in electronically analyzable format data on the assessment process (e.g., the dates different types of notices were sent out, when individual questionnaires were started and finished, when phone calls were made and what messages were given and received, etc.). The data will be of considerable value to those charged with understanding the response process, and designing the most cost-effective and efficient methods of utilizing different tools to enhance this response.

Some of these data are captured in the main file containing participant’s answers to the longitudinal questionnaire; some is kept in a separate “contact database file” (described later, especially in Chapters 10 and 11 of this report).

To date, these data remain largely untapped. However, the current section of this report begins to demonstrate the potential worth of the data (from the contact database) by presenting the results of some on the initial analysis done by the Quinte team. Hopefully, further work will be undertaken to verify and extend such results.
### Planning Scenario

**for a Cohort of 4,000 and a 3 Month (5 sub-level) Campaign**

<table>
<thead>
<tr>
<th>Level/# of Sub-Campaign</th>
<th>Staff Action</th>
<th>Elapsed Weeks (Cumulative)</th>
<th>Participants Remaining Un-Resolved at end of Sub-Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None—some people complete before they get an invitation</td>
<td>0</td>
<td>3,993</td>
</tr>
<tr>
<td>1</td>
<td>Mass (personalized) invitations by email (preferred) or letter (expensive)</td>
<td>5</td>
<td>1,600</td>
</tr>
<tr>
<td>2</td>
<td>Mass (personalized) reminders by email (preferred) and/or mail (expensive)</td>
<td>8</td>
<td>640</td>
</tr>
<tr>
<td>3</td>
<td>Telephone calls (Did you get our invitation?)</td>
<td>11</td>
<td>256</td>
</tr>
<tr>
<td>4</td>
<td>Telephone calls (Can we help?)</td>
<td>14</td>
<td>102</td>
</tr>
<tr>
<td>5</td>
<td>Missing—can’t find, etc.,</td>
<td>17</td>
<td>41</td>
</tr>
</tbody>
</table>

The following chart, prepared by analysing 150 persons that completed Survey #3, prepared by Belleville staff for the annual project review meeting shows their perspective of the level of effort required to resolve issues with the cohort.

![Level of Effort Required to Resolve Issues](image)

*Note:* Resolution does not always correspond to a completed survey. The participant may have died, withdrew, skipped a survey or remains lost.
This predictive model is of considerable assistance in project workload planning. For example, if the study knows a 62% response rate will generate enough data to inform the research, then the project could distribute the first invitation to the cohort and take no further action. This would, from a staff perspective, remove almost 90% of their work.

8.4 Tentative Timelines and Targeted Tasks

Eleven target dates for specific tasks are especially important.

1) **Immediately following each assessment period**—from the data that has been collected and the team’s memory—analyze the retention strategy processes and data and quantify everything. Determine how many letters or personalized Invitations-to-Complete can be prepared per hour and how many staff are required to perform each task; determine the call rates per hour for the phoning campaign; determine the popular hours for drop-in participants; determine the popular hours and days of the week for participants with special needs; and determine the number of compensation cheques that can be processed per hour. All of this time-and-motion information is especially important to anticipating the timelines and resourcing for the subsequent assessment period. It is also very important to do this immediately following the assessment period, as it is shocking to see how quickly the experience is forgotten, the electronic file names and folders are forgotten, and the things that seem so obvious and familiar are completely lost from memory. And this reality is magnified when staffing is part-time or assessment-specific.

2) **Mid-way between the assessment periods**, this project prepared and mailed a Newsletter to all participants (See Chapter 15 and Appendix A). This required one week of staff time. The content was upbeat and friendly—its purpose was to keep the participant interested and aware of the project. It also helped to keep the participant addresses current as emailed newsletters would bounce back and Canada Post-mailed newsletters would be returned to sender, if undeliverable. This in turn afforded the project a few months of lead time to contact the participant and update their contact information.

3) **Three weeks before the launch of an assessment period**, the participant file of contact information was refreshed and divided into randomized Batches (250 participants each) based upon the survey completion behaviours during the previous assessment period. This re-sorting facilitated communications with the participants, as the same messages could be used for participants in each batch—of course, each communication was personalized/individualized but the message remained constant.

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22 Examples of these newsletters and all other types of correspondence mentioned in this section can be found later in Chapter 15 and Appendix A.
4) **Two weeks before the launch of an assessment period**, the RA staff returned to work full-time. Workstations were set-up, the survey, website and data interface systems were tested and validated, and the production and distribution of Invitations-to-Complete began.

5) **Two days before the launch of an assessment period**, assuming that the testing confirmed that the systems were functioning as designed and that the survey site was live, the project mailed (for the in-office participants) and emailed the first batches of invitations. This ensured that survey completions could begin by the first day of the assessment period.

6) **During the assessment period**, this project offered office hours, six days per week, for the first six weeks of the assessment period (November 1st to about December 12th). During this 6-week period, no appointments were necessary—participants could drop-in and complete. They were welcome to book an appointment, if they wished.

   This project invited all special needs participants to come to the office during this early time of the assessment period. (Note: we hoped they would come before winter snow and ice complicated travel.)

   During this 6-week time period, we always had healthy snacks (e.g. fruit, cheese, crackers, coffee, water, juice, tea, candies and cookies (including sugar-free options)) set out beautifully to encourage participant relaxation, consumption and conversation. Many participants expressed their appreciation for the thoughtful food choices - especially those with health concerns such as diabetes.

   We strove to have all 4000 invitations-to-complete distributed in that same 6-week period. During the 3rd assessment we completed the distribution in 5 weeks, during the 4th assessment we completed the distribution in 4 weeks, and during the 5th assessment we completed the distribution in 3 weeks. This was our maximum speed as we wished to ensure that our completers’ compensation cheque distribution timelines were not compromised (our participants had come to expect that their compensation cheques would be processed and mailed within 48 hours of their survey completion).

   With this annual distribution strategy, the project could mail a postcard of Seasonal Greetings to all non-completers, in the two week period from December 12th to New Year’s.

7) **In January (i.e., month 3 of the assessment period)**, the office was open 5 days per week (Monday to Friday) for appointments with special needs participants, and we were pleased to provide appointments in the evenings or on week-ends, when requested. Reminder emails (to non-completers) were sent throughout January, scheduled 21-24 days after their original invitation was sent.

8) **In February (i.e., month 4 of the assessment period)**, the Phone Campaign was initiated and the focus of the call was a friendly, upbeat and quick call to confirm that the participant had received our Invitation-to-Complete. The project did not leave messages with these calls, as it was important to speak directly with the participant. By the time the Phone Campaign was initiated, we expected that each batch of participants would be over 85% complete.
In most of our assessment periods, we were over 88% complete when we initiated the Phone Campaign.

Prior to dialling the phone, we always studied the contact notes about each participant. We also reviewed their past practices with regard to doing the earlier assessments - had they encountered problems, did they complete quickly, had they required multiple contacts before completing, had they come to the office etc. We had to be prepared before dialling the phone.

At no time during our phone campaign did we use words like: “we are calling to remind you. . . “, or “we are wondering when you might expect to have your survey completed”. We always tried to have something new to communicate and the real focus of each call was to listen to the participant—sometimes we picked up clues, sometimes the participant would talk themselves into completing the survey and even by a particular date, or sometimes they were reluctant about something in our study and needed to talk about it—directly or indirectly. Our sequence of messages went something like this:

1st call—calling to make sure you have received our notice that the next QLS survey is ready. No further questions were asked. Our call attempts were at different times of day, night and weekends until we reached the participant. (This is usually confirmed quickly and we thank them and wish them a great day or evening. We never wanted to take unnecessary time from the participant and we really wanted to emphasize that we had only one objective for our call.) We have noticed that, after this 1st call, some participants log on and complete, even when we have not spoken to anyone in the household—presumably prompted by Caller ID or Missed Calls logs.

2nd call—this was usually 2 weeks after we spoke with them the first time, if the participant had not logged on to start the survey again, we continue to call until we reach the participant - we do not leave messages [unless the person who answers the phone comments that they have noticed that we have called a few times (missed calls ID) and they are aware of the QLS project survey being underway; or the contact notes confirm that we have had cordial conversations during other assessment periods, and their message machine confirms that we have reached the correct household].

The purpose of our second call is to determine if the participant has everything they need to complete the survey or if there is anything we can do. Our objective is to listen to whatever information the participant shares with us.

We would say something like, “I am calling in follow-up to our conversation on ‘date’. I am wondering if you have any questions or if there is anything I can do to assist you?” And again we listen. Sometimes the participant might mention that they accidentally deleted our email and so they would like us to resend the survey link and the password recovery link. Sometimes we hear that the computer had a virus and it was at the fix-it shop. These were wonderful opportunities to encourage an office visit, to mention that they could do it from any computer including the local library, or if there were travel or health issues, we offered the mailing of a paper survey (and the stamped, addressed return envelope). We would usually
conclude this conversation with something about “we will check with you in a few weeks to see how you are doing”. Sometimes knowing that we are not about to give up on wanting to help them complete this survey prompts them to complete.

Note: the examples in the last paragraph are typically “social politeness” and the real intent is to keep the person talking until they can either talk themselves into doing the survey or explain the real reason why they cannot face doing the survey.

This project determined that the average call rate was 17 calls per hour and that tended to yield 3 survey completions. The Phone Campaign was very tiring work—and the project, by tracking our hourly activity and participant outcomes, determined that 4 hours of phoning was all a caller could do and remain effective. After that time, the call rate dropped off but more importantly, the successful impact of the calling dropped off—perhaps it is the voice, the energy, the concentration to listen and pick up on clues from the participant, or maybe it was just the nature of the day and the participants were feeling non-responsive.

If the call rate was less than 12 calls per hour, we did not proceed. It was a waste of project resources. Staff took on another task, called it quits for the day, et cetera, and resumed the phoning the next day when refreshed.

Under ideal circumstances, this project strove to conclude the assessment period in 4 months. The project tended to be at 91 or 92% retention at that time. Our budget was adequate so we were able to continue a modest phone campaign into the 5th month. This additional time allowed us the opportunity to locate and encourage more stragglers to complete their assessment—sometimes we felt that the participant completed just so they would not have to hear from us again. Others seemed to love the ongoing calls of encouragement—perhaps they were lonely, but eventually they seemed to reach a point where they felt they had taken enough of the project time and they logged on and completed the survey. All of this “End Game” work was so individualized and so linked to the participant’s life issues. Survey completion was a priority for the project—not for the participants. It was paramount that the project’s sense of urgency was not transferred to the participant—the project’s messages were always calm, friendly, filled with humour (when appropriate), and encouraging. Staff frustration for non-completion must not be felt by the participant—if felt, the participant may opt to withdraw from the study.

Alerting participants to a “drop-dead date” after which no more survey completions was possible did not seem to yield an upsurge of completions. Again, it was a factor felt by the project but it appeared that for some stragglers, they breathed a sigh of relief that after that date, they would not have to hear from us again, or make excuses for their delay.

11) The day the survey (assessment period) closed, we put a message of thanks on the project web-site, and on the automated phone message system of the project office. Within the following few weeks, we placed a Notice of Thanks in the newspapers throughout the region. This informed the public and the participants that the assessment period had concluded and extended our appreciation for their support, and from time to time, it also prompted lost/missing participants to contact the project office, and provide their current contact information.
Our predictive model demonstrates that if the project did the first 12 weeks of the assessment period (i.e., this included the 2 weeks of assessment preparation time) effectively, then at least 62% of the participants completed their assessment without any additional effort. The cost-effective reminder emails/postcards/mailings delivered at least 23% more completions. Months three and four were more complicated but with gentleness, friendliness and attentive listening, they generated up to another 10% completions. Over 90% retention is readily achievable.

8.5 Track Everything! And Adjust Tasks with Confidence

We observed that every project activity must be tracked. If the action is going to be taken, we figured out how to measure it and did so. We monitored the timing of participant actions following each project action. If words or messages were changed within a project communication, we observed whether or not there was an impact on the timing of participant responses. This project found that one word or one phrase in the subject line or opening sentence of an emailed communication affected participant response.

By measuring and analyzing everything, project staff could adjust their approach/content/timing/activity quickly, in order to sustain a desired pace of participant response. Having process data allowed the project staff to adjust or tweak their activities with confidence and haste. This reality was known as “the project office staff having their hands on the throttle”. And it worked...

By tracking everything, the subsequent assessment period had a rich data resource to inform its planning and decision-making.
9.1 Introduction

As mentioned in earlier chapters/sections, longitudinal research is not usually spread evenly across the calendar year. Rather, the majority of the work is clustered in the annual assessment period and in the weeks leading up to and immediately following the defined assessment period.

In keeping with that reality, the majority of project staff is not likely to work during the between-assessment-periods and therefore the project computers and systems may be dormant during those times. Our project experience is that all project technologies and systems must be carefully examined before the launch of a subsequent assessment—gremlins do seem to get into the technologies, and upgrades of linked systems may have surprising impacts (and regrettably where least expected).

Directing attention to every possible quirk that can be imagined is well worth the project’s time and cost. Retention rates of longitudinal research can be easily negatively affected if project participants are frustrated by survey instruments and technologies that do not perform as designed. System crashes, error messages, processing delays, confusing language, inconsistent formatting, complicated instructions, distracting information et cetera, can be the straw that breaks the camel’s back, the frustration that pushes the participant over the edge, or the irritant that causes the research participant to withdraw from the study.

A positive survey experience, on the other hand, can positively affect retention rates.

9.2 Scheduling Testing and Validation Activities

It is the experience of this project that at least 10 days of rigorous testing, validation and time to debug the problems are required prior to the launch of an assessment period. Delay an assessment launch if problems persist, because once the project participants are frustrated, it is difficult, if not impossible, to lure them back. It is much easier to catch up on a delayed launch (awaiting perfection in the systems), than it is to recover from frustrating/problematic false starts.

The initial testing / validation of the survey questionnaire before and during the launch of the QLS Project were performed using a Monte Carlo approach, with the testing team creating and signing in with fictitious names and personalities. These test surveys could be deleted by the University of Lethbridge IT staff. Since the project staff was newly hired and not familiar with either longitudinal surveys, or with problem gaming, this approach served a number of purposes including:

- Training staff on questions relating to gambling issues

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Part III: Specific Tools  

9: Testing and Validation Processes

- Finding interpretation problems in the survey and learning how to address potential question that might arise
- Finding logic errors in the survey
- Finding areas where participants might have technical difficulties and learning how to address these, and
- Identifying coding problems.

Including the two principals (PIs), seven people tested the questionnaire dozens of times over a period of six weeks, both in the Belleville Project Office and on their home computers.

Major issues were encountered and even simple questions like, “What is your address?” or “What is your name?” were issues that had to be resolved.

Despite this intensive effort and work in re-formulating questions and in re-writing code, there remained problems throughout the first survey. This lead to a re-thinking of the way testing/validation was conducted.

Beginning in Survey #2 and fully developed by Survey #3, a new approach was taken. This was based on the construction of a flow chart (branching) for the entire survey instrument and the fostering of a close working relationship between the front-line and programming staff.

The paper version of the survey had 56 pages of questions in 9 point font; consequently, the initial flow chart was huge - about 9 feet long when drawn out on sheets of paper. Nonetheless, this became manageable with the realization that each section of questions was a self-contained module.

The flow chart was therefore split into:

- A master containing the entry, exit, completion and resume routines, and the call routines which determined if a particular “module” was relevant to and should be asked of a particular participant; and
- A flow chart that described the questions, how they were presented to a participant, allowable responses and the paths to be taken within a module.

To use this new approach several enabling pieces of technology were required:

1. The establishment of twelve permanent “Testing Accounts” that behaved exactly as normal accounts (except any answers were not collected for statistical analysis).

2. A tool to create a history file for each test account. This enabled the functions that displayed and updated information such as name, address and medications to be tested and validated.

3. The ability to move the entry point of a testing account to any point in the questionnaire instead of starting each one from the first question. (In practice, it was quickly found that

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24 While city dwellers have only one address, in the Survey Area (which was mostly rural) participants often had three different addresses: Municipal, Postal and an Emergency 911 address.

25 The participant’s name on their birth certificate, the name they use day-to-day (essential for telephoning) and the name to be used on a participant compensation cheque.
each new test should start at a module entry point, joining in the middle of a conditional branching section gave the results one would expect).

4. A “re-set” function that set all the values of a test account to a zero value or a null string and allowed a new name and password to be created.

While the investment in developing these tools was not trivial, their use had substantial benefits. The new tool kit reduced the time needed to validate the survey, after the flow charts were updated, from weeks to only one or two days. In addition, the test accounts were used as a batch to test the system programs that sent invitations, scheduled appointments, sent reminders, printed cheques and monitored survey progress.

An additional use of test accounts was as an emergency fall back for use if a participant was getting frustrated or discouraged by being locked out of his or her account and it was not possible to resolve the problem immediately.

Although seldom used (e.g. 5 - 10 times during the project), Belleville staff were able to use this feature to get participants--who might otherwise have abandoned the project--back on-line in minutes and able to complete their questionnaire. After the participant had completed their answers, U of L IT staff electronically transferred the data to the correct place in the survey data table and re-set that test account.

One of the test accounts was also used to monitor the response time of the QLS Project server at U of L. While participants typically took an hour or more to complete a survey, it was found that staff members who were familiar with the survey could complete one much more quickly and, more importantly, in a very consistent time. Typically, when the project server at U of L was working correctly, the variability in the time to complete a survey was less than a minute. Because response by the U of L server had been a serious issue during Survey #2, during the following survey periods, the server was tested in this way every week or whenever a problem was suspected.

9.3 Survey/Systems Validation and Testing Protocols

During the five (5) assessments of this project, we evolved an increasingly sophisticated set of validation and testing protocols. These were compiled into a check list at the start of each survey period and, as individual project staff skills improved and testing tools were developed, allowed many of the validation tasks to be assigned to individuals and performed in parallel. This was a major factor in reducing the test/validation period from many weeks to a few days. The following check list example was developed at the start of Survey #4.
### Validation and Testing Protocol: Example

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Reason</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review paper questionnaire</td>
<td>Staff to familiarize themselves with changes from previous survey</td>
<td>Look for oddities</td>
</tr>
<tr>
<td>Review QLS cohort survey table</td>
<td>Mainly used as a reference document</td>
<td>Look for oddities</td>
</tr>
<tr>
<td>Run through on-line questionnaire</td>
<td>Staff to re-familiarize themselves with the survey (given summer break)</td>
<td>Look for oddities</td>
</tr>
<tr>
<td>Construct questionnaire flow chart (logic)</td>
<td>Validate logic flow in main document used to test on-line questionnaire</td>
<td>Information retrieval, Branch points, Conditional statements, Multiple choice areas</td>
</tr>
<tr>
<td>Test Questionnaire</td>
<td>Make sure the on-line survey works.</td>
<td>Verify that branches work correctly, Verify conditional statements give “reasonable” responses (it may not be possible to test all permutations and combinations), Verify that pages with radio buttons or check boxes function as expected, Verify that there are no typos or confusing instructions on each page, Review the appearance and instructions on each page with respect to clarity of layout, Verify that any “type in” fields do not crash when special characters are used, Verify that the page colours are correct (blue for Quinte data, yellow for Lethbridge data)</td>
</tr>
<tr>
<td>Validation and Testing Protocol: Example</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td><strong>Reason</strong></td>
<td><strong>Actions</strong></td>
</tr>
<tr>
<td>Log-in procedures</td>
<td>Make sure that participants can get to and log-in successfully</td>
<td>Verify that access from the main qeri.ca site is obvious and easy to follow&lt;br&gt;Verify that the email link set-up takes people to the correct page&lt;br&gt;Verify that the get-in from <em>forgotten password</em> page works correctly&lt;br&gt;Verify that passwords that were emailed during the earlier survey will open the current survey&lt;br&gt;Verify that access works from home pages of key internet service providers in project region. Are they obvious and do they work.</td>
</tr>
<tr>
<td>Data transfer</td>
<td>Make sure that data is correctly transferred from the survey to the contact database tables</td>
<td>Verify that the D1 &amp; D5 blue screens populate the correct database fields for review by project office staff before transfer&lt;br&gt;Verify that the D16a, D16b, D19 &amp; D20 blue screens correctly transfer all the fields to the database and show up on the screens&lt;br&gt;Verify that required changes trigger a notification on the reports_infochange.cfm page (and that other changes don’t)&lt;br&gt;Using completed test questionnaires (000-000-0001 to 0015), verify that the data collected and exported makes sense. This must be tested at U of L.</td>
</tr>
<tr>
<td>Verify that the re-login (i.e., resume) works</td>
<td>This is quite a common procedure and should take a participant back to the last page they were using</td>
<td>Verify that access from the main qeri.ca site goes to the right page&lt;br&gt;Verify that the email link setup takes people to the correct page&lt;br&gt;Verify that the get-in from <em>forgotten password</em> page works correctly</td>
</tr>
</tbody>
</table>
### Validation and Testing Protocol: Example

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Reason</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verify that the “Stuck in Loop Zero” has gone</td>
<td>Being stuck there drives everyone crazy 😊</td>
<td>Testing requires imagination 😊</td>
</tr>
<tr>
<td>Verify that the Save and Resume feature works correctly</td>
<td>People get disconnected for a variety of reasons. Watch for how the new session is (or isn’t) validated. On a random page, test the following:</td>
<td>User initiated normal exit System crash (Windows lock up) System crash (Browser lock up) Lost internet connection Questionnaire time out</td>
</tr>
<tr>
<td>Verify that the end-of-questionnaire process works correctly</td>
<td>A lot of things happen here and they should all happen in the correct sequence. This testing must be done at BOTH the Quinte Office and Elsewhere locations.</td>
<td>Things to check (there may be others): The In-Office / Elsewhere branch is functioning correctly The ALT block kicks in on the right page Verify the right email has been sent Verify that the “Completed” flag is set at the correct point/page to prevent re-login (check this with pre-validated sessions as well as re-logins) Verify that end of session data is transferred to the contact database tables Verify that the correct people are flagged as either having been paid or appear on the cheque print queue (and disappear after their cheque is printed/posted) Verify that keying in paper questionnaires does not trigger odd responses by the system (example: people may have been issued a cheque before the questionnaire is officially completed)</td>
</tr>
</tbody>
</table>
### Validation and Testing Protocol: Example

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Reason</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Survey data capture verification</td>
<td>When people complete paper questionnaires, it’s different.</td>
<td>Suggestion: Complete three different paper questionnaires (common mistakes and skips acceptable) and have someone else key the responses in and see what happens</td>
</tr>
<tr>
<td></td>
<td>This caused a lot of aggravation (and wasted time) in previous surveys.</td>
<td></td>
</tr>
<tr>
<td>Check <em>odd ball</em> situations</td>
<td>We know from previous surveys that people do odd things. While it isn’t worth writing code to address these, staff should be aware of them and know how to fix them.</td>
<td>Known issues include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multi-session logins that produce duplicate records or surveys with skipped areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Log in to start survey using an ID that has been flagged as dead or withdrawn.</td>
</tr>
<tr>
<td>Browser and Operating System but not Java testing</td>
<td>Participants use a wide variety of computers and software to complete the questionnaires. Since we had no known Java or Browser issues in Survey #3, and we were confident the U of L IT department would not introduce new features in the middle of a project, we were confident the survey would run smoothly on participant machines. But, we tested it anyway – especially with the Operating Systems and browsers that have been introduced since the previous survey. One participant completed Survey #3 on her Blackberry, a first for us.</td>
<td>Based on what we know, see test table below. (Note: we don’t believe that Java or OS are likely to pose significant issues although browsers do. This project had definite preferences for using different browser / web site combinations.)</td>
</tr>
</tbody>
</table>

The Belleville project office was equipped with 10 public workstations and 3 staff workstations, printers, etc. It took several days of work prior to the assessment period to test this set-up. In addition to the survey instrument / website / database /database interfaces testing, the Belleville office network was thoroughly tested.

This included: troubleshooting software, installing software updates, renewing anti-virus software licences and protections, running cleaning programs on all computers, testing /printers and thereby re-establishing confidence that the project technologies were in good working order.
While most of this testing could be undertaken at the Belleville office, some of the testing needed to be done off-site, both from the homes of staff members and at the University of Lethbridge.

### Distribution of Longitudinal Survey Options Used

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online from Home, Work or Friend's Computer</td>
<td>84.95%</td>
</tr>
<tr>
<td>Online from Project Office</td>
<td>12.0%</td>
</tr>
<tr>
<td>1:1 Assisted at Project Office</td>
<td>2.0%</td>
</tr>
<tr>
<td>Paper Survey</td>
<td>1.0%</td>
</tr>
<tr>
<td>Home-visit</td>
<td>0.05%</td>
</tr>
</tbody>
</table>
10.1 Introduction

There is a lot of data in longitudinal research—research data collected from the participants and required by the research team, contact information (for keeping in touch) collected from the participants and needed by the project office staff, time and motion study data to determine the best use of staffing to meet the project outcomes, and data to determine best practices for maximizing cohort retention.

The duration of longitudinal research provides an opportunity to design, use, re-design and evolve unique and possibly innovative tools for keeping track of everything. Some of these tools may be paper-based, extracted from the phone or computer systems, while others may be grass-roots development based upon local need.

Feeling buried in paper, or binders of tallies and documentation, or post-it notes is not a calming feeling. A sudden gust of wind, a momentary slip of foot, or a misfiled heap of paper can lead to frustrations, considerable time-wasting and/or errors of calculation.

Time in computer program development is, however, wasted, unless one is very certain about what needs to be collected. Starting with concepts and paper-based tracking systems—until the project is certain what it thinks it needs to collect is in fact what it needs to collect—is prudent.

As a project masters the development and use of tracking and monitoring tools, it will be motivated and compelled to make the tools interactive, thereby minimizing data entry errors and duplication of effort.

Through careful observation and measurement, a project may be surprised to discover what works and what doesn’t work. There is immense variability. The QLS Project philosophy was to manage its project by meeting unexpected and changing circumstances.

There were three (3) key steps:

- Design each action so that it included a means of measuring the results and/or effectiveness of the action
- Quantify the results from each action
- Design subsequent steps to take into account the results from all the previous actions
10.2 Manageable Size Considerations

The size of the longitudinal cohort can be in the thousands if not tens of thousands of people. That is just too big to wrap one’s head around for day-to-day workload management. As such, it is helpful to divide the entire cohort into bundles/batches.

For a cohort of 4100 participants, the QLS Project chose Batches of about 250 participants, as this was a manageable cluster for preparing bundles of letters for mailing, file size for emailing personalized information to the participants, and telephone call lists (although by the time calling the participants is necessary, the size is more likely to be less than 100 participants per list).

As a project becomes more familiar with the characteristics of its cohort, it is recommended that the batches/clusters be re-aligned/re-jigged to sort high-level similarities. For example, if a percent of the cohort is completing its assessment at the project office, place those participants in the same batch(es), so that the communication strategies for interacting with everyone in that batch are similar. For those who are likely to complete their assessment using the internet from their home, workplace or local library et cetera, place them into similar batches—possibly randomized so that detailed analysis (free of bias) can occur. The sub-groups of Batches are determined by the discrete type of interactions/communications that will be required to facilitate the continued participation of the participants.

10.3 Track Everything

10.3.1 What to look for—and what to adjust to?

One of the challenges in monitoring is that one does not know what to look for, and specific problems are often only noticed as an unexpected by-product of monitoring something else.

Nonetheless it might be useful to list some of the problems our extensive monitoring uncovered, usually before they became so entrenched as to present significant threats to retention. Such a list also demonstrates the high degree of flexibility one should expect will be needed to respond to such unanticipated problems. Examples include:

1. By recording comments from early participants, we identified improvements that could be made to ensure the language of those doing the recruiting would better match those living in the Quinte area. Increasing direct contact and sharing findings (including through site visits) between the telephone recruiters (who worked for an independent firm) and Quinte office staff improved the situation.
2. Early close monitoring of staff fit-to-the-job indicated that changes would enhance the effectiveness of the team.
3. Once a better understanding was developed of the nature of the different project jobs, and the skills and preferences of different staff, significant changes were made to the project staffing model.
4. Monitoring participant comments and response rates—together with Quinte project staff regularly testing the survey response systems—at times identified sluggish computer server response. Calls to—and a rapid corrective response (including purchase of a separate virtual server for the project) effected by the University of Lethbridge Information Technology department—resolved the problem before it discouraged more participants from responding to the questionnaire.

5. Similar monitoring identified the need for remedial software and hardware to correct two bugs in the survey instrument and problems associated with the timing-out of survey pages and the contact database.

6. Being attentive to participant reactions led to changes to the Quinte office lay-out—including changes to accommodate family and friends accompanying the participants and participants with disabilities.

7. Regular discussions regarding the effectiveness of the contact database (e.g., what data was collected, and what information was reported) led to ongoing significant improvements in its functionality.

8. Constant monitoring of respondent behaviour significantly changed previously held perceptions of the degree to which computer literacy had penetrated our target population—and the ease of use and reliability of consumer email and web-browser software and hardware. This resulted in more intensive monitoring and the development of work-arounds for problems stemming from situations such as: participants having emails, but checking them infrequently; participants having multiple and changing email addresses; spam controls on certain email hosts preventing participants from receiving emails; and relaying restrictions on certain ISP’s resulting in mass mailings being truncated without notice.

9. Some 900-plus participants who started with in-office survey completions switched to filling out questionnaires on-line. This caused an unexpected increase in staff time to assist these relatively new-to-the-internet respondents.

10. The Quinte area had the worst winter in 50 years—necessitating intensification in recruitment initiatives and changes to office hours.

11. Changes (at a very important point in the project) in key technical support staff in the U of L University Information Technology department required significant and rapid efforts to hire and orient replacement staff.

12. Ongoing quality management checks of systems noted problems that had to be fixed or had to be circumvented if a fix was not available (e.g., certain contact database features non-functioning, the appointment scheduler essentially non-functioning, vanishing contact database notes).

13. A significant number of participants seemed to file hard-copy mail and emails for later reading—making it important to find a way to distinguish time-sensitive mail from the project.

14. Postings to the Afghanistan War required alternative strategies for securing the responses of CFB 8-Wing (Trenton) participants.

15. Early response difficulties were noted with participants who go south in the winter for as long as 4 months which overlapped with the assessment period and necessitated specialized efforts to maintain the retention rate of these “snowbirds”.

16. Constant attention was paid to monitoring and adjusting Quinte Project office hours and staffing to accommodate variations in the numbers of in-office respondents at different stages in the assessment period, different types of weather and timing of holidays (e.g., winter break occurred within 3 weeks of the start of the assessment periods).
17. We noted an unexpected lack of response to certain strategies—requiring an unanticipated need for (and resources devoted to) alternative strategies (e.g., lack of participant response to increased office hours during the end game, little up-take to certain media announcements).

18. Discernibly different telephone-use patterns that became evident between younger and older participants (with the younger more likely to use cell phones or be dependent on other people’s or group phones) required concomitant modifications to project communication strategies.

10.3.2 What Information to Collect?

Examples of information to be tracked:

- Inbound phone calls
- Inbound participant emails
- Inbound phone messages from participants
- Number of Address Changes
- Number of Email Address Changes
- Turn-around time for taking action regarding and updating participant information changes
- Turn-around time for taking action to resolve complaints or project concerns
- Time of Day For Participant Activity with the Project Office
- Time of Day When Project Staff Initiated Contact with Participant
- Length of Time for Survey Completion
- Length of Time for Participant Action/Response, following Canada Post Mailing
- Length of Time for Participant Action/Response, following Emailed communications
- Length of Time for Participant Action/Response, following Phoned communications
- Length of Time to Resolve Computer-based Participant Issues
- Number of Surveys Completed Per Day
- Number of Compensation Cheques Processed Per Day
- Date When Specific Follow-up is Required/Requested
- IP address of participants (to monitor due diligence regarding fraudulent survey completion or misrepresentation)
- Email Provider (to observe if participants using some providers are experiencing more technical difficulties than those with other providers)
- Browser Choice/Use by Participants
- Partial Survey Completion with time stamp (so that staff can intervene if no further actions by participant)
- Returned Mail Counts and Monitoring of Postal Codes (to isolate postal delivery problems)
- Special Needs of Participants (to maximize opportunities for Project staff to provide support/service)
- Reasons Why Participants Want to Complete Paper-Based Questionnaire (rather than online)
- Problematic Questions within the Research Questionnaire (to de-bug language, format, instructions or computer programming)
- Etc.
10.3.3 How Can the Information be Tracked?

Examples of how this project tracked information:

- Binder of paper print-outs of the participants who died during the assessment period
- Piles of Returned Mail Envelopes sorted to show the status of resolved or actions taken but not yet resolved (e.g., outstanding phone message, et cetera)
- Binder of paper-print-outs (sorted by date) of participants requiring unique follow-up action
- Google Spreadsheets (see the following two Figures). They were completed after midnight each day during the assessment period. These spreadsheets showed the number of completed assessments per . A colour-coded overlay on the spreadsheets noted the date when the notice to complete the survey was mailed, the date when a follow-up email was sent and any other batch-based communication that was used.

These Google Spreadsheets rolled up the daily data into bar graphs that showed the percentage completed per batch. As well, the graphs changed colour as they reached pre-programmed completion levels (e.g., light blue at 80%, red at 92%, gold at 95% and bronze at 100%—and yes, the QLS project has enjoyed batch completions that turned bronze®).
### Part III: Specific Tools

#### 10. Planning & Monitoring Tools

Google Daily Catch Sheet (Tab 1)

![Google Daily Catch Sheet](https://docs.google.com/spreadsheet/ccc?key=0AhGu3GcbQnikudFM3amNvenvrRmVtrHdLbFqSIE#)

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**QLS Manual: Achieving a 94% Retention Rate:**

Page 87
Part III: Specific Tools

10. Planning & Monitoring Tools

Google Daily Catch Sheet (Tab 2)
• Telephone Call Lists using Google Spreadsheets. These allowed the project to quickly calculate how many phone calls to participants had been completed during a time period/work shift, how many times we spoke to the participant, how many times we spoke to a family member, how many times we left a message (we preferred not to do this, as it had a low rate of participant action), time of day when we placed the call (e.g., morning, afternoon, evening or the week-end) as we wanted to ensure that we tried different times of day and days of the week when contact had been unsuccessful, and whether or not we had also sent an email as a concluding action from our phone contact. Further, an incredibly useful component of the Call List was that it had a hot link (interface) to the participant’s contact and history information in the client database.
  o Listing of all participants who withdrew from the project during an assessment period, and the reason for the withdrawal. This Google document also had a hot link to the participant contact database.

• Mailing Lists that were extracted or downloaded from the database and sorted by postal code or municipality using Excel (required for the printing of mailing labels)

• Start/Finish times of the questionnaire, browser used, IP address and any interrupted survey times. This was a report generated by extracting the timestamp information from the dedicated U of L My SQL server and was analyzed to isolate computer problems and identify participants who may require project assistance

• After the project discovered that it required repeated use of a particular report of extracted information, the script was prepared and it became a Common Report that could be requested by Project Staff at any time—each time it was requested, the data was refreshed.
10.4 Analyze Regularly

If an assessment period is four months in duration, it is likely that there will be at least 12 weeks of intensive, fast-paced work and interaction with the cohort. Minimally, data reports should be generated bi-weekly or weekly, if possible. In this way, the project team can be assured that the project actions are yielding the expected results and if not, through analysis, tweaking of actions/communications or pacing can occur.

Every week is precious, as all longitudinal research requires that the cohort provide its responses within the defined time period and thus project slippage must be minimized.

If a project team has weekly project meetings (or teleconferences et cetera), then the monitoring reports should be produced and analyzed 12 - 24 hours prior to the meeting, so the data is current and if there are problems or concerns that have been identified, discussion for corrective/improved action could occur. For us, this ensured that timely adjustment occurred and the entire project team was aware of the subtle shift (if necessary).

Dependent on the experience and mindset of the project team members, a project may discover that the regular data reports should be graphed, as many people feel that “a picture paints a thousand words”. Watch the slopes and the equations of the data. They will flag the need to collect additional
Part III: Specific Tools

10. Planning & Monitoring Tools

data to provide clarification, or demonstrate the timeliness of intervention, or affirm that all is well. Data is critical to knowing the project is getting the best outcomes from the time and resources.

Collaboration and timely problem-solving or re-jigging maximized our project outcomes.

More comprehensive reports and data extractions are likely to be needed monthly or even every 6 weeks. The generation of these reports may require technical assistance, although a project may have access to PhP data extraction and analysis programs such as Navicat software. With practice and its user-friendly on-line manual, they proved to be a worthwhile data extraction tool for this project.

10.5 Proactive Interventions

At the outset of each assessment period, a project should set out its expectations for mailing/distribution timelines, timeline for 60% completion per Batch, timeline for 75%, 80%, 85%, 90% and 95% completion by the participants. Monitor the project data, and intervene when the upward momentum loses its energy. Don’t Wait! Determine whether it is time for a new/changed contact strategy and, if so, which. Determine if something has gone wrong, and some action needs to be aborted or clarified. Don’t Wait! The slopes of the graphed data and the R2 values will make the need for your actions abundantly clear.

10.6 Linked Monitoring Tools

Project staff time is more effectively used, when the monitoring tools are linked. This reduces the need for repeatedly closing and opening programs and allows staff to toggle between programs. This was particularly helpful when the Phoning Campaign was underway, as the participant often raised questions that were only available in the complete contact database. For example, the participant might ask whether or not they had been paid for the previous survey and the project staff could quickly access that information while continuing to chat or listen. The information could be augmented with the date the previous survey was completed, the issued compensation cheque number and even the date that the cheque was processed and mailed. It was also important to be able to relate participant addresses to points in time, as often the communication difficulties arose when a participant moved while the project was mailing out something.

Linked monitoring tools reduce the need for repetitive data entry, frustration that comes from closing a document without saving the recent changes, errors because of tedium, and wasted staff time.

Project staff needs bells and whistles on their monitoring tools, to add interest and to minimize eye strain and boredom. The QLS Project staff always got excited when a transaction triggered a colour or screen display change, as it signalled that another milestone had been achieved.
### QERI Project Retention Data Model

Retention Rate = \( \frac{\text{PMI} \times \text{INV} \times \text{LSI}}{\text{Function of:} \quad \text{Letter} \quad \$ \quad \text{Family/Relationships}} \)

- **Function of:**
  - Incentive Payment
  - Civic Pride
  - Personal Agenda
  - Letter
  - Email
  - Phone Call
  - Special Mailing
  - Newsletter
  - Health
  - Death/Loss
  - Employment Pressures

**Legend:**
- \( \text{PMI} = \text{Project Motivational Index} \)
- \( \text{INV} = \text{Invitation to Complete the Assessment/Survey} \)
- \( \text{LSI} = \text{Life Stresses Index} \)
Chapter 11: Building Your Cohort Tracking/Management

11.1 Importance of a Customizable Contact Database

- An essential resource to achieving retention success
- Utilized many, many, times a day by each staff member
- Useful for:
  - maintaining effective communications with participants (critical to retention)
  - greatly improving efficiency of office processes
  - cutting down on paper clutter (e.g., sticky notes everywhere)
  - capturing data on the nature and levels of different retention activities
  - capturing data essential to evaluating the effectiveness of different retention activities and strategies (allows far more analysis than possible in other studies)

11.2 Overview of the Contact Database

11.2.1 Key Technical Features

- Hosted and programmed by staff of the Information Technology department at U of L
- Information sources include:
  - selected data entered automatically by participants when filling out surveys (e.g., contact information). **N.B.** the contact database does not contain the vast majority of information from the surveys as that information is confidential and anonymous and is therefore not accessible to the on-site/front-line project staff.
  - data captured automatically by the system regarding participant activity (e.g., time logged on, time survey completed, browser and IP used etc.)
  - data entered manually on-line by on-site project staff in the Quinte Project office on individual participants (e.g., special needs of participants such as immobility, disabilities, animal allergies), updates in contact information, special family situations, all contacts with participant (e.g., phone calls, personalized letters), and "to do" items regarding particular participants.
Part III: Specific Tools

11. Cohort Tracking/ Management

- data entered in batch mode through special automated processes by Quinte Project office staff, to record specific activities undertaken with batches of participants (e.g., date that a communication or newsletter etc. was sent to a Batch of participants).

11.3 Access to Contact Database Information

- All access is password protected
- Host site has multiple layers of security (including separate server)
- Quinte Project office staff can access the information from their computers through a web browser
- Multiple users can access at the same time, from multiple locations
- Access is 24/7

11.4 Design Lessons

11.4.1 Main Lesson:
Value of the database increased significantly when a process was implemented to ensure that Quinte Project office staff had input into:

- defining the specific Quinte Project office day-to-day and planning needs the contact database would address
- defining how the design of the database could most effectively and efficiently fit in with the daily and special workflows of the Quinte Project office
- defining how the design of the database could be improved over the life of the project as staff had more experience with its use.

11.4.2 Other Key Lessons:
- Managing the participant communications and activities for a longitudinal study requires a sophisticated computerized contact management system.
- The special needs of the QLS study meant that one either had to develop a custom-designed system (the option we chose) or buy an extremely flexible and customizable system (seemed prohibitively expensive for the flexibility we needed).
11.5 Contact Database Details (and Examples)

11.5.1 Main Sections

Screen Shots from each of seven key parts of the Contact Database will be presented:

- Contact Status Flags
- Common Reports
- Current Assessment Status
- Current Status
- Appointment Information
- Paper Survey
- Technical Reports
  - Financial
  - Website Information
  - Contact Information Update
  - Web Archived Contact Information
  - Mass Communication History
  - Participants Password Recovery.

11.5.2 Contact Status Flags

Contact Status Flags

On this screen staff could see at a glance, the date and description of all mass communications (letters, emails, postcards, newsletters) sent to the participant—using a batch automated process, these were posted to the participant’s record at the conclusion of each mass mailing. As well, using
Part III: Specific Tools

11. Cohort Tracking/ Management

This screen, staff could indicate returned mail, bounced emails, invalid phone contact numbers (home, work, alternative contacts) and whether or not the participant had special needs—the flags were turned on or off (deleted) by staff, as we processed returned mail, bounced emails after mass emailed communications, or during our phone campaigns.

This screen was always studied prior to any contact with the participant, so we knew the status of our previous contacts with the participant.

### 11.5.3 Common Reports

During Surveys 1 and 2, the QLS Project office was buried deep in paper-based lists, binders and post-it notes. While we were able to keep track of the status of the participant within the notes field of their individual file, we had no systems to alert us to which individual files needed follow-up action.

At the QLS Project Office, we began to design, develop and test some tracking systems that would allow us to prepare and print “to-do” lists that were current in real time. After testing these concepts, and their importance, they were costed-out and the following Common Reports were phased in during Survey 3 as project funds became available.

These Common Reports brought sanity to our re-recruitment efforts as we could confidently know that we were making contact with all the project participants, that we were solving any problems (especially log-in or system computer issues) encountered by individual participants, and that we were doing so in a timely way so that neither the participants nor the project staff were frustrated. With our belief that all participants wanted to complete each survey, it was paramount that we knew that each participant had been contacted and given all the tools needed to complete each survey. And we needed to know with certainty that we were making the process as efficient as possible for each participant as their time was valuable and we did not want the QLS Project wasting it.

The following screen print shows the reports that were developed and which staff could access as needed:

- Common Reports (8)
- Technical Reports (2)
- Financial Reports (2)
Common Reports

i. **Booked Appointment Report** was printed out and used on a daily basis during the weeks of the survey when participants with special needs or a personal preference came to the office to complete their survey. Prior to the start of the daily appointments, staff would review the contact notes for all participants coming to the office that day, in order that we were familiar with any previously encountered issues and so we could interact with the participants in a knowledgeable and friendly way. For participants who did not arrive for their scheduled appointment, we called them after one hour to either re-book the appointment or to encourage their attendance. This early follow-up was appreciated and demonstrated our caring philosophy.

ii. **Participants to Call Back Report** was designed as a daily to-do list. In some situations, the participant (or someone else in their household) may have said the participant would be unavailable (e.g., out of the country, dealing with work pressures, in hospital, etc., for x number of days). We would set the call back flag for the bring-forward date, and the participant’s name would appear on the Call Back Report on that given date. We would review the participant’s notes field to be reminded why s/he was on the day’s Call Back List. This report helped to ensure that we did not miss opportunities to follow up with participants.

iii. **Participants Using Paper Surveys Report** was designed to help us keep track of the participants to whom we had mailed out Paper Surveys. Each mailed paper survey included a
cover letter that provided the date (usually 2 weeks) by which we would encourage them to complete the survey and mail it back to us in the self-addressed and stamped return envelope. Weekly, we would review the Paper Surveys Report to determine if any paper surveys were outstanding for more than three weeks and if so we would call the participant to make certain they had received it. During that call, we would also listen and if there were any uncertainties or concerns, we would provide the necessary information and encouragement. In the notes field we would note our call and the expected date of receipt of the completed paper survey.

iv. Participants Who Have Started but Not Completed Report was designed to help us keep track of participants who had logged on to complete the survey, but for one reason or another had not yet finished it. We would review this list on a weekly basis and call any participants who had started the survey 3 weeks previous, but had not yet completed. The purpose of our call was to say that we had received a report from the University of Lethbridge advising us that the participant had started the survey 3 weeks earlier, but had not yet completed and that we were calling to see if they had encountered a technical problem, or perhaps they had questions that we could help them resolve.

Calls of this type often flagged computer glitches or a survey question that the participant wondered why they had to answer it as it seemed irrelevant (e.g., medications that they used). With the clarification or help, the participant usually committed to completing the survey within “x” number of days. We always emphasized our appreciation for their participation.

v. Participants Who Have Completed Recently (select a specific date), or All Who Have Completed in the Last 365 Days Report was designed to help us quickly know who and how many participants had already completed the current survey.

vi. Participants Completion vs. Weather Information Report was designed because we wanted to track whether the weather had a direct relationship to the daily survey completion rate. In order to do so, we began designing a tracking system that would allow us to enter Environment Canada’s weather details for the Quinte Region and we could integrate it with the day’s survey completion rate. Our preliminary findings were disappointing (there seemed to be no direct correlation), so this report was never finalized nor used.

vii. Participants With Flags Set Report was developed to guide our proactive work when we had down time. During work shifts when we were open for participants to come to the office to complete their survey, but few participants came in, there was an opportunity for staff to look for participants for whom we may have lost contact. By generating the Report, we had a list of participants for whom we had invalid phone numbers, or returned mail, etc. Staff would then use 411 look-up, social media sites, and alternative contact folks etc., to try and track down the current contact information for the participant. Following up on these leads was tedious work, so it was helpful to have an automated list that we could access whenever we had spare time. It was always thrilling to remove the flags in the participant file, as it meant that we had re-connected with the participant and they were likely to complete the survey.

viii. Lost Participants Report was an extension of the above-noted report. It was the list of participants for whom we had no current mailing address, no phone contact numbers, no workplace contact information and no active alternative contacts. While it was tempting to “give up on including these people”, we never did. And what a celebration it was when we
found participants (sometimes after they had been missing for 2 surveys), and they were thrilled to be “found/reconnected with the project” and they completed their survey!

### 11.5.4 Current Assessment Status

![Current Assessment Status](image)

This information was used to help us trouble-shoot technical problems, generate reports that showed the range of time it took participants to complete the survey, the popular times of day and days of the week for survey completion, and the percentages of surveys that were completing using each browser and operating system. Collecting such information was critical for designing effective and efficient project processes that were worthwhile to the participants.
This screen assisted us to make certain that we did not frustrate participants by contacting them unnecessarily. If we learned through conversation or contact with a participant that they were experiencing a medical or life crisis etc. or felt unable to participate in the current survey, we could set the status to say “Will complete later” or “Skipping this survey”. In setting this status we could further note the time period (Start and End date) when they would be unavailable.

As well, the Current Status settings helped us keep track of technical issues, which allowed us to do effective and timely follow-up, whether the participant was stuck in the current survey due to a University of Lethbridge systems issue (i.e., some things the Belleville office front-line people could not fix), or a Belleville systems issue (which we typically fixed within 24 hours—often linked to our internet service provider), or a participant issue (e.g., computer got a virus, or broken etc). These notations allowed staff to proceed with confidence when interacting with participants and helped us ensure that we did not forget to resolve issues.
The implementation of this appointment scheduler during Survey 3 was like throwing the Belleville Office staff a life-line. It was so much more manageable than our earlier, paper-based binder appointment booking system!

The information entered on these screens allowed us to print the Daily Appointments Report so we knew who to prepare for and who to follow-up with when there were “no shows”.
Appointment Information

Appointment Information

Appointment Date: (change this information)
User has not booked an appointment.

Appointment Time:
User has not booked an appointment.

Having the on-line calendar and time-clock with the half hour start times was so easy to work with.
11.5.7 Paper Survey

For all participants who opted to complete the survey by using the Paper Survey, we set the Paper Survey Flags—when the paper survey was requested by the participant, the date when it was mailed out, and the date when the completed paper survey was received back at the project office.

This information was important as it allowed for the production of the Paper Survey Report described earlier. This information was also important as the data entry of the paper survey did not necessarily occur on the date the survey was received and the system would only know the paper survey had been done on the date when the data entry was completed.

Note: To protect the confidentiality of the participant information, usually a Research Assistant entered the contact information from the paper survey and the Belleville Site Manager did the data entry of the survey questions.

11.5.8 Technical Reports

These reports are similar in appearance and content information to the common reports.

A. FINANCIAL REPORT
Financial Report

QERI Longitudinal Contact Database

< view all common reports:

Cheques issued to Participants (3922 total)

<table>
<thead>
<tr>
<th>Cheque #</th>
<th>Status</th>
<th>User ID</th>
<th>Print Name</th>
<th>Print Date</th>
<th>Address</th>
<th>Batch Number</th>
<th>Issued By</th>
</tr>
</thead>
<tbody>
<tr>
<td>23297</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>01-04-2019</td>
<td>[redacted]</td>
<td>304</td>
<td>rpm</td>
</tr>
<tr>
<td>30001</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>29-10-2018</td>
<td>Manual cheque</td>
<td>300</td>
<td>kjk</td>
</tr>
<tr>
<td>30002</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>30-10-2018</td>
<td>Manual cheque</td>
<td>300</td>
<td>kjk</td>
</tr>
<tr>
<td>30003</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>31-10-2018</td>
<td>Manual cheque</td>
<td>300</td>
<td>kjk</td>
</tr>
<tr>
<td>30004</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>31-10-2018</td>
<td>Manual cheque</td>
<td>300</td>
<td>kjk</td>
</tr>
<tr>
<td>30006</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>01-11-2018</td>
<td>Manual cheque</td>
<td>303</td>
<td>dgr</td>
</tr>
<tr>
<td>30007</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>01-11-2018</td>
<td>Manual cheque</td>
<td>300</td>
<td>kjk</td>
</tr>
<tr>
<td>30009</td>
<td>Issued</td>
<td>612</td>
<td>[redacted]</td>
<td>01-11-2018</td>
<td>Manual cheque</td>
<td>303</td>
<td>dgr</td>
</tr>
</tbody>
</table>

This was an important validation and auditing report, especially necessary because the participant compensation cheques were prepared and issued by the Belleville Office staff, and the Project Principal responsible for the project finances, lived far away. This report allowed him to always know the status and number of mailed cheques and was a handy look-up system for any cheques that were reported as missing or not received by participants.
Website Information

Office Hours between May and September are usually:

**Monday to Thursday**
10:00 am to 3:00 pm

We are often here much more than this, but please call ahead before coming to the office. This will ensure that we have someone here to assist you.

The office phones and the info@qeri.ca email account are monitored daily. We are anxious to keep in touch with you and to resolve any questions that may arise.

Thank you for your enthusiastic participation during Survey 3! We are now preparing for the next one -expected to begin on November 1, 2009.

Have a great summer!

Phone:
Toll Free: 1-866-969-8313
Local: 613-969-8313

During Survey 3, this web-page was modified and provided an easy way for participants with computers to look up the office hours for the QLS Project Office.
During Survey 3, the on-line Helpful Hints for completing the QLS Survey were modified to this much more user-friendly listing. The first hint was the most important as many participants would panic if their computer shut down e.g., a power failure while completing the survey: they always feared that they would have to redo all the previously completed questions. The constant auto-save was great.

A particularly important feature about both of the web pages noted above, was that the Belleville-based staff could change, edit or amend them, with ease and thereby with regularity. If there were systems-wide issues, we could also post a notice here so that participants could access the information even after hours when we were unavailable—helpful as many participants completed their surveys late into the night.

**C. CONTACT INFORMATION UPDATE**

Maintaining the accuracy and currency of the participant’s contact information was critical for high retention. As such, this screen was pivotal to our re-recruitment success.

This screen kept track of the participant’s name, address, phone number (and cell, if available), email address and Batch Number per survey period. As well, when changes were made to these data, the replaced data was copied, saved and dated in the notes field screen. Also, any mass communications
and survey log-ins were automatically copied into the notes field screen.
After we experienced too many times when we copied information into the notes field, and forgot to hit the SAVE button, the save feature was automated.

D. WEB ARCHIVED CONTACT INFORMATION

This screen was particularly helpful when contacting participants who tended to move often, or change their phone numbers and emails with great frequency. These changes often linked to life issues and augmented our need for very careful listening, in order to ensure their continued participation in the project. At a glance, this screen gave us a snap-shot of their contacts, and how many earlier surveys they had started or completed.

We reviewed this information always before calling a participant.
If we wanted to see the archived contact address history, we would click the *View it now* link.

**View Archived Contact Information**

---

For technical support, click here. If you have any other questions contact the QERI office at info@qeri.ca or 866-969-8313.
Part III: Specific Tools

11. Cohort Tracking/Management

View Archived Contact Information

By clicking on the shaded and dated line, it would reveal the address information that had been replaced on that particular date.
E. MASS COMMUNICATION HISTORY

Mass Communication History

<table>
<thead>
<tr>
<th>Contact Status</th>
<th>Mass Communications History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Bounce Back</td>
<td>Date</td>
</tr>
<tr>
<td>Nondeliverable Mail</td>
<td>2009-01-19 Reminder email</td>
</tr>
<tr>
<td>Invalid Phone #</td>
<td>2009-01-07 Postcard</td>
</tr>
<tr>
<td>Invalid Alternative Contacts</td>
<td>2009-12-18 Reminder email</td>
</tr>
<tr>
<td>Invalid Work Contacts</td>
<td>2008-11-08 Invitation letter</td>
</tr>
<tr>
<td>Invalid Internet</td>
<td>2008-08-11 Newsletter</td>
</tr>
<tr>
<td>Special Needs</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Jan 31/09, Logged in to survey
Jan 29/09, called “A-list” 7:30, spoke with Jeff’s wife - he was disconnected and didn’t realize that it would resume where he left off. She will tell him. npw
Jan 19/09, Logged in to survey
Mar 04/08, Logged in to survey

Some participants in the QLS Project had two mass communications per survey period: the invitation to complete, and the summer newsletter. They received the notice that the survey was ready for completion, they logged on and completed (and we subsequently mailed them their compensation cheque©). And then six months later, in mid-summer, we sent them the newsletter, to keep them in the communications loop and again express our appreciation for their participation.

But for other participants, there would be many mass communications listed on this screen per assessment period—our procrastinators or those with life issues that needed support and encouragement.

F. PARTICIPANTS PASSWORD RECOVERY

During the early surveys we learned that some participants required that we re-send the survey log-on information numerous times before they completed the survey. They either misplaced their mail and emails, or they deleted it or it was not a priority in their busy life. Whatever the reasons, sending repeated letters and emails, was a time-intensive staff task and we needed a better solution. During those early times we also learned that providing their log-in information by telephone was inefficient as people tended to reverse numbers or not hear correctly the numbers or characters.
The project therefore developed an effective Password Recovery function. For participants with an email, we just clicked the “Send this user their login information” button and the system sent it to the participant’s email address. In this way, the participant could click the survey link when the email arrived. It was an awesome improvement and some evenings during our Phone Campaign phase, we each probably sent 15 links.

After clicking the Send this user their login information, the following screen would appear so you had the chance to confirm or reject the action:
Participant Password Recovery

And if you confirmed the send, the following screen would appear, to affirm that the email and link had been sent successfully.
Participant Password Recovery

For technical support, click here. If you have any other questions contact the QERI office at info@qeri.ca or 866-969-8313.

And then the following screen would confirm that your action was dated and reported in the notes field of the participant’s file (most recent action always listed at the top of the listing):
The evolution of the Contact Database functionality improved with each survey period and consequently allowed us to keep effectively in touch with our QLS Project participants and thereby attain how high retention rates for the study.
12.1 Why Provide Compensation?

Retention of participants within a longitudinal study was augmented by the provision of financial incentives. While some portion of the participants are likely to indicate that they enjoy the research questionnaires and are happy to complete them without compensation, for many if not most participants the money is enough to compensate them for travel, parking and their time to participate. It further acknowledges that the research project is aware of the personal inconveniences, and is appreciative of their continued commitment to the project and their participation.

Some participants asked if their compensation payment could be submitted to a charity of their choice. The Ethics Committee approval of the research project prohibited such action as the compensation was only for the participant; the participant could determine how they wished to spend their compensation payment, possibly themselves redirecting it to a charity or community organization.

Some participants asked if the compensation payment had to be declared to the government as income; this was particularly asked by project participants who were in receipt of some form of social assistance or unemployment insurance. It was important to determine answers to these questions prior to commencing the longitudinal assessments, as project participants needed certainty about the implications of their participation.

12.2 Compensation Payment Structure

A compensation payment structure that has a considerable first payment, followed by a lower amount for the second assessment, followed by graduated increases with each subsequent payment, seemed to motivate continued participation. It is important at the recruitment stage to communicate the total payment the participant will receive through their continued participation as that number stays firmly in the mind of the participants. As well, emphasize the total number of assessments that are a part of the research design and that each assessment is merely a part of the whole. This too helps to motivate the participant to continue to the end.\(^{26}\)

\(^{26}\) PI Note: As noted earlier, for a number of reasons, soon after the start a change was made from 6 to 5 assessments.
Compensation payments were made by cheque as this ensured that cash was not on the premises, thereby minimizing the risk of break-in or robbery.

### 12.3 Compensation Processes

For participants who came to the office, it was important that if they did not bring their Project Notification Letter (i.e., Invitation to Complete) with them, they were required to provide photo identification before commencing the survey. Compensation payments and a written notice of thank-you were provided before they left the office. The participant initialed the cheque stub to confirm receipt of the payment. The immediacy (i.e., same day) of payment motivated some participants to complete the assessment at the project office.

The issued cheque number, the initials of the staff person who processed the payment, the date and the cheque amount were entered into the Contact Management database so that all interactions and transactions with the participant were easily retrieved for quick reference and accountability.

For participants who completed the assessment online from their home or other places with secure internet access, it was important that their compensation payments were also processed within a day or two (if at all possible). This immediacy of payment and thank-you demonstrated project professionalism and instilled project confidence in the participants. Included in the mailed payment was a note of thanks, an encouragement to contact the project office if they had any project suggestions or concerns, the expected date of the next assessment, and encouragement to contact the project office if there were any changes in their personal contact information (so we could stay in touch😊). Accuracy and warmth of communication was always shown.

In keeping with effective audit and accountability practices, the cheque processing required actions by two or more staff members. This was particularly important when processing and mailing high volumes of compensation cheques and posting the data to the Contact Management database. Another important rule of thumb was to minimize manual data entry to ensure data integrity/accuracy. Automated processing and data posting is recommended.
12.4 Signing Authority/Signature on Compensation Cheques

It was important to determine an acceptable way to reconcile the goal of issuing cheques (at an on-site location by staff who were on duty at the time), with the need for sound financial controls (in particular, the need to restrict cheque signing authority to one of the PI's or another senior staff member). Given the high number of cheques to be issued, it was necessary to find a way that did not require a senior staff member to personally sign each cheque©.

Resolving this issue early in the project may be difficult when on-site staff have not yet gained the trust of the more senior staff. In our project, after the required trust was established, we resolved the issue by using an electronic signature provided by the PI in charge of finance, and instituting a number of clear procedures and after-the-fact checks. 27 We had no instances of our trust being misplaced.

As mentioned above, participants who completed their assessment at the project office had their compensation cheque provided immediately. The production of those cheques was not a fully-computerized system, and thus required that at all times, there were a number of cheques printed (with the dollar amount) but the date and the name of the recipient had to be entered manually when the participant completed their assessment. Remembering that our objective was to maximize participant convenience, the project did not require office appointments and it encouraged participant drop-ins. It was therefore necessary to estimate the number of partially prepared cheques that might be needed by RA staff for each shift. Clear practices about cheque lock-up (security) and access, and timely data entry of the cheque issuance were required (given the onsite presence of these partially prepared signed cheques).

27 PI Note: The project started by having all cheques manually filled out (except for signature) by the Site Manager in Belleville, recorded in a register in Belleville, mailed to Toronto, checked and manually signed by the PI-in-charge of this Financial function, mailed back to Belleville, and then put into addressed envelopes and mailed to participants. All of this was done within very tight time constraints to ensure prompt participant/customer service. The time taken for the Site Manager to perform the first of these steps manually, was, not only very expensive, but presented far too much stress on an already over-worked Site Manager.

Slowly and carefully over a year we moved one step at a time—testing each new change and implementing the appropriate financial safeguards—from the initial totally manual process to the automated process essentially run by the Belleville/Quinte office, with only random and periodic checks performed by the PI-in-charge (bank reconciliations, central handling of all questions regarding payment, random cheques against separate electronic files of questionnaire completion, etc.).

This is only one example in which the institution of efficient administration and management techniques—made possible only by the presence of skilled and completely trustworthy staff—made possible the levels of customer service and staff satisfaction essential to the high participant retention rates.
12.5 Lost and/or Stale-dated Compensation Payments

Things happen and compensation payments need to be replaced, from time to time. While the national mail service is excellent, it is not perfect; nor do all participants always provide their correct or current mailing address. Additionally, because some participants are not really motivated by the compensation payment, they set aside their cheque for future cashing or deposit. They sometimes misplaced it or, when they did take it to the bank, it was more than 6 months since it had been issued by the project and it was thereby stale-dated and non-cashable. As such, the project needed guidelines and auditable procedures for reasonably-convenient cheque replacement.

When a participant contacted the project office to report a missing/lost compensation cheque, the following actions were considered:

- Ensure the cheque had been processed and sent
- Ensure the mailing address was correct and was correct at the time of mailing the cheque
- Determine if the participant experienced other problems with receipt of their mail
- Determine if other people familiar to the participant picked up their mail from time to time and ask the participant to check with that person
- Advise that the project could not issue a replacement cheque until 6 weeks from the date of mailing (just in case the mail processing had simply been delayed) and until after the project bank statement for the month following the cheque issuance had been received, so that the project (i.e., the PI in charge) could determine if the missing cheque had been cashed
- Arrange a date for follow-up, at which time project staff would contact the participant
- If the cheque had not surfaced nor been cashed, then the replacement cheque would be processed and mailed
- Oftentimes, through this process, it was determined by the project that the cheque had in fact been cashed (and usually by the participant). When this happened, a scan of the cancelled cheque which usually showed the date of deposit, the bank location and the signature of the person who cashed/deposited it was provided by the PI-in-charge to the Site Manager. A phone call to the participant provided these details. The matter was then usually concluded by mailing the participant the cancelled cheque scan and an upbeat/positive note. This project always replaced stale-dated cheques—with minimal delay and always with a positive and enthusiastic attitude. The person was deserving of the compensation and completion of the subsequent assessments was likely to be affected by the handling of the stale-dated cheque. This project asked the participant to return the stale-dated cheque (preferably before we issued the replacement).

- Ensure that accompanying correspondence is friendly, positive, notes that it is a replacement cheque for the specific cheque number dated “x”, and request that if the original cheque does turn up, that it be returned to the project office.
- Enter the details of the transaction into the Contact Management database for easy reference
- Retain a complete paper trail of all cheque replacement transactions
Note: From time to time, it was necessary to determine quickly whether a cheque had been cashed and/or to check the particulars written on a cheque. It was therefore essential that the project arrange at the beginning of the project with its bank that images of all cashed cheques were returned on a monthly basis to the PI-in-charge of finances. Those images had to be sent in a sorted manner which made searches efficient; getting this agreement with the bank can be difficult as banks prefer to provide information in a manner that minimizes costs to them and follows standardized procedures developed for other clients.\textsuperscript{28}

12.6 Tracking Compensation Payment Cheques

Most longitudinal studies include thousands of people. This leads to a considerable number of cheque stubs for tracking and storage (and from which retrieval may be necessary).

Staying on top of the sequential filing is imperative—otherwise project staff may become overwhelmed. Ensuring the security of cheque stubs was very important as they included considerable client information which had to be protected.\textsuperscript{29}

When purchasing the cheque stock required for each assessment period, a discrete colour per assessment and a unique series of cheque numbers (that easily identified the assessment period) was recommended.

If automated/computerized processes are used to post the cheque data to the participant records, then a percentage of random files should be checked each time the cheques are issued, to ensure accuracy and accountability.

12.7 Storage of Cheque Stock and the Cheque Issuance Software

Business cheques are expensive and usually include a business logo and contact information.

The blank cheques must be stored in a locked cabinet (at all times). As well, the computer software to produce the cheques must be password protected and with extremely limited access to the password.

\textsuperscript{28} PI Note: In our case, the bank policies were changed part-way through the project and we began receiving electronic versions of the cancelled cheques, sorted by cheque number. The reduction in the PI-in-charge’s auditing work and stress was palpable.

\textsuperscript{29} PI Note: When the bank began offering electronic images of cancelled cheques sorted by number, this manual task became unnecessary.
Chapter 13: Staff Motivations

13.1 Introduction to Staff Motivation

Longitudinal research at the front-line level involves considerable tedium, with very uneven workload pressures. Yet the success of the project is highly dependent on retaining the active involvement of the project participants. Nurturing this continued project participation by the participants is primarily the result of the work by the front-line staff.

So with uneven workload pressures and thereby uneven hours of work, and highly repetitive duties (for at least 70% of the job responsibilities), how can a project retain the commitment and motivation of its front-line staff?

Motivation is defined in the Oxford Dictionary as the way to stimulate interest. First and foremost, the staff must believe in the scientific worth of the longitudinal research because without this underpinning, one cannot convince others to stay on board. Believing in the value of the research requires knowledge that comes from considerable staff orientation, background readings, discussion at the project outset, and ongoing opportunities for continued orientation.

13.2 Determining Unique Motivators

Each staff person is unique and thus what stimulates their interest is likely to be equally unique. Figuring out what those unique motivations are (and they may continue to evolve throughout the project) is a critical project responsibility for retaining the commitment and employment of project staff.

The underlying principles for motivating staff are not unlike those that have been described in Part III, Chapter 5, Subsections 2 and 3—i.e., our values and service approach to our project participants.

Staff must feel appreciated, valued, respected, and included. Staff must feel supported—especially if things go wrong, or mistakes are made. Staff must know their work expectations and any specific procedures that are minimally required and these must be known from the outset.

But determining the unique motivations requires dialogue, collaboration, sensitivity and understanding. While these may feel like “motherhood” concepts, all staff must walk the talk. Open and honest communications, significant opportunities for input and adequate time to provide it, knowledge of what’s going on, and a confidence that fellow team members want to dialogue with you are extremely important project components that must be in place.
Some staff are likely to be unwilling or unable to declare what they need as motivators; other staff may be satisfied with their hourly pay and a confidence of knowing their weekly work schedule; other staff may be motivated by opportunities to analyze data; other staff may be motivated by the opportunity to write or edit project newsletters; while other staff may thrive from the opportunity to reach out to the most disenfranchised of the project participants. But project management must figure this out and create the needed opportunities to sustain the staff interest through the boring times and tedium.

Hiring a team of mature, well qualified and well-experienced professionals to do RA duties within this longitudinal project added another challenge to figuring out the unique motivations. Such staff were accustomed to running their own businesses, making strategic and operational decisions on a day-to-day basis, and/or managing a considerable budget - yet they had chosen to “retire” and do time-limited project work. The QLS project had confidence in their judgment, problem-solving and trouble-shooting skills, all of which were second-nature to their being. They thrived on creative problem solving, innovative action, the pursuit of continued learning, and contributing to the big picture of this longitudinal research. Respecting that high energy, project commitment and self-directed motivation was important to sustaining their interest. To do otherwise could have caused them to walk away from the project.

Self-motivated, passionate and intelligent staff thrives with collaborative empowerment. The Project trusted their project work, confident that difficulties or concerns would be flagged in a timely way to the principals, and celebrated that they produced for the project well beyond levels of common expectation or defined targets.

By taking interest in the individual staff uniqueness, and creating opportunities to showcase or draw upon the uniqueness was certain to augment the staff motivation, and the resultant project gestalt was magical!

13.3 The Good News and the Bad News

The bad news is that the QLS project did, at one time or another, do all the things every text book on motivation says you should never do--sometimes repeatedly.

The good news is that we survived the bad and came back to get quite respectable results. So what can we say about motivation?

Just as with participants, so it is with staff, one person’s motivator is another’s turn-off. This was a lesson that was painfully learned during the course of the project.

The need for motivation increases throughout a survey period and is especially important towards the end of each assessment period when staff are chasing the last 10% of non-completers. That’s when it becomes painfully obvious that it’s a logarithmic slope you’re climbing, not a linear one. It’s easy to feel motivated with 100 completions an hour, but when it’s one a day, it’s tough!
Part III: Specific Tools

13. Staff Motivations

Setting realistic expectations is a key component to keeping the motivation and morale high and must be set logarithmically if those feelings are to be sustained. And tweaking those expectations from survey to survey proved to be quite an art as is shown in the following example from Survey #3.

One of the most widely watched indicators was the “Daily Catch” a spreadsheet that recorded and displayed graphically the completion progress in each survey. However, as shown below, in Survey #3 the keenly watched Daily Catch summary didn’t even change colour until a batch hit the 80% mark.

There were five colour changes corresponding to the sub-campaigns discussed in Part III, Chapter 10 Monitoring Tools, to get to the highly prized top level, over 98% resolution of a batch was required.\(^\text{30}\)

\[\begin{align*}
\text{Conditional formatting} \\
\begin{array}{c}
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As can be seen it’s not exactly a log scale. But it does reflect the effort that was made to let staff know (very visibly) that it was understood that it takes as much work to get from 95% to 98% as it does from 0% to 80%.

\(^{\text{30}}\) Resolution includes not only survey completions but also those that have died, become medically incapacitated or unable to complete the current survey. Proving a death, incapacity or inability to complete usually took far more work that is involved in getting a survey completion.
Participants who had previously died, were medically incapacitated or had withdrawn, were excluded from these statistics. So contacting and resolving everyone was theoretically possible. On one occasion during Survey #3 a batch resolution rate did hit 100%, and, while elated with the batch progress, staff emotions were bittersweet as four of the participants in that batch had died.

What is the reality? The retention targets originally set at the start of the project (on which bonuses were based) were more of a limit on aspirations than a target. Fortunately a number of staff decided to ignore them and just go for the 100%.

What did motivate the Belleville Office Project staff?

**Money.** Belleville staff were paid above typical Belleville “call centre” rates, they knew and appreciated that, but the bonus money was not a motivating factor for their performance.

**Recognition.** Being recognised and treated as a professional by both participants and other project staff. Given the connections Belleville-based staff made with the project participants (through in-person, phone and written communications), we wanted to follow through and help them in any way we could, thereby ensuring that our project participants would remain involved in the project. We liked being reliable professionals, delivering on our promises.

**Travel.** Going to annual project review meetings / get-togethers with not only project staff but also with the project advisors. Acknowledgement and praise for our outcomes provided motivation to try for even higher retention levels.

**Fun.** It was fun to adapt techniques and skills we had used in previous careers or employment to a new area. The more monitoring tools we developed, the more precise our processes became, and this in turn yielded higher retention rates. It felt great to be on the “cutting edge” with our use of data collecting techniques and tools - and this in turn fueled new innovations and motivations.

**Satisfaction in being the best.**
We reviewed the literature, and prepared well so that we could make a favorable impression on the project principals and advisors. Knowing that we
would have the opportunity to present and debate our approaches with these experts motivated us to get the last few hundred project completers during each assessment period.

<table>
<thead>
<tr>
<th><strong>Do’s</strong></th>
<th><strong>Don’ts</strong></th>
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<tbody>
<tr>
<td>Respect</td>
<td>Cookie cutter approach to interaction</td>
</tr>
<tr>
<td>Empowerment</td>
<td>Do as Told</td>
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<tr>
<td>Adequate Timelines for Tasks</td>
<td>Impossible deadlines</td>
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<tr>
<td>Opportunities for Meaningful Input</td>
<td>Lip service to seeking input</td>
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<tr>
<td>Opportunities for Innovation</td>
<td>Top-down directions</td>
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<tr>
<td>Laughter</td>
<td>Emotion-free, dull</td>
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<tr>
<td>Thoughtful Communications</td>
<td>Curt communications</td>
</tr>
<tr>
<td>Frequent Appreciation and Thanks</td>
<td>Silence, Implied or Limited Thanks</td>
</tr>
<tr>
<td>Nice Workplace</td>
<td>Grungy Workplace</td>
</tr>
<tr>
<td>Safe Location and Workplace</td>
<td>Poor Location - unsafe or high crime</td>
</tr>
<tr>
<td>Nice Workstation - ergonomic</td>
<td>Makeshift work stations - poor repair</td>
</tr>
<tr>
<td>Adequate Supplies to perform the functions</td>
<td>Limited tools to do the job</td>
</tr>
<tr>
<td>Reasonable Compensation</td>
<td>Low rate of compensation</td>
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= Highly Motivated Staff and Significant Project Outcomes Performance

= Minimal Staff Morale and and possibly high staff turnover and Minimal Project Outcomes
14.1 Introduction to Participant Motivations

A longitudinal cohort study is likely to have thousands of participants. We expect that many people agreed to participate because of an interest in the two originally-stated foci of the project: the determination of the etiology of gambling, and the impact of gambling.\textsuperscript{31} However, there are many other motivations for participating in the study (including: a general interest in surveys, a sense of civic responsibility, payment for completion) and a project never really knows what the individual cohort motivations are for continuing to participate.

The participant’s motivations begin to formulate the minute the cohort recruitment call or communication begins. And it continues to take shape while the recruitment script is delivered - totally or partially received or understood. Those initial thoughts by the participant will continue to evolve during the duration of the longitudinal project.

The different motivations will be as different as black is from white, and many participants will have expectations as different as 180 degree directions on a highway.

These extreme differences must be grasped by the project personnel at the outset of the project as every project communication will be read and interpreted according to the different understanding and unique motivations of the participant.

As well, developing methods of quantifying participant motivation at different stages in the retention process thus became very useful for project planning.

For instance, the number of completions in a survey is the product of the size of the people remaining in the project, their awareness that the survey was available, their ability to do the survey and their motivation.

\[ \sum_{\text{Survey}(n)} \text{Completions} = \text{Pool size} \times \int \text{Awareness survey is available} \times \int \text{Ability to do survey} \times \int \text{Motivation} \]

Since the pool size is known (total minus ineligible and withdrawn), the awareness can be calculated. We kept track of the number of participants we had not contact as “missing”, and those we could not contact as “lost”. Since the ability to complete was close (but not quite equal) to 100%, the motivation of the cohort could now be estimated. Motivation was close to 100% for every survey and not related to any form of communication.

\textsuperscript{31}... although the funding agency dictated part way through the project that the focus be solely on the first objective, that did not affect why participants initially agreed to take part.
14.2 Impacts on the Motivations of Participants

Over the first three years of the QLS Project it became evident that some participants no longer felt a need to continue their participation because the slots facility had not been built as scheduled and they felt their survey answers had successfully influenced that non-development. Other participants no longer felt a need to continue their participation because they had initially thought they would have an increased chance of getting employment at the new slots facility if they participated in the study and were seemingly on the inside track, but with the non-construction of the slots facility their participation was now a personal waste of time. Other participants, who expressed personal loss of interest in the study, advised that would continue because they had given their word at the project start and they always live up to their word. Another cluster of participants expressed that they wanted to influence public policy and their participation was a chance to make a difference. Another sub-group was motivated by the compensation payment, however big or small it may have been. We also observed that many people are lonely or socially isolated and any opportunity to participate in community life is welcomed so they continued to participate. Some participants in that sub-group also seemed to delay their participation (i.e. survey completion), as it assured them that they would receive phone calls and assorted mailings from the project, encouraging them to complete their next assessment. Surprisingly, very few participants were motivated by the project’s desire to attain a high retention rate. Others were curious, while others were just looking for something to do.

By Surveys 4 and 5, we also heard from project participants that they enjoyed doing the annual surveys and found it an interesting time of soul searching and reflecting on the issues in their life and how their answers seemed to change from year to year. They acknowledged the personal benefit of this focused time of self-reflection.

Further, while we did not conduct a scientifically valid sub-study on the issue, we did ask people to tell us why they were withdrawing or skipping a survey. Almost everyone was willing to talk on the subject, often a great length.

Not infrequently, people deliberately skipped a survey because they were “busy”. By “busy” they meant that a major physical or emotional change was occurring in their life and they could not face answering the detailed questions in the survey. In a four month period “busy” did not mean lack of time; some participants spent much longer on the phone with us than it would have taken them to do the survey.

We know several participants that we had contacted early in a survey period and, at that time, they were too stressed to face the questionnaire. Later they contacted us and completed the survey towards the end of the survey period – after they had resolved their financial or family problems.

A detailed spreadsheet was maintained to keep track of all participants who became ineligible or who withdrew. Since most participants volunteered (often at length) the reasons for their withdrawal, these reasons could be logged. By the end of the fifth survey, twenty-six participants (less than 1% of the cohort) had withdrawn. Twelve people decided they had tried the survey and it wasn’t for them; these people predominantly withdrew during Survey #2. Seven people took exception to a question
or questions in the survey and asked to be withdrawn; this occurred mainly during Survey #3. The remaining seven participants gave a variety of reasons for their withdrawal.

There were also a small (not quantified) number of people who were not committed to the project from the start, and this disinterest continued from survey to survey. In fact, they probably should never have been recruited. If you caught them in front of a computer and sent them the link right then they would complete the survey, but there was obviously little interest or motivation.

We did record and analyze the recruitment location and date (which would identify the call centre recruiter) of all withdrawals and, while it was obvious that recruitment was not 100% consistent, it had no statistical impact on the retention rate after Survey #1. Some geographic areas had a lower recruitment rate and a lower percentage of converting “yes I’ll do it” to “yes I did it”, but this was not analyzed.

The most worrisome problem were the “missing” and “lost” which had reached 54 people (almost 1.5%) by the end of Survey #5. The number of participants in this category was growing slowly but steadily from survey to survey and, with no ability to contact these people, retention would obviously continue to drop.

14.3 The Alignment of Project Communications

These examples of the diversity of motivations within the cohort significantly affected all project communications. The project communications had to be written in a way to connect with the individual motivations, not irritate or augment loss of interest, and nurture project commitment, regardless of their unique specifics.

If the project realities shift even slightly during a longitudinal study, or if circumstances require a significant re-jigging of the project, the project is likely to encounter considerable difficulty re-aligning the thinking, perspectives or motivations of the cohort. Whatever messages are communicated at the outset seem to be the anchor that must be dragged along.

Gentle, thoughtful, friendly, professional, factual and honest communications, provided by friendly, enthusiastic, respectful, professional and thoughtful project staff - whether written, in person or by phone, are the best guarantee that the participant will remain committed to the project.

Staff’s Anecdotal List of Participants’ Motivating Factors:

- Like doing the survey (fun).
- Feeling of influencing someone/something.
- Civic duty (I made a commitment to you guys).
- Interest in and/or commitment to project scope/ideas.
- Money.
- Learn something about themselves.
Part III: Specific Tools

14. Participant Motivations

Careful listening, timely and proactive problem-solving and communications, and sensitive and thoughtful interactions among staff and between staff and all participants are required. At no time can participants observe staff members to be frustrated with other project participants or staff members. Every interaction must provide reassurance that the project staff enjoys their work, the value of the research and their opportunities to interact with and facilitate the assessments by the project participants. As well, any criticism by project participants must be addressed seriously and quickly, as bad news or wrongful interpretations spread much more quickly than good news stories, and can destroy or reduce participant motivation like wild-fire.

Nurturing the awareness that everyone’s input counts and makes a difference to the study’s outcomes is likely to go a long way in satisfying the unique motivations of the cohort.

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**The Best Measure of QERI Participant Motivations**

**Achieving 94% Retention Rate**

*In each of the five (5) annual assessments*
15.1 Introduction

Effective communications are essential to maintaining high retention. While staff-to-cohort communication is the most critical (and labour intensive) aspect, it became apparent that many other types of communication were also very important to our project success. Seven important aspects of communication are described in the following sections—with specific examples of written communications with the project participants for each aspect included in Appendix A.

15.2 Project Participants

All communications to the project participants must be friendly, accurate, clear, concise and professional looking (including the branding with the project logo etc.). The use of graphics, screen prints, tables and maps reinforces the messages in the text—things need to be stated 3 times it seems.

Each subsequent communication with the participants must be different than the previous one—change up the message and the mode. For example, if the first communication was a letter through the mail, then the next communication would be by email or a phone call, if at all possible.

We suggest that there be 3 to 6 weeks between communications to the participants, as it is imperative that a project participant not feel harassed by the project. With each communication, encourage action/response by the participant within 7 to 14 days, following receipt of the communiqué.

We personalized each written communications—in the salutation. We also changed up the way the communication was signed—for example, the first would be sent from “the Project Team”, then the next time it could be sent from a particular staff member, and the next time it could be personally signed by the Site Manager. None of this sequencing should be random, but rather strategized and planned from the outset of the assessment period.

Telephoned communications with the participants must be equally planned. The first time a participant is phoned (during the Phone Campaign), the message is to confirm that they received a particular communication that had been sent on a particular date. If the call revealed that the communiqué was not received, then we confirmed the address information and mailed it again, unless the participant suggested that it be emailed to them.

The second time a phone contact is required by a participant, the message is to connect with them and listen. Determine if any life issues are causing a delay of participant response. Don’t push, don’t
suggest, but listen and it often happens that the participant will suggest their own solution or way forward. It was as if they talk themselves into an action, while the project personnel listen, and laugh and chat about gardens, weather, children, etc.

With each contact to the participant, ensure that the message is different and that the project interest in them is genuine. Be vigilant so that it is clear that the project appreciates their participation; that project staff are there to help and love to do so. The participant must feel that project staff are not harassing them nor wasting their time.

Effective communications with participants are essential to maintaining high retention rates. To be effective, the communications must be at the appropriate times, frequency and format, and must contain the appropriate information. If not done properly, communications can easily irritate participants, thereby having the opposite-to-the-intended impact on retention rates.

The QLS project utilized a large number and many types of communications—at the start of the project, before each assessment period, during each assessment, on completion of each questionnaire, after each assessment period, between assessment periods, and at the end of the project. The project also used a number of media, including: email, web-sites, regular “snail” mail, telephones and mass print media. Whatever the form or format, the QLS Project was careful to ensure that each of these communications embodied the principles and strategies described elsewhere in this manual.

Given the importance of the types and form of the communications utilized, we have provided, in Appendix A, examples and templates of the majority utilized. These examples and templates (listed in the Figure following) are presented within two broad categories:

- General (Cohort Wide)
- Personalized (Individual Participant/ Event or Status-Specific).
15.3 The QLS Project Office

Communication is more than words or paper. For a longitudinal study, a stable presence in the community can be an integral part of the communications strategy. The establishment, layout, workings, ambience and feel of the Belleville Project office communicated the project’s commitment, professionalism and caring to all who visited or contacted it.

We estimate that there were around 2,900 participant visits to the Belleville Office during the course of the project. This number does not include the drivers, friends, children and other persons who accompanied the project participant. Given this considerable number of visits, we feel that the office setup and ambience were very important to making participants feel comfortable about the project.

We modeled our staff-to-staff communications approach with the service philosophy we had established for our participants: respect, caring, professionalism, and appreciation for one another. Each staff member, like each participant, was a unique individual with a wealth of experience, diverse talent and enthusiasm to contribute to the project. As we drew on the special skills of each staff member, self-confidence grew and with that came project innovation, productivity and rapport. Project participants felt our work enjoyment, our excitement for and belief in the project, and our
Part III: Specific Tools

15. Effective Communications

respect for our co-workers. We laughed together, and cared for each other as we cared for and supported the project participants.

During Survey #1, all participants were given an introductory talk about the project’s aims and objectives (the same talk was given to those that called with questions) and we attempted to provide a short “how did you find it?” conversation for every participant after they had completed their survey. We kept a general log of comments, most of which were very positive (great for staff morale) but some did identify things that needed to be addressed.

The project office could get very busy. At times participants could be waiting 15 minutes or more for a computer to become available and accompanying persons might have to wait several hours for a participant to complete their survey. It was not always easy as sometimes participants needed to be “talked down” after a survey and most wanted to chit chat after they completed. Being calm, relaxed and appearing confidently in control was sometimes a challenge (e.g. the time the University of Lethbridge server went down on a Saturday leaving the project office with no communications to Lethbridge and a full day of participant appointments is well remembered. We had a lot of paper surveys that day!)

We believe we were successful in creating a comfortable atmosphere and a positive attitude to the project. Participants and visitors to the office told us that our physical environment aligned with our actions/behaviours. People not only called us but some dropped by to show us their new babies, check up on how the project was progressing, or just stuck their head in the door to say “Hi”! Kudos to all. 😊

15.4 Project Co-Workers

The success of longitudinal research is highly dependent on a consistent service approach and administrative practices, a timely resolution of issues that may emerge, and a staff confidence about their work and the research that is underway. The only way to ensure this is through open and active communications.

Effective communications are even more important if a project has chosen to use part-time staff, rather than full-time staff who are normally present during all or most hours of operation. Keeping aware of subtle changes to the service approach, corrective actions for information technology issues, or shifts of office practices must be communicated and documented (as soon as possible), so that everyone feels “they are singing from the same hymn book”. Part-time staff is quickly distanced from the project if they feel that every time they come to work they are starting over and scrambling to keep up with seemingly new practices.

The Site Manager must have an open and approachable communication style. There must be certainty that staff feel comfortable bringing new ideas, problems or confusion forward for discussion and/or clarification in a timely way. As well, if the Site Manager is away or off-site, email or phone communications should be welcomed at all or most times. As well, a log-book should be maintained at the Project Office so that incidents/issues/unresolved matters can be noted before staff end a work shift.
Part III: Specific Tools

15. Effective Communications

Minimally, once every two weeks, there should be a short team meeting (possibly no longer than one hour) wherein staff can receive updates, provide input to outstanding issues, and share good news anecdotes and brain-storm troublesome matters. As well, because the work within longitudinal research is dynamic, it is highly likely that planning for the next phase of activities will be required and staff need to feel a certainty that there is a time and place to get on with that work. Forward thinking/planning provides a sense of control to the entire team.

Sometimes the Principal Investigators of a longitudinal research project will be located miles, or provinces, or even countries away from the front-line project personnel and participants. In these situations, it is important to have a regular, designated time when the project office staff and the principals can communicate.

If at all possible, protect a regular meeting time - possibly weekly, and only for about one hour. Teleconferences or video-conferences work effectively for such communications. All staff members should have the capacity to dial in (connect) from wherever they are at the designated time. If it turns out that there are no agenda topics to be discussed, the meeting can be adjourned within minutes - but protect the designated time, make the commitment to those regular communications and provide the certainty of knowing that everyone will be available at least at that time. The reassurance generated from this certainty of communications is immensely comfortable and positive.

If at all possible, it is worthwhile to include other support staff or advisory personnel in these regular meetings of update, as it keeps everyone connected and provides an ongoing opportunity to provide input and ideas, especially in trouble-shooting. The QLS Project got much better with this as the project proceeded and during Surveys 3 to 5, our teleconferences included the IT and research administrative support personnel from U of L. The improved sense of inclusion was appreciated by all.

Direct communications - staff talking one to the other - increases innovation, builds rapport and trust, improves problem-solving, and is much more effective (and less time-consuming) than emails.

Project decisions that are reached during the teleconferences/regular meetings should be logged for handy reference by everyone.

Position papers, analytical reports or project documents may be required throughout the project, in order to strategize future directions, adjust timing, provide corollary research or document alternative approaches. The internet provides so many options for working collaboratively on such documents e.g. blogs, Google spreadsheets or shared documents, Google sites, and other shared sites. These options are encouraged as they are so much more active and dynamic than saving endless versions of documents and emailing them to one another. Using the web-based options allows staff to interface with the developments no matter where they are e.g. home, work or even travelling.

Document, document, document-- as it will be important to know exactly how situations were being handled during each assessment period. For example, when the research personnel are completing their analyses and writing up the project findings at the conclusion of the project, anomalies will need to be assessed in the context of the administrative procedures. Every action and the reasons for it are so clear at the time, but with certainty the passage of time will blur that clarity and recall.
15.5 Participant-to-Participant Communication
A substantial number of participants were friends of, related to, or acquainted with other project participants.

Approximately one in four of all households in the project catchment area were called during the recruitment period. With over 4,000 project participants, many if not most of the participants knew at least one other participant in the project and they talked to each other.

Making sure that each participant had a concise and consistent orientation that emphasised the importance of the project and the confidentiality of the answers was essential. The message of scientific importance, survey confidentiality and staff competence was emphasized at every possible opportunity as we knew this would be passed along and reach other participants.

15.6 Co-Domiciled Persons and Alternative Contacts
Communication between participants and the other people domiciled at the same residence, and the alternative contacts of the project participants were also very important.

It was important that other persons domiciled with the participant were aware of and had a positive attitude towards the project. This helped to ensure that mail and telephone messages would reach the participant and that emailed communications from the project would reach the participant, especially important when an email address was shared between family members.

We learned that, not only was having alternate contacts information extremely useful when participants changed their address, phone number and sometimes name, but it was also important that the alternate contacts were made aware of the QLS project and the person’s participation in it. When a participant changed all of their contact information it was often a result of difficulties in their life. At such times, friends and family are often extremely protective of the person and are not likely to assist unknown persons or agencies in re-establishing contact with that person. In these situations, having the alternate contacts aware of and having a positive attitude towards the project was essential.

15.7 Community Contacts and Partners
As with our project participants, communications with our community connections were friendly, accurate, clear, concise and professional - and clearly branded with the project logo. As well, it was important that all community and general communications reinforced how and when a person could
Part III: Specific Tools

15. Effective Communications

contact the Project Office, web-site etc. We included a statement about the source of funding for the project, whenever possible.

It is a balancing act - keeping the community aware that the project is progressing, yet not drawing too much attention to the project so that any who may be opposed to the research will be motivated to take precipitous action. Staying under the radar as much as possible is encouraged, while at the same time providing milestone articles to the local media as they reinforce participant participation and the project’s appreciation of the community support for the research study.

15.8 Project Funders

The project contract with the funder is likely to specify the nature and frequency of project reporting. Timely submission of those project status reports builds trust and support with the project sponsor.

Animated good news stories, included within or appended to the project report, bring a project to life for those who cannot easily visit the project – always remembering to protect participant confidentiality.

Regular phone calls with updates (with the staff of the funding agency) and invitations to the sponsor (its board members and agency staff) to visit the project and celebrate project milestones with the project participants and project personnel are encouraged. These approaches build good will and create wonderful opportunities for dialogue, information-sharing and feedback. Two-way communication is always worthwhile.
16.1 Introduction

Longitudinal research is expensive to undertake; lengthy in terms of time and thereby requires significant documentation to ensure consistency of data collection practices and provides the background for the research analysis; and usually captures millions of pieces of research data that must be protected, stored, and managed so the effective research can be concluded.

The principal researchers and the funders must be assured that the collected data was handled properly at every step. Effective data management and project practices are necessary to ensure project and data integrity and research confidence.

16.2 Objectives

Due diligence (the careful and persistent application or effort) must be a project priority from the outset. A project must demonstrate its effective stewardship of the funder’s money; its effective implementation and delivery of the research model; its protection of the research participants, staff, and the collected data; and its documentation of all processes and strategies, so that the academic and research community can know with confidence that the results can be replicated.

16.3 Evolution of Due Diligence Practices

From the get-go, this project was committed to keeping track of everything. During recruitment, the project over-shot its target of 4000 project participants and enjoyed assessment 1 survey completions from 4123 people.

During the second assessment, the project team was most uncertain about what communications to issue to the participants and thus tracked and graphed everything! The project was surprised to discover that one RA had a passion for number and data analysis and before long we had mathematical equations to assure us of the ideal time to change up our interaction strategies with our participants.

With each new monitoring practice that we put into place, it kindled yet another innovation and the project encouraged its implementation. The project front line had the computer technologies and the staff interest to contemplate, design and introduce these new tools.
When the second assessment concluded with a retention rate of 96.17%, the project was jubilant—but also realized that other researchers might be skeptical about these outcomes. How could longitudinal research retain so many members of the research cohort?

At this time, the project introduced many additional monitoring and validation activities and processes. The project needed to be assured that every aspect of the project was valid, reliable, verifiable and true. Due diligence activities were paramount to our confidence, our project success and our integrity (both personally and academically).

Whenever the project identified any potential process or system gap or weakness, the benefits and risks were assessed and a determination of action/non-action was completed. Risk management was important yet it had to be balanced with costs (including human resourcing). The ongoing assessment of retention validation practices promoted project understanding and integrity.

### 16.4 Description of Due Diligence Activities to Ensure Retention Validation

The following table describes the key processes, protections, activities and characteristics that were in place in order to:

- Ensure the integrity and credibility of the project
- Ensure the validity and reliability of the research data
- Ensure opportunities for the project outcomes and processes to be replicated
- Demonstrate that due diligence was a project priority
- Demonstrate the commitment of the project to its staff (e.g. clear practices, safeguards, documentation, back-up systems etc.)
- Demonstrate the commitment of the project to its participants
- Demonstrate the commitment of the project to its funder
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<th>#</th>
<th>Type</th>
<th>Explanation</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Cohort Recruitment</td>
<td>Consumer Contact (CC) recruited 6700 participants for QLS and 4123 completed 1st assessment. We have a copy of CC emails to those participants (note: this authentication process was introduced about half way into recruitment)</td>
</tr>
<tr>
<td>2</td>
<td>Cohort Recruitment</td>
<td>Consumer Contact (CC) is an arms-length, third-party private specialized business with a business reputation to maintain. QLS staff spent a day onsite at CC to meet with and train recruitment call centre staff to improve understanding of consistent use of the project recruitment script</td>
</tr>
<tr>
<td>3</td>
<td>Cohort Recruitment</td>
<td>Over 80,000 households across the Quinte region (approximately every second household) were telephoned by CC, thus if “fraud” was happening, somebody in the region would have reported it</td>
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<tr>
<td>4</td>
<td>Data base Backups</td>
<td>Complete backups of the QLS database were kept on the U of L secure server (Note: this practice was fully implemented prior to assessment 3)</td>
</tr>
<tr>
<td>5</td>
<td>Detailed Backups</td>
<td>In Survey 3, automated archiving of participant contact information changes was introduced and these are stored on a U of L secure server - as well, the Notes Field of the contact database, describes any staff action with regard to contact info changes</td>
</tr>
<tr>
<td>6</td>
<td>Cohort Cheques</td>
<td>All cohort compensation cheques were reconciled after each assessment period. As well, in October 2009, they were professionally audited.</td>
</tr>
<tr>
<td>7</td>
<td>IP Addresses</td>
<td>The IP address from where each survey was completed is logged in the U of L secure server</td>
</tr>
<tr>
<td>8</td>
<td>Duplicate IP Addresses</td>
<td>With regularity, the project office staff ran a query to identify duplicate IP addresses, and any occurrence was examined to ensure legitimacy/explanation</td>
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<tr>
<td>9</td>
<td>Browser Strings</td>
<td>As with IP addresses, these were logged by the U of L secure server. While there were many possible combinations of browser strings, project office staff reviewed oddities with regularity to identify possible problems and determine explanations</td>
</tr>
<tr>
<td>10</td>
<td>Invitations</td>
<td>Each Invitation-to-Complete was posted to the participant’s record (communications table) and stored on the U of L secure server</td>
</tr>
<tr>
<td>11</td>
<td>Invitations</td>
<td>Each emailed Invitation-to-Complete was blind copied (bcc) to a secure location. This process was introduced prior to the launch of assessment 3.</td>
</tr>
<tr>
<td>#</td>
<td>Type</td>
<td>Explanation</td>
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</tr>
<tr>
<td>12.</td>
<td>Backup of PI (longitudinal)’s U of L Email Account</td>
<td>All complaints, concerns, and praise of project activity, received by PI (longitudinal) was backed up on U of L server</td>
</tr>
<tr>
<td>13.</td>
<td><a href="mailto:Info@qeri.ca">Info@qeri.ca</a></td>
<td>All received and sent emails were backed up on the U of L secure server - unknown if there was any fall off of the backup system, as quantity built or time passed</td>
</tr>
<tr>
<td>14.</td>
<td>Phone Log</td>
<td>PI (financial) had the phone records of all long distance calls - no project log of local calls</td>
</tr>
<tr>
<td>15.</td>
<td>Patterns of Answering Project Surveys</td>
<td>Analysis of patterns of answers within each survey, comparing responses to those entered during the other assessment periods, could detect “fraud”. Confirmation of who does the survey?</td>
</tr>
<tr>
<td>16.</td>
<td>4123 Participants with Contact Information</td>
<td>A random sample of QLS participants could be contacted (following ethics and confidentiality guidelines) and asked about their project experience to confirm that they are valid (and real) participants/completers</td>
</tr>
<tr>
<td>17.</td>
<td>Cohort Life Events Journals</td>
<td>Since these were hand-written and very personal, they would be extremely difficult to forge - they could be reviewed and compared to survey information</td>
</tr>
<tr>
<td>18.</td>
<td>In-office Cheques</td>
<td>Each participant who completed the survey in-office, initialed the compensation cheque stub - those initials could be authenticated</td>
</tr>
<tr>
<td>19.</td>
<td>$ Downside of High Retention Rate</td>
<td>Given the project funder established the project budget based on 4000 participants and a 95% retention rate each assessment period so at the conclusion of 6 surveys, there would be a 75% retention rate, project over-achievement caused a $75,000 financial pressure over the course of the project</td>
</tr>
<tr>
<td>20.</td>
<td>Every participant must be accounted for</td>
<td>During our 3rd assessment, we changed our project strategy. Rather than counting/focusing on those who had completed the survey, we decided to focus on those who had not completed. Even our reminder postcards said “You Count” . . . We need your opinions/participation. We used/evolved many approaches to look for those participants who had not kept in touch with us - reverse number look-up, 411 online search; Googling people; purchasing an online obituary program; and more. The challenge of keeping in touch with 4123 is immense, but the project embraced it.</td>
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### QLS Project
#### Retention Validation - Risk Management - Due Diligence

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<tr>
<td>21.</td>
<td>Firewall/Divide</td>
<td>The project designed and continued to build upon the clarity of data separation between the project office and U of L - to ensure that nobody had the opportunity to breach confidentiality with participants - blue screen data was for Quinte staff; buff coloured screens were for U of L and the research staff access. This separation minimized fraud and data manipulation (retention fraud).</td>
</tr>
<tr>
<td>22.</td>
<td>Chronology of Completers</td>
<td>During the <em>End Game</em> of the 2nd assessment, the project began to study/identify the characteristics of the cohort during different phases - Launch, In-office, Paper and End Game. Were there also unique characteristics inside the questionnaire (their answers), that could guide the project e.g. whether the final 10% is worth the extra cost? This question was not directly affirmed - but explored. It seemed that “fraud” during the launch/early phase of an assessment period was not possible, as participants could log on later in the assessment period and they would have been unable to have their ID and password validated and thus could not proceed with the questionnaire. Project would be notified.</td>
</tr>
<tr>
<td>23.</td>
<td>Finders’ Fees</td>
<td>While these funds were available to encourage leads to help the project stay in touch with participants, we felt the approach could be mis-used/abused, and could reduce the commitment of participants staying in touch with the project office. Thus, the project office did not use the Finders Fees.</td>
</tr>
<tr>
<td>24.</td>
<td>2 Points of Scrutiny</td>
<td>All activities that related to survey completions (and thereby cohort payments) had two separate staff undertake a portion of the actions (Site Manager/RA1; RA1/RA2; Site Manager/PI (finance) - this approach was in place since the project outset in order to protect individual staff members and to provide scrutiny and a second pair of eyes reviewing the data/facts.</td>
</tr>
<tr>
<td>25.</td>
<td>Police Within our Cohort</td>
<td>Although unaware of the exact number, the project office was aware that our project cohort included many police officers and Canadian Armed Forces personnel. The project believes that with their training, they would have been sensitive to fraud potential and would have raised concerns.</td>
</tr>
<tr>
<td>26.</td>
<td>OPP White Collar Crime Expert</td>
<td>During Survey 1, an in-office participant was driven to the office by her brother. He waited in the reception area, watching and asking many questions. When his sister was exiting, he identified himself and his career. He commended the Project Office for all the practices that he witnessed. He said he observed an incredibly professional and conscientious approach to our research - to protect confidentiality and data integrity. (We then learned that he was a white collar crime investigator.)</td>
</tr>
</tbody>
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QLS Manual: Achieving a 94% Retention Rate:  
page 141
Part III: Specific Tools

16. Due Diligence re: Retention Validation

**QLS Manual: Achieving a 94% Retention Rate:**

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<tr>
<td>27.</td>
<td>Project Office Staff Recruitment</td>
<td>Not one of the recruited staff had any prior knowledge of any other recruited staff member. While three staffers had lived in Belleville for over 30 years, their paths had never crossed and in fact their careers had been in very different sectors.</td>
</tr>
<tr>
<td>28.</td>
<td>Professional Licenses and Credibility</td>
<td>One RA was a Registered Nurse. She would have lost her license to practice nursing, if she committed fraud or violated public trust. Between 2002 and 2005, the Site Manager worked as the community representative on the Pathways to Independence Steering Committee preparing for Accreditation by the Canadian Council of Health Services, and since 2008, as a member of the Board of Directors of Pathways to Independence (one of the largest non-profit agencies in the SE Region and providing services to people of development disabilities and those with acquired brain injuries), has been the Board member leading the committee for Accreditation by the Canadian Association of Rehabilitation Facilities (CARF). Credible practices, due diligence, consistency and reliability are her <em>modus operandi</em>. The second RA too has been a member of many professional associations (e.g. engineering; safety professionals) and breach of public trust or fraud would cost him his professional standing and credibility.</td>
</tr>
<tr>
<td>29.</td>
<td>Stability of Retention Rates</td>
<td>Since assessment 1, the Project achieved reasonably consistent retention rates. Inappropriate activities or data manipulations would likely have generated erratic retention rates.</td>
</tr>
<tr>
<td>30.</td>
<td>Requirement to Show Photo Id</td>
<td>Anyone who arrived at the project office to complete their survey must showed photo identification if they did not bring their personal emailed invitation or project Invitation-to-Complete.</td>
</tr>
<tr>
<td>31.</td>
<td>Provision of Survey Dates</td>
<td>Until the 4th assessment, all project communications (including the project website) noted the date of the next survey time. This publically accessible information also minimized data manipulation/fraud.</td>
</tr>
<tr>
<td>32.</td>
<td>Documented Call Lists</td>
<td>The Project office used Google-based call lists since the 2nd assessment. During the 3rd assessment the project determined the calling rate: 17 calls per hour - in the end game. This type of data-based monitoring provided evidence of transparency and openness.</td>
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### QLS Project
#### Retention Validation - Risk Management - Due Diligence

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<tr>
<td>33.</td>
<td>Survey #2 and Beyond</td>
<td>Having attained a 96+% retention, during the 2nd assessment, the project feared there might be non-believers. The project office pushed for new tools to document all activities/processes - and many new systems and documentation practices were put in place (to protect staff/project from criticism). As credibility and trust were built within the project, the project office was entrusted to “have its hands on the throttle of the assessment period pacing”. This necessitated backup systems running in the background, so there was validation/proof of the project office activities, if ever required. Due Diligence was the project office approach.</td>
</tr>
<tr>
<td>34.</td>
<td>Staff Retention Bonuses</td>
<td>This was a performance monitoring strategy that was proposed for the Project at the time of submitting the proposal for funding. While project staff appreciated the concept of performance pay, it did not resonate with staff behaviour. Each project office staff member was a perfectionist, rather like a dog with a bone. They simply did not give up and when presented with a challenge, they wanted to do the best job possible. Project work is uneven in its time demands - yet each staff member seemed to put their families on hold when the assessment period was underway. They could stop when 95% retention was attained; but they did not. The staff motto was that they wanted to account for every participant.</td>
</tr>
<tr>
<td>35.</td>
<td>P.O. Boxes</td>
<td>Literature about fraud suggests the use of Post Office Boxes can be considered suspicious. The project did a preliminary analysis (and clean-up) of the P.O. Boxes and some rural addresses (to which compensation cheques were mailed). No irregularities were found but further analysis could be done.</td>
</tr>
<tr>
<td>36.</td>
<td>Honesty and Credibility</td>
<td>These two personality characteristics described the Site Manager and the RAs. Each lives by these values and each continues to address the importance of these characteristics with their children (interestingly each has daughters).</td>
</tr>
<tr>
<td>37.</td>
<td>QLS Manual</td>
<td>The project welcomed the opportunity to document the processes used throughout the five assessment periods and it looked forward to providing workshops/seminars the animate the details. The project welcomed the opportunity to share its straight-forward and caring approaches; it liked what it did, wanted to do it in the best way possible, and welcomed any opportunity to be critiqued by other longitudinal studies. Through dialogue/review, the project hoped to integrate other experiences into this project’s practices.</td>
</tr>
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<tr>
<td>38.</td>
<td>Maturity and Life Experiences</td>
<td>The Site Manager and the RAs enjoyed diverse and progressively responsible careers. Each enjoys diverse and amazing family life. Each is comfortable with a wide range of people, special needs, ethnicity, and embraced/welcomed people to the project - on the phone, in writing and in person. There was no point to mess with a good thing - this was a great project and a great job. Staff members would not have risked their life careers, families and community credibility for a $20 an hour job!</td>
</tr>
<tr>
<td>39.</td>
<td>Ethics of Social Change</td>
<td>The Site Manager graduated (admittedly, many years ago!) with a MA in the seminary/social work department. Her thesis topic was the Ethics of Social Change. She has been committed to ethical decision making and practices her entire life. That is who she is. She similarly expected that from all those she supervised/managed/employed. She lives by the values that she expects - Walks the talk.</td>
</tr>
<tr>
<td>40.</td>
<td>Orphan Cohort Participants</td>
<td>About 30 participants are identified in the project database as orphaned recruitment. Project staff suggested a review of the characteristics of those participants to identify suspicious characteristics.</td>
</tr>
<tr>
<td>41.</td>
<td>Please Drop In</td>
<td>Between the summer of 2006 and September 30, 2011, the Project Office was open 12 months per year, in a visible section of the community, with clear signage and posted office hours, and encouraged participants and the public to drop in at any time. The project had nothing to hide, and welcomed input and feedback from anyone and everyone at anytime. We also actively encouraged our project funders (Ontario Problem Gambling Research Centre) to come and watch the project in action.</td>
</tr>
</tbody>
</table>
17.1 A Realistic Budget and Effective Budgeting

17.1.1 Having the Appropriate Budget was critical to the Success of the Project

- Some of the retention techniques utilized would have not been feasible without adequate budgeted resources
- Having an adequate budget created a sense of team confidence that was reflected in the quality of the work
- Being able to define clear budget guidelines made it possible to delegate authority for certain tasks to front line staff - with delegation extremely important to successful operations
- Being able to test out the financial implications of different options was essential to the ongoing project planning and management—especially given the need at a number of key points in the project to make significant changes to strategies and procedures

17.1.2 A Budget is not enough. What is needed is an Effective Budgeting Capability

- A longitudinal study is a very complicated process from a financial standpoint. Changes in each of a large number of factors (from hourly rates of staff to retention rates) will have significant financial effects on different parts of the budget.
- Any budget will therefore be dependent on a specific set of assumptions about the underlying factors.
  
  Any budgeting process or capability must have an effective process for collecting information on the assumptions from experts with the required knowledge. In this project, the budgeting process included processes for collecting, discussing and testing assumptions with all staff—from scientists, from technical support, and (very importantly) from the front-line project office/survey implementation staff.
  
- The relationships between the level and nature of the multitude of factors and the financial effects are often complex. It is also often necessary to be able to look at the budgetary implications of different sets of assumptions.
  
  This project found it necessary to build a computerized financial simulation model that would automate the process of documenting and simulating the financial effects of different scenarios of financial, scientific and technical assumptions.
Part III: Specific Tools

17: Financial Systems

- Although this model became very complex, it became essential to our planning and management process.32

17.1.3 Importance of a Well Thought-out Initial Budget

- Developing a detailed budget at the outset was essential to ensuring that we had a feasible and effective plan for starting the project.
- The detailed budget also helped to ensure that the client was aware of the complexity, assumptions and resources requirements of the project.

17.1.4 Example, Surprises to Which We Had To Respond

Although we thought the initial budget was well thought out, we have been repeatedly reminded that life is full of major surprises that could not be anticipated. Being able to quickly and accurately modify the budget (both in total and with respect to re-allocations among different budget line items) to accommodate changes was critical.

Examples of such major surprises included:

- Realization that we needed to add a web-based facility for participants to fill in the questionnaires
- A delay in the new racetrack-with-slots opening, that necessitated inter alia a change in the interval between surveys from 12 to 9 months
- A change in the front-line staffing model (from equal work for four Research Assistants to a greater reliance on two
- Producing financial scenarios for both restrictions and extensions to the length of the project

32 PI Note: The financial simulation model was captured within some separate but inter-connected 50 worksheets within an Excel spreadsheet. It covered all types of project expenditures, on both an actual and accrued bases. It also provided both an historical record of all actual project expenditures (numbers provided from our separate project accounting system) and forecasts of future expenditures. It allowed the PI’s to estimate how these future expenditures were likely to change under alternative scenarios (e.g. different retention rates, staff hourly rates, hours worked, costs of particular types of equipment and services).

The project financial simulation model was thus an invaluable tool to PI’s—for both regular tasks such as preparing annual budgets, and irregular tasks such as developing work-arounds to handle unforeseen challenges such as those listed in section 17.1.4 following (and also including: a change in the number and timing of assessments, a higher than expected retention rate, and a change in overall client project funding far into the project).
17.2 Robust Expenditure Monitoring and Control

17.2.1 Utilizing Public Monies requires Accountability

- Considerable effort was put into designing and operating a professional quality accounting and bookkeeping system

- All financial procedures follow generally accepted accounting principles

17.2.2 B. Complete and Accurate Knowledge of Expenditures to Date is Essential to Effective Planning, Budgeting and Management

- The accounting/bookkeeping system has an account structure consistent with that of the separate financial/budgeting simulation model

- Expenditures (for specific time periods and year-to-date) by line item can be efficiently extracted for entry into the separate financial model

17.2.3 The Size and Complexity of the Project Required a Professional Quality Automated Bookkeeping and Accounting System

- The combination of the accounting system and the financial simulation model was especially effective in providing different types of financial reports, both internal reports for project planning and control, and external reports to the client for purposes of accountability and control.

17.2.4 Clear and Well Monitored Sets of Accounting Responsibilities, Authorities and Protocols were Essential for both Accurate Data and Effective Delegation of Financial Responsibilities

- *see next point*

17.2.5 The Project found it Most Efficient to Centralize some and Decentralize (with controls) other Financial Functions

*Centralized [with the PI in charge (PI/IC)]:*

- Overall Responsibility for Financial Systems and Bookkeeping

- Overall Responsibility for Financial Budgeting (jointly with the second PI)

- Approval of Design of all financial procedures

---

33 PI Note: Although the Quinte Site Manager played an important role in making and documenting certain types of expenditures (including key parts of payroll) and in maintaining a petty cash system, the accounting system was developed and the set of books maintained separately by the PI-in-charge of finances.
• Purchasing: Major Expenditures

• Setting up (with the accounting system of the PI's company) a set of financial accounts specifically designed for the project (accounts are totally separate from other company accounts)

• Entering all expenditures (including purchases made by Site Manager) into the financial bookkeeping system

• Establishment of a separate bank account for the project

• Bank reconciliations

• Producing financial reports

• Calculating payroll cheque amounts

• All payroll and tax reporting to the government

• Maintenance of all financial records (including specific items kept temporarily on-site)

Decentralized [to Site Manager] with controls:

• Purchasing from Petty Cash (of items under a maximum amount, with the total amount replenished only after a written report of previous expenditures was reviewed and passed by the PI/IC)

• Purchasing pre-authorized items (with requests validated by email from the PI-in-charge)

• Writing cheques to participants

• Entering participant payment related information into Contact Database (Note: not into separate financial bookkeeping system)

• Calculating hours worked for payroll purposes, and writing cheques to all Research Assistants (with the PI-in-charge responsible for calculating necessary deductions and special payments for holidays and bonuses)

• Special financial analysis re. specific issues or purchases
17.3 Staff Payroll

The pay period for the Quinte/Belleville-based personnel was biweekly and ran from a Friday until midnight on the second Thursday after that Friday. So, by way of example, the current pay period includes Friday, September 11th through until Thursday, September 24th. This is a two-week work cycle.\(^\text{34}\)

When the project began, there was a binder at the office reception desk, and each staff member signed the time sheet when they arrived at the office, and when they left for the night. Those paper-based time sheets where tallied by the Site Manager on Friday morning, then entered into the excel staff Timesheet and emailed to the PI in-charge of financial matters.

The Staff Timesheet (in Excel)

(QERI_RA_Staff_Timesheets_yymmdd_pmcl.xls) has one worksheet for each project fiscal year, plus a summary worksheet. Each yearly worksheet has one row for each day of the year and each row contains columns (for each Quinte staff member) for recording the times and hours worked that day. As well, summary total hours are automatically calculated for each week and two week pay period. The gross pay for each staff member for each 2 week pay period is also automatically calculated. The Summary worksheet automatically calculates year-to-date information for each year to allow the Research Associate/Site Manager to monitor and control the total hours worked by the RA's.

Copies of each version of the Excel Staff Timesheet are kept by the PI in-charge at the Grey Highlands office of Robert Hann & Associates Limited. The most recent versions are kept by the Site Manager in Quinte.

The system evolved because the Site Manager tended to be on-site at the start and finish of the staff work shifts. While each staff member noted their start and finish time in their daily journal, the Site Manager typically entered the start-time on the payroll spreadsheet as each staff member arrived. As well, she entered the end of day time, in real time. At the end of the 2-week pay period, the Site Manager reviewed the logged time sheets with each staff member, to ensure that the data entered matched the staff member’s record-keeping. This review protocol was important as some project work could be/is done on-line from home and that pre-approved work was always included in the time sheets.

\(^{34}\) PI Note: This and the next section describe two of the financial processes used in the process. However, the descriptions are equally important since they illustrate the care and detail and accountability with which all project processes (financial and otherwise) were documented and understood by all staff.
Once the timesheets were reviewed (and amended, if necessary), the updated Excel Staff Timesheet was emailed to the PI (financial). It was submitted before noon the following day (i.e. on the Friday, if at all possible).

The PI in-charge scrutinized the information on the Excel Staff timesheet and used the total gross pay to calculate source deductions and net pay. These amounts were transferred to a separate Excel Payroll spreadsheet (Robert Hann and Associates Payroll_yyy_yymm_yymm22_rgh.xls) to which the Site Manager and staff did not have access.

The Payroll Spreadsheet (Confidential and in Excel)

This spreadsheet was updated by the PI (financial) at the end of each payroll period and was used to keep track of the information needed to automatically calculate summary information needed to prepare quarterly and yearly employee payroll returns to CCRA (i.e. Canada Customs and Revenue Agency). It was also used to calculate amounts due for special calculations (e.g. vacation pay, and ROE’s [i.e. Records of Employment]).

A separate Spreadsheet was kept for each calendar year, and each yearly spreadsheet had separate worksheets for each staff member plus summary worksheets that presented summary year-to-date statistics for each staff member and monthly totals for all staff members combined.

Copies of each updated version of the Payroll Spreadsheet were kept by the PI in-charge of financial matters.

The gross and net pay and deductions were also transferred to Earnings Statements for each staff member and were emailed back to the Site Manager (oftentimes within 1 - 3 hours 😊). Paper copies of these earnings statements were also created and stored in the Grey Highlands office. The email was also the authorization (from the PI in-charge to the Site Manager) to continue with the payroll process (including the issuance of payroll cheques).

The process for printing the payroll cheques included the following:

- The Site Manager printed 2 copies of each Earnings Statement
- The Site Manager highlighted in yellow on each copy, the staff member’s Name and the Net Amount payable
- Because the total hours worked by each staff member were entered by PI (financial) on the Earnings Statement (beside the staff member’s name), the Site Manager checked this amount with the submitted time sheets, before proceeding with the cheque preparations
- The Site Manager, using the staff payroll cheque issuance template, prepared the cheque payable to the staff member (the highlighting ensured accuracy). The cheque template included a communication portion (2nd) which was given to the staff member with their cheque. It stated the dates of the pay period, the cheque amount, the cheque issuance date.
and the cheque issuer. The cheque template also included an audit portion (3rd) which was retained by the Site Manager as confirmation of the details of each issued cheque - these included the cheque number, the issuance date, the amount payable, the pay period dates and the cheque issuer.

- The 3-part cheque (which includes an electronic signature) was printed.
- The 3-part cheque was photocopied
- The Pay Period and the Date of the Issued Cheque were written in red on the top of both copies of the Earnings Statement
- The audit (3rd) portion of the cheque was separated from the cheque
- The cheque payable (1st) and the communications (2nd) portions of the cheque were folded on the perforated line
- 1 copy of the Earnings Statement was folded and placed between the folded cheque
- The cheque and the Earnings Statement were placed in a 2-windowed envelope and sealed. (The name and address of the staff member was now visible through the big window of the envelope)
- If the staff member was on-site, the envelope was provided to them directly.
- If the staff member was not scheduled to be on-site until mid-week the following week, the envelope was stamped and placed in the Canada Post mailbox (before the 2:45pm pick-up time). This ensured that the cheque was delivered to the staff member on the Monday.
- From time to time, if the PI (financial) and/or the Site Manager had Friday commitments, the payroll might not have been processed until early the following week - staff were advised if this might be necessary.
- The second copy of the Earnings Statement was then stapled to the photocopy of the processed pay cheque and placed in the staff member’s payroll file
- Using the audit (3rd) portion of the issued cheque as the source of the information, the Site Manager emailed the PI (financial), the details of the payroll cheque(s) e.g. the cheque number, payable to whom, the cheque issuance date and the cheque amount.
  - The PI (financial) compared these amounts with the amounts shown on his copy of the payroll earnings statements and entered the amounts and other particulars for each cheque into the separate project electronic bookkeeping system. The Site Manager was notified immediately of any discrepancies.
  - This email was printed by the Site Manager and filed in the General Payroll file (with the 2-week portion of the spreadsheet).
  - The audit (3rd) portion of the cheque was filed sequentially with all issued cheque stubs.

Each month, as part of the bank account cheque reconciliation procedure, the PI in-charge compared the amounts of the cancelled payroll cheques written by the Site Manager (as shown on the monthly bank statements) to the amounts recorded by the PI-in-charge in the project electronic bookkeeping system.
NOTE: The staff payroll files, cheque stock and files pertaining to cheque issuance were always in locked cabinets/drawers in the Site Manager’s office. Electronic and paper copies of the payroll records created and used by the PI in-charge (including staff contracts, ROE's and other payroll related information such as quarterly and yearly statements to CCRA) were also kept in lockable filing cabinets at the Grey Highlands office.

17.4 Petty Cash

When the QLS Project began in 2006, the Site Manager was provided with $500 petty cash. The concept was that the petty cash would be replenished after the Petty Cash Reconciliation Report was submitted by the Site Manager, to PI (financial). In the fall of 2007, the petty cash limit was raised to $800 - $1000 especially during the project’s assessment period, as operational expenditures occurred quickly at that time.

The Petty Cash Reconciliation Report uses the QLS Project Expense Claim Template (which was kept on the QLS Project website, under the Researchers Log-In for easy access by all QLS Project personnel). Each category for classifying petty cash expenditures was delineated on the Notes Sheet of the Expense Claim template.

Some operational services were contracted annually with an outside provider e.g. office cleaning, security alarm monitoring, phone services and those invoices were received regularly at the Project Office. These invoices were then forwarded by mail to PI (financial), for processing.

Most operational needs were consumables and purchased locally as the need arose (the project office had limited storage). Most (if not all) of these local purchases were made by the Site Manager. For any items costing more than $200, research was done to ensure the best buy (if possible, 3 suppliers were contacted) and the cost/quality comparisons guided the purchase.

Examples of expenditures to maintain the Project Office included the following:

- Jugs and bottles of water for the participants
- Healthy beverages and snacks for the participants
- Serviettes and supplies for serving and cleaning up from the participant snacks
- Toilet paper, soap, and paper towels for the washroom (participant and staff use)
- Computer paper
- Note pads, pencils and pens for use at each public computer workstation
- Printer ink cartridges
- Garbage bags and municipal garbage bag tags
- Office stationary supplies
- Postage for mailing communications to our 4123 participants

Staff drove their personal vehicles to purchase the office operational supplies and the kilometres driven were logged for reimbursement when the distances mounted up. Minimally, staff were
Encouraged to submit their expense claim for work related travels, prior to the end of each fiscal year. In this way, expenses could be associated with the relevant Assessment Period.

Petty Cash was kept in a zippered case in a locked credenza in the office of the Site Manager. The receipt for each petty cash purchase was similarly kept in the case.

When the petty cash amount was less than $200 (or when the case was bulging from the number and size of receipts in the case), the Site Manager prepared a Petty Cash Reconciliation Report.

To do so, all the receipts were sorted in chronological order by date of purchase. They were then numbered in red, so that the circled red number matched with the receipt number on the Expense Claim template.

The Excel spreadsheet was then completed, listing:

- Date of Purchase
- Place of Purchase
- Description of Purchase
- Total amount of the expenditure
- Total amount of GST (within the purchase)
- Category of Expenditure (and for many invoices, the items were divided across a number of the columns)
- When each receipt was entered and divided across the columns, the spreadsheet functionality determined if the apportioning was correct. If not, the numbers were corrected.

When all of the expenditures in the time period had been entered, the summary page was completed, and the Petty Cash Report was printed. The original invoices were stapled (in sequence) to the printed report. The Site Manager then signed and dated the report.

An electronic copy of the Petty Cash Reconciliation Report was then emailed to the PI (financial). He reviewed it for completeness, appropriateness, accuracy and ensured that each item had been properly categorized.

The paper-based version of the Petty Cash Reconciliation Report (and its original receipts) was filed in a locked cabinet in the office of the Site Manager. Separate files were maintained for each fiscal year (i.e. April 1st to March 31st).

Once the Petty Cash Reconciliation Report was approved, the PI (financial) prepared a cheque for the expended Petty Cash and mailed the cheque, his approval signature and the dated cover sheet to the Site Manager. The Site Manager cashed the cheque, attached the bank receipt to the reconciliation report and placed the QLS cash in the case in the locked cabinet.

When the PI (financial) travelled to the Project Office for site visits, or at various reporting times throughout the fiscal year, the Petty Cash Reconciliation Reports and their associated original receipts were transferred to the PI (financial).
Between 2006 and September 2010, the PI (financial) always processed the Petty Cash Reconciliation Reports in a very timely way – always within 10 days or less – and this ensured operational support to the Project Office. The Site Manager and project office personnel were most appreciative to the PI (financial) for this very efficient yet clearly documented Petty Cash system.

Given the significant geographic distance between the front line QLS Project Office and the Principals in this project, the timely processing of all financial supports was extremely important and much appreciated by the Site Manager.

### 17.5 Petty Cash Addendum and Process Revisions

On December 4, 2008, the PI (financial) and the Site Manager determined that the petty cash and some invoice processing for the project should be handled differently, in order to streamline the past practices.

#### 17.5.1 Rationale for Making Adjustments

The rationale for making adjustments to the petty cash practices which had been in place since August 2006 was as follows:

- Mailing invoices for payment to Grey Highlands [rather than the previous Toronto location of the PI (financial)], was requiring additional time delays and costs
- Trust/confidence between the Site Manager and the PI (financial) was established given the Site Manager’s documentation, tracking and bring forward systems, and active communications
- The exemplary budgetary management systems used by the PI (financial) for the Project and for his company
- Email-based requests and authorizations documented the details of each invoice in a timely way
- Monthly Bank Statements sent to PI (financial) verified and documented each cheque written on the Project Account
- More than one year of experience at Project Office, responsibly using the electronic signature of the PI (financial) in the preparation of compensation payments to the project participants
- The international work (non-QLS) by the PI (financial) - from time to time throughout the year, took him out of the country for periods of up to 3 weeks. These absences meant that late payment charges could be accrued on project invoices, given the practices by some companies if payment was not received within 10 days of receipt of the invoice, interest charges commenced
Part III: Specific Tools

17: Financial Systems

- Timely, local processing was in the best interests of the Project Office, as it increased local visibility and accountability for the project in the community and demonstrated the Site Manager’s professionalism and management skills to the community service providers.

- Ease for suppliers to walk into the office and discuss or sort-out with the Site Manager any invoice processing concerns that arose from time to time.

17.5.2 Revised Guidelines for Issuing Cheques for Invoice Processing

Based on the above-listed reasons, it was prudent to discontinue the practice of mailing local service invoices to the PI (financial) for processing and payment.

Effective December 4, 2008, the following guidelines and approach were determined:

- For any emergency items/services, the Site Manager generated a project cheque and provided cheque issuance documentation by email to the PI (financial), as soon as possible.

- For service invoices of less than $200, the Site Manager generated a project cheque; forwarded payment; sent an email to the PI (financial), documenting the details of the invoice and the cheque issuance (with GST amount specified); and filed the cheque issuance details with the invoice originals.

- For service invoices of purchases of more than $200, the Site Manager sent an email request to the PI (financial), explaining the need for the expenditure and the options for purchase (cost estimates). The PI (financial) reviewed the request and if sufficient documentation had been provided, emailed back the authorization to proceed with the purchase/expenditure. After the purchase/expenditure, the Site Manager emailed to the PI (financial), the details of the purchase, including the invoice number, the cheque issuance details (including amount of GST), and then filed the cheque issuance details with the original invoice/receipt and the emails of authorization and documentation.

Note: The emails of cheque issuance details were sent to the PI (financial) within 48 hours of cheque issuance (but in reality, they were typically sent immediately, as the task was seen to be the final step in cheque issuance).
Chapter 1: Introduction

The Previous Parts of this manual focussed on the general strategies and approaches (Part II) and the specific tools (Part III) that were used to achieve the 94% retention rate achieved by the QLS study. This last Part of the manual provides specific examples of the specific operational tactics used to convert those strategies and tools into actual practical results.

Part IV draws heavily from slides prepared by the Belleville front-line staff for presentation at the 20th Annual NAGS (National Association for Gambling Studies) conference in Gold Coast Australia, December 1 – 3rd, 2010. To retain the tenure of that presentation, the original slides, style and language of the presenter’s commentary have been retained.

That presentation was delivered when the project was in the early stages of its fifth and final assessment round of questionnaires—and thus reflects the status of the project at that time. However, by that stage the project had achieved general stability with respect to its strategies, tools and operational tactics. The messages presented are thus virtually identical to those in place at the end of the project.
Part IV: Tactics to Put Strategies & Tools into Practice

The material is presented in 3 Chapters:

*Chapter 2 Counting Down:* focuses on the logical steps used to schedule and implement the different tactics used during a typical assessment cycle;

*Chapter 3 Database Tools:* focuses on how the Contact Database, Google Doc and other tools played an integral role in supporting the many different project management and participant retention efforts; and

*Chapter 4: Strategies and Costs:* provides overall summary and concluding comments.
Chapter 2: Counting Down

The Quinte Office Project staff had been achieving what we felt were quite respectable re-recruitment numbers but, to our surprise, both the numbers and the techniques were at variance with both the literature and anecdotal reports.

The remainder of this part of the current document is the presentation the Quinte office staff put together to explain the project’s success for a workshop at the 2010 National Association for Gambling Studies (NAGS) conference held in 2010 in Australia. Since the project topic was an investigation into problem gambling, we chose to describe the QLS Retention Approach with a game strategy.

This is how the game was played...
How to get 94% Retention

In a few (not always) easy steps

Patricia McLaughlin & Nick White
QERI Project, Belleville, Ontario
Canada

Tarot images from www.wischik.com who state they may be used for non-commercial purposes
# How is the QERI study doing?

<table>
<thead>
<tr>
<th>Survey Number</th>
<th>Usable Surveys</th>
<th>Official Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4,121</td>
<td>99.95%</td>
</tr>
<tr>
<td>2</td>
<td>3,934</td>
<td>96.17%</td>
</tr>
<tr>
<td>3</td>
<td>3,897</td>
<td>95.56%</td>
</tr>
<tr>
<td>4</td>
<td>3,823</td>
<td>94.16%</td>
</tr>
<tr>
<td>5</td>
<td>In progress</td>
<td>Target 93+%</td>
</tr>
</tbody>
</table>

What is the QLS track record? This shows our results after four assessment periods and as of last Thursday afternoon, we were at 4 weeks into Survey #5 and we had exceeded 65% retention. Throughout our time together this morning, we expect to look at our live tracking documents so that you can see our real-time status.
Part IV: Tactics to Put Strategies & Tools into Practice

Slide 3

The Basic Principle

Need to be sure that you are playing with a full deck of cards.
So count them every day.

This is critical. You must be certain that you are playing with a full deck of cards! The only way to be sure is to count them every day and, if you have a suspicion that one or more may be missing, count them again.

Remember you can’t win every hand but, since all the participants volunteered for the project, our mission is to help the participants complete.

Our real target is to account for each and every participant, and as a side benefit that allows us to calculate the expected retention rate at the beginning of each survey.

So how do we count?
Part IV: Tactics to Put Strategies & Tools into Practice

2. Counting Down

Slide 4

The Flag System
(this is a simplification of reality)

<table>
<thead>
<tr>
<th>Ineligible</th>
<th>Reviewed with Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawn</td>
<td>Belleville review</td>
</tr>
<tr>
<td>Lost</td>
<td>Belleville review</td>
</tr>
<tr>
<td>Missing</td>
<td>Belleville review</td>
</tr>
<tr>
<td>Stuck</td>
<td>Always flagged for action</td>
</tr>
<tr>
<td>Will complete later</td>
<td>Staff set flag – date set</td>
</tr>
<tr>
<td>Skipping this Survey</td>
<td>Staff set flag – reason noted if appropriate</td>
</tr>
<tr>
<td>Clear with “Promise”</td>
<td>Staff set flag</td>
</tr>
<tr>
<td>Clear</td>
<td>Default</td>
</tr>
<tr>
<td>Started</td>
<td>Computer report</td>
</tr>
<tr>
<td>Completed</td>
<td>Computer report</td>
</tr>
</tbody>
</table>

When playing a game of strategy, knowing what cards you have in play means that you must know the unique characteristics of each, and like cards, each participant has a unique face or description. Since we do not have the time, money or desire to build up individual profiles, how do we keep track of everyone?

We flag people. We have evolved a Flag System and project protocols that relate to each flag setting. These protocols are important. For example, as noted above, before anyone is determined to be ineligible, the Principal Investigator with responsibility for the survey science (Rob) must review the facts and make a determination. Rob has set a very high bar to be cleared before a person can be flagged as ineligible – he accepts obituary notices if it clearly identifies the participant.

The three flags that are in **green** are set manually by the front-line team. It should be noted that nobody makes an independent determination here, it is a team decision. Once a participant is flagged this way, staff effort to re-recruit them is minimized so it is unlikely that the participant will or can complete a survey. But we don’t give up – especially for the “lost” category. If there is a quiet day or evening later in the survey period a staff member will re-re-review the list to see if a new approach or technique to reconnect with the participant can be used.

Stuck is **red** because it is a high priority. We must be certain to sort it out – and fast. If we cannot resolve it immediately, we keep the participant informed of our progress. We do not want anyone left in limbo or frustrated – they might start thinking about quitting!
The three flags identified in **black** are set manually by staff after a conversation with the participant. By Survey #5, we have a fair idea of both the size and dynamics of these categorized lists: they start at zero and gradually grow during the survey period. The number of people on these lists is reviewed periodically and if the number seems to be out of line - we investigate.

The pale **grey** flags give the numbers that everyone asks about and go in reports. In reality, those numbers aren’t very important to the day-to-day work.
The Flag System
(the reality)

We use around 20 different flags and tracking variables
- Some are for staff convenience (save time and money)
- Some are binary (yes/no)
- Some take a fixed value and are set to be mutually exclusive
- Some pertain only to one particular survey, some pertain to all surveys
- Different flags and flag combinations become important at different times during the survey period

When a new survey period commences, a batch program is run that clears the survey-specific flags. In actuality, the end-of-survey flags are archived and can be accessed if the need arises.

Multi-survey flags are retained. We do not expect death and medical-incapacitation (i.e. those who are ineligible) to change. Those participants who are “lost” are reviewed at the beginning of each survey period, maybe something has come up and we could find them again. . .

We want to send our Invitation to Complete the Next Survey to everyone who is eligible to complete. Making a mistake may lead to the permanent loss of a project completer.

Now that we have talked about how we count our cards, let’s start counting.
The specialized research sample recruitment agency provided us with 6,632 people who met the criteria to participate in this longitudinal study.

We were able to encourage 4,123 people to complete Survey #1. Two completers changed their mind about staying in the project and after review by the Project’s Principal Investigators, their data was deleted and they were removed from our contact database.

Henceforth, they have been invisible to us.
As of last Thursday, sixty-five participants had become ineligible. Fifty-seven are deceased and eight were determined by Rob to be medically-incapacitated.

It can be difficult to determine a death – we may hear of the death from the estate executor, a lawyer, a friend, a spouse or other family member of the participant (responding to our project communications). In each situation, the Site Manager follows-up with a sympathy card to the family, expressing appreciation for the family member’s participation in our project. It may also be that some of those who are “lost” may in fact be dead.

So our retention ceiling is now 98.7%
Now at 98.37%

- 46 people have been withdrawn (don’t forget these people)
  - Boredom with project
  - New questions they felt were not relevant to the survey
  - Life circumstances have changed and they are no longer interested
  - We hassled them once too often about completing
  - Other (or unknown)
- 97.26% remaining in the deck

Forty-six participants have asked to be withdrawn. Each project participant has the right to withdraw from the project at any time. This was explained to every participant at the start and they are reminded of this at the start of each survey.

We review the list of withdrawn participants prior to the distribution of our summer newsletter and the preparations of our Invitations to Complete. We have sent Newsletters to about 30% of the “withdrawns” as they have been a part of an interesting research initiative and we think they might like an update on it.

There are many reasons why people may want out – and they need not tell us why, although many do. So be sensitive, but don’t forget these people. We have had a few withdrawn participants complete their next survey – it may have been a soft withdrawal because perhaps they were having a bad day?
After four and a half years of the QLS Project, we have lost touch with 44 participants. We do not think that setting the Missing Flag is final. With the rapid pace of changing technologies, we are optimistic that new ways to track down these people may become available.

At this time, we have 96.19% remaining in our deck.
Now at 96.19%

- At the start of Survey #5, we were not able to issue invitations to 34 people (it may be more)
  - No email or postal address
  - Telephone may be valid
  - Alternative or work contacts may be valid
  - Can try neighbours and social networks etc.
- **94.75% remaining in the deck**

We do not consider these people to be Lost – we just have more work to do to try and get a mailing address or email address so that we can get an Invitation to Complete Survey #5 to them. Now that we have finished our Launch, we will start the search for the contact information for these thirty-four.

We recount the cards in the deck and review the flags to make certain our numbers add up. Last week, we verified our Invitation distribution numbers and realized that somehow we missed 2 participants. Without a notice from us, they are unlikely to complete – a missed opportunity for the participant to be involved and a missed completer for the project. . . We’re on it😊.
What Does This Mean?

- 94.75% remaining in the deck means we have (if we don’t lose some) 3,907 participants in play
- Based on what we talk about in the next few slides, our target is to have 3,797 complete
- Estimating probable deaths during Survey #5, the 3,797 completions would give a Retention Rate of 93.73%
- This may be possible 😊

So with this approach to the game, we have 3,907 participants in play.

But between Surveys 2 and 5, we have learned some other lessons about survey completions and sadly some other folks will die, so we believe that our Survey #5 objective for Completions will be 3,797 (or 93.73% completion).

So what is realistic for Survey #5?
Down to 3,907 Available Participants

<table>
<thead>
<tr>
<th>Action</th>
<th>Completions</th>
<th>Remaining</th>
<th>Response Percentage</th>
<th>Accumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invitations</td>
<td>2,422</td>
<td>1,485</td>
<td>62%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Reminder 1</td>
<td>691</td>
<td>594</td>
<td>60%</td>
<td>84.8%</td>
</tr>
<tr>
<td>Reminder 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone call to verify status</td>
<td>344</td>
<td>249</td>
<td>58%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Phone call to encourage</td>
<td>140</td>
<td>110</td>
<td>56%</td>
<td>97.2%</td>
</tr>
<tr>
<td>ESP</td>
<td>110</td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

This table is bright to catch your attention, because we think it is probably one of the most important findings we have had. These numbers are based on models developed during Surveys 3 and 4 and we are already seeing them give reasonable predictions for Survey 5.

The Action column lists our campaign strategy or sub-strategy and the other columns give our forecast results. With each Campaign we record the dynamics of the response and the results – we know our starting point, we model where we expect to be.....and watch to see if our results are happening as expected – if not, we introduce a sub-campaign.

At the start, a campaign is very statistical in nature (get the message out but don’t offend anyone) but as we move to the second phone call and the number of remaining participants is small, every communication is tailored to that individual.
Be Realistic

- Don’t expect to get everyone to complete with one campaign
- Plan for sub-campaigns within the main re-recruitment campaign
- Measure (daily if possible) the effectiveness of each sub-campaign

Monitor the effectiveness of **everything** you do in communicating with the participants.
We have found the response to a good Sub-Campaign is consistent

- Completions from the letter invitations for the first 15% of participants was about 62%.
- Completions from the phone calls to the last 15% of participants was about 58%.

You won’t know if what you are doing is useful unless you record what you did and monitor the results.

By way of example, in Survey 3 we measured the completion response to our Invitation to Complete for the “early completers” and it was 62%.

We also looked at the completion response to our Phone Campaign for the “stragglers” and it was 58%.

It is interesting to us that the response to a campaign or sub-campaign on such a different group of participants is so consistent.

And as the next graph will show, just last week, when we were planning our postcard reminder campaign, once again the 60% outcome level had been attained so we were assured it was time to stir-the-pot with a new intervention (campaign).
Last Wednesday, we were deciding that Batches 501 to 504 needed the pot stirred – another intervention with a new message. The completion momentum had slowed. Our next intervention (post card sub-campaign) was actioned when the momentum plateaued at around 60%. A typical number😊
The Length of Time for a Sub-Campaign Varies

- It takes a finite time to launch each sub-campaign: 2 days to 6 weeks
- The effect of a sub-campaign varies: 2 weeks to 4 weeks

You probably will be launching a new sub-campaign on one batch of participants before the last one has finished.

Campaign activities take time and resources. By way of example, during Survey #2, our initial Invitation to Complete (or Launch) took us six weeks. We launched Survey #4 in about three and a half weeks and Survey #5 in eighteen days.

Yes, our approaches evolved – much greater use of emailing, but the timing and pace of a campaign is constrained--by staff (we check each communication individually and have caught some real boos), by the ability of the Lethbridge server to handle multiple log-ins, or (our favourite) by the reality that we can only print so many cheques a day before the printer overheats.

Fast is great but one must be mindful of the impacts on staff. The tracking logs and systems must be up and running from the start as the timing of new campaigns overlaps previous campaigns. You need to budget time to analyze and think about the results. If something looks wrong, stop, analyze and fix it! Don't compound a muddle.
Another factor to consider when planning the introduction of a Communication with Participant's Campaign, is that the different communications have different shelf lives.

To demonstrate this we include a few examples of our shelf life curves. The least squares fit that we model is (to our eyes) remarkably consistent from batch to batch and survey to survey.

The start time is tricky to compare between communication batches. Email batches sent in the early evening would have a substantial number of completions in the first day whereas those sent near mid-night would have far fewer. For postal communications, we took the first day anyone could receive a letter as day one, even though some participants did not get their mail for several days.
Responding to Reminders

A reminder also has a shelf life

Response Rate from Participants in All Batches to Email Reminders
(542 in sample)

This was the degradation curve for Communications in our Reminder Notices Campaign. The “shelf life” period for this email is again about twenty-one days.

Knowing the shelf life of a communication is extremely important. When times are busy, knowing that a batch or group of participants have an invitation with some shelf life remaining means staff efforts can be directed toward more urgent tasks.

Conversely, it quantifies the “don’t bug participants unnecessarily or they may quit on you” waiting period. As a rule of thumb, we would not re-contact a participant until the 90 percentile period of the previous communication was reached – typically 10 to 14 days.
This was the curve for our Phase One Phone Campaign. Calculated on a sub-set of participants who said that they had the necessary log-in information and (without prompting) indicated that they intended to complete the survey.

Again the shelf life appears to be around twenty-one days.

As with the previous charts, a detailed examination of the wriggles demonstrated that very few participants completed surveys after mid-night and before 6 o’clock in the morning.
This concludes this initial full Chapter of Part IV– our Counting Down to 94% Retention Approach.
3.1 Introduction

Now we will describe our Database Tools – the tools we developed to count our cards.

(This discussion extends and should be read in conjunction with the descriptive material on the Contact Database presented earlier in Chapters 11 and 12 of Part III. Because we wanted to preserve the effect and flow of the NAGS presentation, a certain amount of duplication between this chapter and those earlier chapters is intentional.)
3.2 Contact Data Base

Slide 1

Contact Database

Most Important Feature - it is a Firewall

- Data about the participants that is known only by staff in Belleville
- Data about the participants that is known only by staff in Lethbridge

From our first contacts with our cohort, a feeling of calm for both the participants and the front-line staff has been assured by the Firewall that separates the participant’s Contact Information (keeping in touch) from the research data—in both the longitudinal survey data base and the contact database.
The Contact Database is a controlled interface. The Participant’s Name, Address, Phone Numbers, Email Addresses etc., the history and details of the compensation payments that have been provided to the participant, the participant’s status in the current assessment and the summary of project contacts with the participant are retained. As column 2 notes, project staff can update these fields.
What is in the database?

qeri_main (we use six tables)

* qeri_address_change
* qeri_cheque_log
* qeri_infochange_log
* qeri_mass_com_hist
* qeri_participants

* qeri_survey_status
* qeri_survey_status_2
* qeri_survey_status_3
* qeri_survey_status_4

1. Logs address changes
2. Logs cheque payments
3. Flags changes in contact information
4. Logs mass communication history
5. Main table of participant information
6. Shows the status of participant in current survey

On an everyday basis, the Belleville/Quinte Project Office staff use database tables – and since we are in the Survey #5 Launch Campaign, we are immersed in the Address Change and Mass Communications tables as we are reviewing the Address Changes as submitted within the completed survey (we manually review them all before they are posted to the database – in order to ensure address entry consistency). This is essential to ensure that the project compensation cheque reaches the participant quickly. They do the survey promptly and we mail the cheque promptly.

The communications table also has a flag for bounced back or returned invitations. This helps us ensure that we send no further communications to that address. . . And we are fortunate to have this information available on nice screens and reports.
During Survey #5 we began using a Test Account, “Automatique 007”, to track each emailed communication.

Using Automatique 007’s file, this slide shows you a data entry screen and its many features, including the opportunity to update a name (e.g. marriage, separation or whatever), address or phone number. It also has an easy request to Send Login Information to the Participant button, a field to write notes about the interactions with the participant, and a listing of survey completions status for the earlier survey periods.

This screen also has a place to Flag if the participant has withdrawn from the study, or died. For these latter two, the flags will ensure that we do not send further notifications or communications.
This is another screen that we use on a daily basis. Here we can set a Status Flag (e.g. whether the participant is unavailable and the relevant dates; we can flag if the participant is skipping this survey; or if they are lost (e.g. we have no current contact information); whether there are computer problems and if so is it a matter for Lethbridge, Belleville or the participant to resolve; we can book an in-office appointment and all booked appointments show on a common report; and we can keep track of Paper Surveys.
At the start of each survey we clear all these flags. We do not clear the notation in the Special Needs box – this is where we can note a participant’s need for computer help (possibly due to advanced arthritis), or needs reading support, or has disruptive behaviour to alert us to booking at a quiet, in-office time. This data entry screen is also used to flag returned mail or bounced-back emails.
Reports

Common Reports (Assessment 5):
- Booked appointments
- Participants to call back
- Participants using paper surveys
- Participants who have started but not completed
- Participants who have completed recently. Select a specific date, or Quick view of 365 days
- Participant completion vs. weather information
- Participants flagged for follow-up
- Participants who are Lost, Withdrawn, or Deceased
- Participants who have promised to take survey

Technical Reports (Assessment 5):
- Users with possible login errors
- Users with zero log-in issues

Financial Reports (Assessment 6):
- Issued Cheques

1. Can’t show details of reports because they contain participant details (but the content should be obvious from the titles).
2. No participants can (or should) go into limbo!
3. Participants always go on one report or another and are counted.

This list of common reports evolved mid-way through Survey #3 and the reports were fine-tuned for Survey #4. They are wonderful and allow us to verify our actions and keep track of everyone. After a mailed or emailed communication, we use the started not completed report, and the participants who have recently completed report many, many times per day. They are helpful reports to guide our follow-up work as we want to ensure that every participant has received our communications so they may complete their survey.
By the end of Survey #5, we anticipate that there could be around 60,000 records in the six tables.

That is just tracking what is happening with the participants!

But that isn’t enough to run the surveys.

This was an interesting estimate of the expected data in our 6 tables – and this does not include the Survey data.
Google Docs

We use *around* 20 different flags and tracking variables

- Some are for staff convenience (to save time and money)
- Some are binary (yes/no)
- Some take a fixed value and are set to be mutually exclusive
- Some pertain only to one particular survey, some pertain to all surveys
- Different flags and flag combinations become important at different times during the survey period

We regularly use about 20 flags and tracking variables. They are particularly important in helping us send the right communication to a project participant - all of which are planned and timed dependent on the information retained in the contact database. The right information must reach the right participant at the appropriate time, if the participant is going to participate positively in the annual survey.

And while we love these Common Reports that help us in so many ways, we still needed more capacity to keep track of our participants and our campaign strategies.
3.3 Google Docs

Early on in the QLS Project (I think it was just before the Christmas break during Survey #2), the U of L IT support told us that he was leaving U of L. We counted on him for so much – he built our questionnaire, our systems and he was helping us to evolve our paper-based tracking systems into better tracking systems. Because project funds were limited, we asked his advice. What should we do to keep track of everything? Cody suggested we try Google Docs. And our Google spreadsheet journey began! Some benefits of this freeware are listed above.
This is one of my favorites! Our 3907 participants are divided into 18 batches for Survey #5. This Google spreadsheet tracks our daily completions by batch. The shading denotes the week-ends. With our Counting Down approach (i.e. which was described in the previous section), you will see that the formula tells us the number of participants per batch that still need to complete. Batch 500 has no Survey #5 completers as it is the deceased, medically-incapacitated and withdrawn folks as of the start of Survey #5. Batches 501 to 504 are the participants who are likely to come to the office or who need special contact considerations. Batch 505 was our first batch of Emailed Invitations to Complete and we observed that some on-line completers were doing or had completed their survey before we had finished sending out the day’s batches of emails.
This is another spreadsheet in the same Daily Catch Google Doc. This screen shot was taken on Thursday, November 25th. Blue are the in-office completers, gold are the paper surveys, and red are the online completers. We watch for bars that do not rise similarly to others – as the batches were randomized before Survey #5. Batch 506 lagged for a while and we sent that email on Halloween day. . . and that may have been a less than ideal decision 😞
This is another component within our Daily Catch Google spreadsheets. This shows the batch size and our projected completion targets for Survey 5. Nick (our IT and analytically talented RA at the Belleville office) pre-programmed comments in column F so that as we reach completion milestones, we get new messages! Staff motivation is critical and this (which is often filled with humour) helps.
This is another sheet within the same Daily Catch Google document. The daily catch data are automatically graphed in this way. It is fun to see the progress in comparison to the earlier surveys. This screen shot was taken on Thursday (November 25th). It highlights the more aggressive Invitation Distribution Campaigns since Survey #2 (i.e. the Green line). The little wiggles link to our stirring-the-pot activities – day 22 on the red Survey 4 line – tells us that it is time to initiate the Reminder Campaign, because the number of daily completers has flattened.
As mentioned, one campaign overlaps another. Keeping track of dates and file names, plus verifying the counts are critical. This is part of our current Posting Log.
This is another sheet within the Posting Log – it summarizes the situation and helps us understand why we are feeling so tired!

2191 cheques out the door and into the postal system, in less than 4 weeks, and 777 mailed invitations (that includes mailed invitations to the 186 participants for whom the emailed invitation bounced back as undeliverable).

These Google Reports are accessible to all project staff and from any location. This report was a quick reference for the Principal Investigator responsible for project finances to see the number of participant compensation cheques mailed and the consequent postage that was being expended.
Our phone lists are interactive with the Contact Database – we can toggle between the list and the Contact Database. We have already been using the Call List for Batch 501 to try and book in-office appointments and to encourage those who complete on paper to mail back their completed survey. But we cannot show you examples of these Google documents, as they have client details. Our Call Lists, like our Daily Catch spreadsheets, collect data about our call volume, the time of day we call, the number of messages we leave, the number of times we talk with the participant and much, much more. Google Documents are a tremendous help to us!
Key Strategies

1. Design a questionnaire that works (so the participants can complete)
2. Design a questionnaire that participants like to complete (so the participants will look forward to the next one)
3. Don’t lose track of anyone (you won’t be playing with a full deck)
4. Have fall back systems in place so participants can still complete if your primary system fails (on-line, office, paper etc)

Know your cohort!

In conclusion, after 4½ surveys on the front line, we feel that there are four key strategies that are especially important: make sure you have a questionnaire that works smoothly (hide all the complicated stuff and make it look really slick); have a questionnaire that participants like to do (because their experience with the completed survey directly affects their motivation to complete the next survey); keep track of everyone, and finally, make sure you have a variety of survey completion options so that you can include everyone and their special needs (we offer on-line, in-office on-line, in-office assisted, paper surveys to mail in, paper survey in-office for techno-phobic folks, and home-assisted on-line).

Some of the completion options may only result in a very small and statistically insignificant number of completed surveys but . . . they are a very powerful motivator for both staff and participants and drive home the message “We want to include everyone”.

To do this, you will need flags (and lots of them) to ensure that the correct communications are going to the right people at the right time and you know when to follow up. Post-it notes aren’t good enough; you will need a sophisticated system to keep track of all the different situations that can occur with over 4,000 participants over five years.
Recruitment & Costs

1. Recruitment (Survey #1) is the most expensive element

2. The first re-recruitment (Survey #2) is the 2nd most expensive element because you are training both staff and the cohort

3. Subsequent surveys have relatively stable costs. The cohort needs more “encouragement” but requires less help.

**Compounding low-retention rates will drive up overall costs exponentially**

Effective recruitment is the foundation of the project – it is the most expensive element and must be done right as it sets the tone for everything that follows. An understanding between the initial recruitment team and the front-line team that will be responsible for the survey completions is important in getting the messaging right and consistent.

Over-selling during the initial recruitment can lead to a disaster. Recruitment is a selection process, not only for demographics but also for commitment. If there is no commitment by a potential participant, re-recruitment rates will be low, staff costs will be high and the survey data can be degraded.

We had 27% of our cohort complete Survey #1 in the office (very expensive) and while that dropped to nearly 10% in Survey #2, a substantial number of those people needed telephone support and/or help. With no experience on longitudinal surveys, this was a surprise to the front-line staff. Our Survey #1 tools were of little help and new tools had to be developed for re-recruitment. And while Survey #2 was expensive in terms of participant support and tool development; we are now reaping the rewards. It is now about encouragement and the investment in the first two surveys is paying off in high re-recruitment rates.
The QLS Project staff in the Belleville office have been given considerable and increasing voice on allocation of resources/costs as the project progresses. We knew we were facing a difficult challenge, if 3,800 participants are required after 5 surveys. It was simple to estimate how many participants must be recruited and retained in each survey.

As shown above, a 95% retention rate (a challenge) from each survey requires less than 4,700 recruits, whereas an 85% retention rate (not an issue) requires over 7,000. Because recruitment is a very expensive component of a longitudinal study, this graph suggests that 95% retention can be the cheapest option as it is only necessary to start.
1. Introduction

Effective communications with participants are obviously essential to maintaining high retention rates. However, to be effective the communications must be at the appropriate times, in the appropriate frequency, in the appropriate format and must contain the appropriate information. If not done properly, communications could easily irritate participants or otherwise have the opposite to the intended impact on retention rates.

The project utilized a large number and many types of communications—at the start of the project, before each assessment period, during each assessment, on completion of each questionnaire, after each assessment period, between assessment periods, and at the end of the project. The project also used a number of media, including: email, web-sites, regular “snail” mail, telephone and mass print media. Whatever the form or format, we were very careful to ensure that each of these communications embodied the principles and strategies described elsewhere in this manual.

Given the importance of the types and form of the communications utilized, we have provided, in Appendix A, examples and templates of the majority utilized. These examples and templates (listed in the Figure following) are presented within two broad categories:

- General (Cohort Wide)
- Personalized (Individual Participant/ Event or Status-Specific).
Different Types of Communications Used by QLS Project  
*(See Appendix A for specific examples and templates)*

<table>
<thead>
<tr>
<th><strong>A. General (Cohort Wide) Communications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Participant Newsletters</td>
</tr>
<tr>
<td>2. Notice in Media re. Assessment Start-up</td>
</tr>
<tr>
<td>3. Notice in Media re. Assessment Wrap-up and Thank You</td>
</tr>
<tr>
<td>4. Other Community Media Notices</td>
</tr>
<tr>
<td>5. Web-site</td>
</tr>
<tr>
<td>6. Office Phone Messages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>B. Personalized (Individual Participant/ Event or Status Specific) Communications</strong></th>
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</thead>
<tbody>
<tr>
<td>1. Notice to Participants (Invitation to Complete)</td>
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<td>a. Mailed</td>
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<tr>
<td>b. Emailed</td>
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<tr>
<td>2. Reminder Notice to Participants Who Have Not Completed</td>
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<tr>
<td>3. Reminder Postcard Notice</td>
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<tr>
<td>4. Personalized Note cards to Participants Who Have Not Completed</td>
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<tr>
<td>a. In Public Places</td>
</tr>
<tr>
<td>b. At Their Homes</td>
</tr>
<tr>
<td>5. Specialized Contact with Participants Who Have Not Completed</td>
</tr>
<tr>
<td>a. In Public Places</td>
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<tr>
<td>b. At Their Homes</td>
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<tr>
<td>6. Mailing Paper Version of Assessment</td>
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<tr>
<td>7. Payment Notices</td>
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<tr>
<td>8. Life Events Journal</td>
</tr>
<tr>
<td>9. Personalized Notice re. Assessment and Project Wrap-up and Thank You</td>
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</tbody>
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2. General (Cohort Wide) Communications

1) Participant Newsletter

Note: all Newsletters are posted on the project website, http://www.qeri.ca/cohort/newsletters.cfm

Our Project Newsletters were prepared and distributed in the summertime so they would reach the project participants in the middle of the “between assessment periods” time. The Newsletter was designed to maintain interest and a connection with the project, to ensure that participants knew how to stay in touch with the project staff especially if their contact information changed in any way, and lastly to flag problematic mailing addresses (postal or email) so that project staff could sort out the addresses prior to the start of the next survey period.
Participant Newsletter #3
August 2009

Thank you for a Very Successful Survey #3

We at the Belleville Project office have really enjoyed the visits, emails and conversations with so many of you over the 3rd assessment period. Your commitment to the project is appreciated and your advice and suggestions are always considered very carefully.

While we note with sadness that 14 of our participants died this past year and that many people answered the survey during difficult times in their life, we also shared many joyous events within the lives of other people. We love when you stop by for coffee or bring your new babies to the office to meet us, and of course we love printing those cheques when you complete a survey.

Project participants continue to travel and Survey #3 was completed by people from coast to coast and as far north as the Yukon and as far south as Mexico.

No matter what your views on gambling, your continued commitment to this project is extremely important to ensure we have a balanced picture of the region. Our high level of participation will ensure that this research will be important to the scientific community.

With 3504 surveys completed this time, we thank you and ask that you take a summer moment to celebrate! We also wish you a great summer!

Kate, Nick, Patricia and Danny of the Belleville Project Office

On the Radio
On April 26th, 2009, Dr. Robert Williams was interviewed by Mary Thomas on CJBQ Newsmaker Sunday, at 12:30pm. It was noted that the “QERI Longitudinal Survey Retention Rate is the envy of the scientific world”.

“There is keen interest in the QERI Project around the world as evidenced by the number of inquiries about the project that are made”

Dr. Robert Williams, Professor, Faculty of Health Sciences & Coordinator, Alberta Gaming Research Institute

Communications with OPGRC
The QERI Project submits regular progress reports to its funder, the Ontario Problem Gambling Research Centre (OPGRC) in Guelph. As well, we are in regular phone contact and over the 1'3 three years of the project, we have been pleased to welcome OPGRC staff to the Belleville Project office numerous times and we have travelled to Guelph to meet with staff and/or present to the OPGRC Board. Through these ongoing communications, OPGRC also contributes significantly to our project.

The QERI Project is most appreciative of this advice and support.

Quinte Exhibition and Raceway (QER) History
The keynote speaker at the October 21st, 2008 meeting of the Hastings County Historical Society, described the 185 Year History of the QER, as revealed by studying QER photos and over 180 years of archival newspaper coverage as reported in The Intelligence:

The talk by Ms. Judith Glynn was a fascinating historical journey of horse-racing, agricultural life and community life in the Quinte area.

For more information, please contact:
http://www.hastingshistory.ca/
Appendix A: Communications Tools: Examples

Example of a Participant Newsletter (page 2 of 2)

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### Survey #3

**Puzzles or the Pattern Recognition questions near the end of Survey #3.** Many of you phoned or emailed us to share your opinions about these questions. We are so glad that many of you had fun with them! We are also pleased to let you know that the Puzzles were a ONE TIME ONLY event in the project.

The inclusion of the puzzles is important for scientific reasons. These pattern recognition questions allow us to compare our project participants (i.e. cohort) with the project participants in other research studies. This is important at the end of the project when the data is analyzed. Besides, some participants had said in Survey #2 that the questions were getting boring and repetitive - so be careful what you ask for!

**Why Do We Ask You to Complete within 2 Weeks?** We sent out over 4,000 notices (letters or emails) inviting participants to complete Survey #3. To manage the workload, we bundle the invitations in batches of 250. This batch system allows us to support those who come to the office, to keep up with the cheque processing and to answer inbound phone calls and emails. It also means the computers in Lethbridge do not get swamped. Your completing promptly helps us focus on the next batch.

**Welcome Back.** In Survey #3 we were pleased to welcome back 83 participants who were unable to complete Survey #2. Thank you for reconnecting and helping us by doing Survey #3. It is great to have you back!

**What You Told Us.** We had 3 questions on blue screens near the end of the Survey #3. We asked how you found out that Survey 3 was ready: what type of internet connection you used to complete the survey; and if you needed any computer or internet help to complete the questionnaire. Thank you so much for your help. Here are some highlights of the information you gave us:

- 07% of you completed Survey #3 before we sent you an invitation - Yippee, we love your enthusiasm and readiness (and that saves us work).
- 44 people called or emailed the Belleville office asking for help either logging in or about problems with questions. That’s about a 95% reduction from the 838 in Survey #2, so we hope that means we have removed some bugs from the system (or you are getting more comfortable with our survey and/or computers).
- 414 completed the survey at our project office - this is important to us as participants often talk to us about the questionnaire and our processes. In November and December, we usually have coffee breaks and munchies for your enjoyment, so please drop by...

The surveys are designed to be completed using a wide range of technologies and internet connections. Dial-up, high speed, cable, wireless, satellite are all quite common (see chart to the right). We also noticed a wide range of computers and software being used, everything from Win98 computers to BlackBerry and iPhone mobile phones! (Please don’t try to complete the Survey while driving.)

---

### Did You Know?

*Canada Post may return undeliverable mail to us within days of our mailing or it may come back 4 - 6 months after we mailed it. We apologize for any repeated wrongfully mailings. When we receive returned mail, we flag your file and try to reach you by phone and/or email so to seek a current address. We are not always successful reaching you so we really appreciate it when you alert us to address changes.*

---

### What's New for Survey #4?

**Timing:** We expect to have the next questionnaire ready on November 1st and we would love to wrap up by February 28, 2010.

**Compensation:** This time it will be $35.

*“Snowbirds” and Other Winter Travellers*

If you plan to be away this winter and did not notify us of those plans when you completed Survey 3, please contact us before leaving. In that way, we will either contact you outside the country or if possible, arrange for you to complete Survey #4 before you leave.
Appendix A: Communications Tools: Examples

2) Notice in Media re. Assessment Start-up

Start-up Notice for Survey #3

QLS Manual: Achieving a 94% Retention Rate:  page 207

2: General (Cohort-Wide)

Notice in Media re. Assessment Start-up

These notices were placed in newspapers throughout the QERI Project geographic area.

3) Notice in Media re. Assessment Wrap-up and Thank You

These wrap-up notices were placed in newspapers throughout the QERI Project catchment area.
Example of a Community Media Notice

Thank You from the QERI Project:

To over 4,000 Residents

At the end of February, more than 4,000 residents had completed the first of six questionnaires they have agreed to fill in over the five years of the Quinte Exhibition and Racetrack Impact (QERI) study.

We wish to thank each of these 4,000 people who now form the project’s “longitudinal cohort”. They have already played, and will continue to play, a critical role in this world-class study.

For those who have not completed the first questionnaire we regret that we can no longer accept additional participants in the longitudinal cohort.

Although we will no longer be able to accept additional participants in this part of the study, we do look forward to meeting other members of the region through a number of special studies, interviews and community meetings over the next four years.

Finally, we also wish to thank the dedicated and professional project staff and subcontractors in our Quinte office, at the University of Lethbridge, and in Toronto who all did an amazing job over this first year of the project.

Again, thank you to all.

(signed) Dr. Robert Williams (University of Lethbridge) and

Bob Hann (Robert Hann & Associates Limited)
5) Web-site

The secure [www.qeri.ca](http://www.qeri.ca) website throughout the project provided an important resource to the participants, the project team and other interested parties. As well as being the vehicle through which many participants logged on to do their survey, it also provided reassurance of legitimacy; a means of communicating to the cohort and for cohort participants to communicate to us; and a transparent presentation of the purpose and status of the project for the funder and the general public.

The design of each of the site’s pages:

- Re-enforced our project’s distinct identity—by being headed by the project logo which appeared on all project correspondence
- Re-enforced the stress placed on security of participant-supplied information—by requiring different passwords to limit access to different pages to the appropriate groups, and making it clear the terms on which information was being requested
- Re-enforced the notion of transparency and that assistance was available—by providing numerous means of contacting project staff.

More specifically, the website’s “Home page” (accessible to the general public):

- Provides links to all parts of the web site (including parts accessible only to
  - Longitudinal participants (but not the research team members), or
  - The Research team
- Puts the commitment to confidentiality and anonymity “up front and center” by linking to a special “Confidentiality & Anonymity page”
- Provides a link to various newsletters
- Thanks respondents for their participation
Appendix A: Communications Tools: Examples

Welcome to the QERI Study

Data collection started in August 2006 and concluded in April 2011.

In June 2011, the Research Team started the data analysis. The Final Report will be posted here in the Summer of 2013.

Full confidentiality of the data will be maintained. See the Confidentiality & Anonymity web-page for details.

Newsletter #5 provides information about the wrap-up of the survey data collection phase and the closing of the Belleville office. See our Newsletter web-page for details.

Confidentiality & Anonymity

All survey data was transferred using encrypted data transfer and is handled by a secure server at the University of Lethbridge. All personally identifying information has been removed from your file and replaced with a unique code for tracking your responses from one survey to the next.

Local Belleville staff had access to your Contact Information ONLY.

Members of the International QERI Research Team have access to the aggregate information from all participants (with the personally identifying information removed). Only group results will be reported when the study is published in 2012.
The site’s “About” page (accessible to the general public) then provides information on:

- The two original purposes of the study,
- The members of the research team, and
- The study funder (OPGRC)
The site’s “Links” page (accessible to the general public) then

- Provides brief descriptions and links web sites of a number of organizations that had a role to play in our research and in gambling in the Quinte region

---

Ontario Problem Gambling Research Centre

In April 2000, the Ontario Ministry of Health and Long-Term Care announced the creation of the Ontario Problem Gambling Research Centre as an arms length funding agency. In July 2000, the first call for proposals went out, and on November 29, 2000 the Centre celebrated its official opening with the announcement of $1.7 million in research awards.

[Link](http://www.gamblingresearch.org/)

Quinte Exhibition & Raceway

Since 1821, the Quinte Exhibition and Raceway has been bringing community fairs and events to Belleville and the surrounding area. The Quinte Exhibition and Raceway is a non-profit organization and run by the committee members of The Belleville Agricultural Society.

[Link](http://www.qer.ca/)

City of Belleville

Belleville, at the centre of a growing region, is the largest community in Hastings County. It holds a key position on Highway 401 between Toronto and Montreal as well as an enviable location on the Bay of Quinte.

[Link](http://www.city.belleville.on.ca/)

Ontario Lottery & Gaming Corporation

In April 2000, the Government of Ontario created the Ontario Lottery and Gaming Corporation (OLGC) through the merger of the Ontario Casino Corporation (OCC), established in 1994, and the Ontario Lottery Corporation (OLC), established in 1975.

[Link](http://www.olg.ca/)

Alcohol and Gaming Commission of Ontario


[Link](http://www.aqco.on.ca/)

Ontario Horse Racing Industry Association

The Ontario Horse Racing Industry Association (OHRIA) is an umbrella association that represents all segments of the horse racing industry.

[Link](http://www.ohria.com)
Appendix A: Communications Tools: Examples

3: Personalized

The **Contact Information page** (accessible to the general public)

- Provided the name of one person (one of the Principal Investigators) as the person to contact for questions about the project from the general public. Although this person might refer the questions to other project team members, this “one window” approach:
  - Minimized the opportunity for messages to be lost,
  - Ensured that important messages would be communicated to all appropriate project staff with either a “need to know” or the specific knowledge and responsibility for dealing with particular issues (especially scientific or financial issues),
  - Ensuring a buffer that could be used to isolate our local Quinte Office staff from certain concerns that related to gambling generally and not to our particular project.

The **“Longitudinal Participants” page** was accessible to the general public to view. However, a password (unique to each participant) was needed to access the link to pages that allowed participants to fill out the survey. This page:

- Welcomed participants back to the next round of data collection,
- Reminded participants of the amount of compensation for this round and other terms of participation,
- Re-iterated the commitment to confidentiality and anonymity,
- Provided the emails and phone numbers of people to talk to for assistance (the two principal investigators and/or local Quinte office staff)
- Provided (an individual password-protected) the link (i.e. the “stat/Resume Survey” button at near the bottom of the page) to the part of web site that allowed participants to access and fill out the next round of the full longitudinal survey on-line from computers at our Quinte office, or from any computer in the world with access to the Internet.
- Once the survey was complete, the web page then automatically
initiated the administrative processes to issue and mail a cheque to the participant, and

- Updated the appropriate information in the Contact Database.

---

Welcome Back! This is Survey 5 for the QERI study. This study is primarily looking at what causes some people to gamble and other people not to, as well as what causes some people to develop gambling problems and other people not to. This is one of the largest studies of gambling ever done. The results will inform us about what things might help prevent problem gambling.

You are one of 4,123 people that we are following for several years. Each person will be assessed once a year between November and February. The present assessment will take about 1 hour for most people. Upon completion of this assessment you will receive a cheque for $35.

The information you provide will be stored as a computer data file. This file is confidential, and can only be seen by the 6 members of the international Research Team (headed by Dr. Robert Williams & Mr. Robert Hann). The local Research Team in Belleville has access to your contact information, but not to anything else. All personally identifying information will be erased from the data file once the study is finished. Also, only group results will be reported when the study is published.

This study has no known risks. However, some of the questions do ask about sensitive issues. You should also be aware that your participation is entirely voluntary and you are free to withdraw at any point. If you do withdraw, you can also choose to have your data erased.

General information about this study is on our website at [www.qeri.ca](http://www.qeri.ca). This is also where the Final Report will be posted in 2012. If you have any questions about the study you can contact our main QERI Research Office (866-969-8313 or [info@qeri.ca](mailto:info@qeri.ca)). Questions about your rights as a participant in this research may be addressed to the Office of Research Services, University of Lethbridge (403-329-2747).

Dr. Robert Williams  
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Mr. Robert Hann  
Robert Hann & Associates Limited  
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806492 25th Sideroad  
Healthcote, Ontario N0H 1N0  
Email: hannbob@ican.net  
Phone: 519-599-2383

For technical support, [click here](#). If you have any other questions contact the QERI office at [info@qeri.ca](mailto:info@qeri.ca) or 866-969-8313.
The following figures show the current version of the “Longitudinal Participant’s page” which (since the data collection phases of the project are completed) simply refers participants to either:

- An archive of project newsletters (also shown here)
- The Confidentiality and Anonymity conditions of participation (see example earlier).
Appendix A: Communications Tools: Examples

The final “Research Team Login” page (accessible to certain staff only through a private sub-page-specific user id and password) of the Web-site was critical to the on-going planning and operation of the project and was designed:

1. to allow staff to up-load, store and share certain project documents, data and comments and administrative/financial documents such as expense claims,
2. (through a second level of passwords) to allow the co-Principal Investigators to share financial and personnel information on the overall project
3. (through a second level of passwords) information relevant to the data collected
4. (through a second level of passwords) to allow staff to share comments relevant to the administration of the survey
5. (through a second level of passwords) to allow staff (mainly the Quinte office project staff) access through the internet to the contact data base (described in detail in Chapter 11 of Part III of the current document)
6. access to a calculator for estimating distances between locations
7. a description of the structure of the contact database, and
8. a facility for changing passwords.

(Because of the sensitive information contained in these pages, only a partial screen capture of the first page is shown here.)
6) Office Phone Message

We regularly changed the automated message on the phones at the QLS Project Office, as we wanted the message to be current, enthusiastic, short and precise. The following are examples of the recorded message for all callers:

- Hi! Thank you for calling the QLS Project Office. Survey 4 is underway and we would love to include you. Please leave a message. We will get back to you very quickly. Have a great day😊

- Hi! Thank you for calling the QLS Project Office. Survey 4 is underway and we are now open Monday to Friday from 10am until 9pm and Saturdays from 8:30am until 2pm. Please drop by or call to make an appointment. We want to include you! You can leave us a message. We always respond quickly. Have a great day😊

- Happy Holidays! The QLS Project Office is closed for the holiday season but we are monitoring our phone messages daily. Leave us a message and we will respond quickly. The office will re-open on January 3rd. We wish you a safe and fun-filled holiday season.

- Hi! Thank you for calling the QLS Project Office. We are excited that already over 88% have completed their survey. We want to include you! You may leave us a message. We always respond quickly. Have a great day😊

3. Personalized (individual Participant/ Event or Status-Specific) Communications
1) Notice to Participants (Invitation to Complete)

Mailed

Dear Larry,

We are pleased to advise that QERI Survey #3 is now ready for completion.

As a person who signed up with the multi-year QERI Project, we are asking that you complete this survey at your earliest convenience. Please do not hesitate to call me, if you have any questions or concerns about the survey or our research activity.

This new survey can be completed at:

- A computer at our QERI Project Office in Belleville, or
- Most computers connected to the internet.

We encourage those who wish to do the survey at our office to come in November, or early December, and thereby (hopefully ☺) miss the complications of winter snow and ice.

Unlike the time required for the first questionnaire, we expect that this survey will take about one hour. We thank you for your continued help with this research and look forward to processing your $30 cheque when you finish.

To log in, regardless of where you do this survey, you require your User ID and Password, as shown in the box.

Sincerely,

Patricia McLaughlin
Belleville Site Manager, QERI Project

How to Start Survey 3 on the Internet
(Please see reverse side, if you prefer to come to our office)

1. Go to our web site at: www.qeri.ca
2. At this screen, click the green box labelled: To Survey #3 (shown by arrow)
3. This takes you to the start of the questionnaire. Please follow the instructions on the screen.
Appendix A: Communications Tools: Examples

Completing Survey 3 at our Belleville Office
(See front side if you prefer to complete the Survey from home)

Office Hours from Nov 1 to Dec 13
No Appointment Necessary

<table>
<thead>
<tr>
<th>Office</th>
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<td>Saturday</td>
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<td>3 pm</td>
</tr>
<tr>
<td>Sunday</td>
<td>CLOSED</td>
<td></td>
</tr>
<tr>
<td>Monday</td>
<td>CLOSED</td>
<td></td>
</tr>
</tbody>
</table>

Please allow one hour to complete the survey. The last start time is 1 hour before office closing.

When you come to the office to complete the survey, please bring this letter, and if needed, your reading glasses, list of medications and contact phone numbers.

If you require any special assistance to complete our questionnaire, please call to book an appointment. In this way, we can ensure that we have staff available to assist you.

Please bring this letter with you when you come to the Belleville office to complete Survey #3.

Don’t hesitate to call us
- If you would like to book an appointment.
- If you have questions or require assistance to complete the questionnaire.
- If you have questions about the research.
- If you wish to talk to us for any other reason.

Local calls
613-969-9313

Toll free calls
1-866-969-9313

You may leave a message for us at any time, but please make sure to leave both your name and phone number.

For those who have not visited us, we are located in the middle of the Harbourview Plaza which is on the east side of Pinnacle Street South in Belleville.

There is a big green and white logo (like our letterhead) above our office door. The office is a ground level, store-front with ample parking and accessibility.
Belleville QERI Office

From: Belleville QERI Office [info@qeri.ca]
Sent: October 31, 2010 20:12
To: ‘Automatique ID 0007”
Subject: QERI - Survey 5 Launch

Dear Automatique,

Survey 5 is now ready for completion!

Your User ID: 000-000-0007
Your Password: qeri10

A quick link to the start of the survey: www.qeri.ca/s

Your personal link to get started:
https://www.qeri.ca/cohort/survey/login.cfm?User_ID=000-000-0007 (this link only activates with some email programs)

It would be wonderful if you could complete this questionnaire within the next two weeks. You are likely to find that it again takes about 1 hour and you will be compensated with $35.

You are always welcome to do the survey at our Belleville office. Our office hours are on our www.qeri.ca <http://www.qeri.ca/> website or call to book an appointment. We offer extended hours during the month of November so project participants can complete the questionnaire before the snow flies.

If you have any questions or difficulties, please email us at info@qeri.ca, or call 613-969-8313 or 1-866-969-8313 (toll free).

Thank you for your continued participation in our project!

Kate, Nick and Patricia
QERI Project Staff (in Belleville)

5E-102-998
2) Reminder Notice to Participants Who Have Not Completed

Belleville QERI Office

From: Belleville QERI Office [info@qeri.ca]
Sent: December 29, 2010 7:54
To: 'Automatique ID 0007'
Subject: QERI - Season's Greetings

Dear Automatique,

The QERI Project staff from both Belleville and Lethbridge would like to wish you all the best for Christmas and New Year Season.

Of course, if you haven't yet completed Survey #5, and have a few minutes over the holiday season you can log in (to either start or continue) using the following information:

Your User ID: 000-000-0007
Your Password: geri998

The link to the start of the survey: www.qeri.ca/s

Your personal link to get started:
https://www.qeri.ca/cohort/survey/login.cfm?User_ID=000-000-0007 (this link only activates with some email programs)

You are likely to find that it takes about 1 hour and you will be compensated with $35 (please check we have your correct address when you do the survey).

If you wish to do this survey at our Belleville office, please give us a call to book an appointment - we will be on reduced hours over Christmas and New Year so please call first to make sure there is someone in!

If you have any questions or difficulties, please email us at info@qeri.ca, or call us at: 613-969-8313 or 1-866-969-8313 (toll free).

Thank you for your continued participation in our project. We very much appreciate it.

Yours truly,
QERI Project Staff - Kate, Nick and Patricia
3) Reminder Postcard Notice

QERI Project

QERI Project Office Hours have now changed.

Before coming to our office to complete Survey #3, it is now necessary to call and make an appointment. 613-969-8313 or 1-866-969-8313 (toll free)

If you prefer, you can always complete the survey on any computer connected to the internet using your User ID and Password.

Our direct web address is www.qeri.ca

or

Use google to search for QERI

The entire project team wishes you and your family a joyous holiday season and a new year filled with peace, health and laughter.

Happy New Year

And, if you have not yet completed Survey #3, you can do so from any computer connected to the internet using your User ID and Password.

Our direct web address is www.qeri.ca

or

Use google to search for QERI

If you have any questions, please call us at 613-969-8313 or 1-866-969-8313 (toll free)

Or email us at:

info@qeri.ca

There is usually somebody in the Belleville office who can help you 10am to 5pm Monday to Friday (and some evenings).

Please call first, if you need to come to the office to do the survey.
Dear Xyz,

We are now down to the last 2% of people in the third survey of the QERI Project and I am asking if you could take the time (about 1 hour) in the next few days to complete Survey #3.

Having everyone's opinions is very important to improve the scientific validity of the research. So far we have achieved one of the highest continued participation rates ever for this type of study and we believe if we can continue to do this - the QERI Project will make a major contribution to understanding gambling both in Canada and around the world.

If you have any questions about the survey or how to log in, please give us a call at one of the numbers below.

Patricia McLaughlin
Belleville Site Manager, QERI Project
4) Personalized Note cards to Participants Who Have Not Completed

Roses are red, violets are blue
This letter we send, especially for you
Survey five you have started, but 'tis our wish
That soon you will log-on, resume and finish.
With appreciation we will shout
"Thanks again for helping out!"
Now in closing, we wish to say:
"Have a Happy Valentine's Day!"

Our Website: https://www.qeri.ca
At Home page: Click big green box that says:
  "Click Here to Start Survey #5"
At Log-in page: Enter your information into the white boxes
  Your User ID: 000-000-0008
  Your Password: QERI998

Please call us if you wish to do your survey at our office—we will happily arrange to be
there at your convenience! (including days, evenings and the week-end)
We do want to include you and time is running out.

If this Valentine jingle arrives after you completed your survey — THANK YOU.
We realize that poets we are not, but a chuckle we hope you have received

Website: https://www.qeri.ca
Phone: 613 969-8313
Email: info@qeri.ca
Toll Free Phone: 866 969-8313
5) Specialized Contact with Participants Who Have Not Completed

QERI Project
37 Pinnacle Street South
Belleville, Ontario
K9N 3A1

08 February 2011

It’s time again! The next QERI Project questionnaire is ready and online.

Just like the four earlier questionnaires, we ask that you complete it within 2 weeks. If this requested timing is impossible for you, please call or email us. The compensation for this survey - which again takes less than 1 hour to complete - is $35.

To log-in to the survey, you will require your user id and password, both of which are the same as used in previous surveys and shown in the box below. (See reverse side for log-in instructions.)

Your User ID:

Your Password:

If you have any questions, please call our toll-free number.

In November, when we mailed the notice about Survey #5, yours was returned to sender (moved). To get an address, we called the phone number we had on file, but it was NIS. We later called the phone number and were told you sold the business and had moved to the USA. We flagged you as missing. Last week, we decided to see if we could find you in the USA. . .

The internet is magical! We found one person with your name and birth date so we are mailing this invitation to the address we located. We hope you are the person who has participated in our project. You are still eligible to participate, if you wish to continue. We hope you will.

Thank you, we look forward to your continued participation in this research project and we hope that life is great for you in California.

Best Wishes,

Patricia McLaughlin for
Belleville Project Office Team, QERI Project

Website: https://www.qeri.ca
Phone: 613 969-8313

Email: info@qeri.ca
Toll Free Phone: 866 969-8313
Patricia McLaughlin  16 March at 11:12

Hi

We are coming to the end of the Survey 5 period and are asking all project participants to complete the questionnaire before April 1st.

Your personal User ID is

Your personal password

To log in, go to https://www.qeri.ca/ and click the big green button.

Every completed survey is important to us – a high completion rate gives scientific validity to the data and the completion rates in the QERI project have been exceptional – thanks to everyone.

With less that 100 (out of 4,000) people to go we are now contacting everyone again. When you fill out the survey please ensure your address is correct – that is where we send your cheque.

We know everybody will not be able to complete each survey - if you cannot complete Survey 5 you can always call us (toll free 1-866-969-8313) or send us an email.

Thanks

QERI Study
www.qeri.ca
Please contact the Belleville Office if you have questions or encounter any difficulties. We love to hear from our project participants!
6) Mailing Paper Version of Assessment

Part III, Chapter 7, Subsection 3 described the circumstances when a paper version of the annual survey/assessment might be used.

We include an example of a cover letter that was used when mailing out a paper version of the survey to a participant who lived a considerable distance from the project office, had no means of transportation to the project office, and who had called to advise that they had no computer access and would not have it restored before the conclusion of the assessment period.

We also include an example of a cover letter that was used to mail out the paper version of the survey to participants who had health issues which limited their ability to travel to the office to complete their annual survey and who lived a considerable distance from the project office, thereby limiting our ability to make a home visit to facilitate their survey completion.

For your reference, we also include the Instructions for Completing the Paper Version of the annual survey. These instructions were enclosed with the cover letter, the paper survey and the return mail postage-paid envelopes.
QERI Survey #5

Instructions for the Completion of the Paper Questionnaire

It is important that you answer EACH question. Dependent on your answer to some questions, you will be directed to another numbered question or section. Please follow the instructions carefully, as you must complete the questions exactly as directed so that no question in a sequence is missed.

Only when you are directed to skip a series of questions, is it allowed. If the questionnaire is not filled in completely, the data cannot be entered into the University of Lethbridge database and your compensation payment will be delayed until follow-up contact with you resolves the missing information.

When a person completes the questionnaire on-line or at our office, the computer technology controls the way each completed question triggers the next question. Because of this, a project participant doesn’t have to read all the instructions and if a question is missed or not answered, the participant is prompted by an error message and the next question cannot be started.

If you have any questions about the questionnaire, please do not hesitate to call the office. Many of our 4123 participants call us to ask for explanations about why various questions are asked. We love to help and to talk about this research - and if we do not know the answer, we are happy to look into it and get back to each caller.

I enclose 2 pre-addressed and stamped envelopes for returning your completed survey. Please place Pages 1 - 4 in the small white envelope and Pages 5 - 46 in the larger beige envelope. (We separate the return mailing in this way in order to ensure that your survey answers have no identifying information - a protection in case they were lost in the Canada Post mail stream.)

If possible, please mail back/return your completed survey to us before March 16th, 2011.

Thank you for your continued participation in and support of this research!

Patricia McLaughlin, Belleville Site Manager
QERI Project Office

November 2010

<table>
<thead>
<tr>
<th>QERI Project Office</th>
<th>Telephone</th>
<th>613 969-8313</th>
</tr>
</thead>
<tbody>
<tr>
<td>37 Pinnacle Street South</td>
<td>Toll Free</td>
<td>1 866 969-8313</td>
</tr>
<tr>
<td>Belleville, Ontario K8N 3A1</td>
<td>Email</td>
<td><a href="mailto:info@qeri.ca">info@qeri.ca</a></td>
</tr>
</tbody>
</table>
27 October 2010

Hi «preferred_name»,

It's time again! The next QERI Project questionnaire is ready.

On October 14, 2010, you called our office to say that you do not have internet access at this time and asked if you could complete the paper version of our Survey 5. I am pleased to enclose it today.

Just like the earlier questionnaires, we ask that you complete the survey within 2 weeks and mail it back to me. If this timing is impossible for you, please call me. The compensation for this survey - which again takes about 1 hour to complete - is $35.

Your user id and password (the same as used in previous surveys), are shown in the box below:

Your User ID:  «user_id»
Your Password:  «password»

In case you change your mind about doing the paper version of the survey, during November we offer Extended Office Hours so everyone can complete Survey #5 before the snow flies. No appointment is necessary, but you always have the option to book an appointment.

Please remember - we are here to assist AND we enjoy doing so! Don’t hesitate to call us if you have any questions.

Thank you, we look forward to receipt of your completed Survey #5, and we very much appreciate your continued participation in this research project.

Best Wishes,

Patricia McLaughlin for
Belleville Project Office Team, QERI Project
Enclosure: Paper Survey

How to Start Survey 5 on the Internet

1. In the address bar type:  www.qeri.ca
2. At this screen, click the green box labelled:  Click Here To Start Survey #5 (shown by arrow)

Or

1. Enter the word QERI in a google search bar
2. Click the QERI Longitudinal Questionnaire link.
Hi «preferred_name»,

It's time again! The next QERI Project questionnaire is ready.

Our records indicate that you completed the Paper Version of the questionnaire the past few years and we expect you may again wish to do so. I am therefore enclosing it for you today.

Just like the earlier questionnaires, we ask that you complete it within 2 weeks and mail it back to me. If this requested timing is impossible for you, please call me. The compensation for this survey - which again takes about 1 hour to complete - is $35.

If by chance you want to complete the survey online, I am providing the log-in instructions (see reverse). You will require your user id and password, both of which are shown in the box below.

Your User ID: «user_id»
Your Password: «password»

Extended Office Hours for November
- During November, we offer Extended Office Hours so everyone can complete Survey #5 before the snow flies. No appointment is necessary, but you always have the option to book an appointment.
- Please remember - we are here to assist you AND we enjoy doing so!
- If you encounter any difficulties or if you have any questions, please call or email us.

Thank you, we look forward to receipt of your completed Survey #5, and we very much appreciate your continued participation in this research project.

Best Wishes,

Patricia McLaughlin for
Belleville Project Office Team, QERI Project
Enclosure: Paper Survey

Website: https://www.geri.ca
Phone: 613 969-8313
Email: info@geri.ca
Toll Free Phone: 866 969-8313
7) Payment Notices

- Participant payment cheques are quite complicated to design and print

Three sections: a) payment section b) message to participant, c) Audit/Tracking portion
8) Life Events Journal

During Survey 1, project participants were given a paper journal to keep track of life events, so that they would have a handy reference when completing their annual survey the following year.

These journals provided the contact information for the Belleville Project Office, as well as for the Principal Investigators of the project. They also included information about the project timelines and payments, the objectives of the study, and information confirming the project’s commitment to data protection and confidentiality.

An alternative to these paper-based journals was an on-line journal. The paper-based journal provided the project website address and the log-in information for project participants who preferred to use an on-line journal for their life event jottings.

The bulk of the journal was of course formatted, but empty, pages where life events could be noted.

Example pages from the Journal are presented on the following pages
Quinte Exhibition & Raceway Impact Study

QERI Project: Your

Life Events Journal User ID: 

Password: 

If you are completing this journal, please bring it to your next appointment. If you are doing the next part, we are trying to stay in touch with you, so please call 613-969-8313 (toll free 1-866-969-8313) or email us at info@geri.ca if you change your phone number, mailing address, email or name... Thank you.

Contact Information

The Investigators/Researchers are:

Dr. Robert Williams Professor, School of Health Sciences
University of Lethbridge
4401 University Drive
Lethbridge, Alberta T1K 3M4
Email: robert.williams@uleth.ca
Phone: 403-382-7128

Mr. Robert Hann
President, Robert Hann & Associates Limited
130 Glenholme Avenue
Suite 200
Toronto, Ontario M6E 3C4
Email: hannbob@ican.net
Phone: 877-872-3265

Ms. Patricia McLaughlin
Belleville Site Manager

General information about this study is on our website at www.geri.ca. This is also where the Final Report will be posted in 2012. If you have any questions about the study you can contact the QERI Project Office 613-969-8313 (toll free 1-866-969-8313) or info@geri.ca. Questions about your rights as a participant in this research may be addressed to the Office of Research Services, University of Lethbridge (403-329-2747).

To help us stay in touch, please contact the Belleville Project Office if you move, change your phone number or email address.
Appendix A: Communications Tools: Examples and Templates

QERI Project - Life Events Journal

This Quinte Exhibition & Raceway Impact Study (QERI Project) is looking at two things.
- The determination of what causes some people to gamble and other people not to, as well as, what causes some people to develop gambling problems and other people not to.
- The social and economic impacts that occur as a result of the proposed new Quinte Raceway Facility.

This is one of the largest studies of gambling ever done. The results will tell us about what may help prevent problem gambling, as well as the overall costs versus benefits of gambling.

You are one of over 4,000 people in this multi-year survey. The first survey took about 2 hours for most people. We expect that the other surveys will take about 1 hour.

Each part can be done over the Internet on most computers or on a computer at our Belleville Project Office. You are paid on completion of each survey for a total of $220. Between each assessment period, we would like you to keep track of any significant life events and (if applicable) changes in your gambling activities.

All information you provide is confidential.
- Personal answers to the survey questions are for use by the 6-member International Research Team, lead by Dr. Robert Williams & Mr. Robert Hann.
- Your contact information is for use by the Belleville Project staff.

QERI Project - Life Events Journal

2. Any significant changes in your gambling behaviour. These could include the following:
- Engaging in a new type of gambling for the first time
- A significant increase or decrease in frequency or spending on a certain type of gambling
- A large gambling win or large loss
- The development or worsening of gambling problems
- Receiving treatment for problem gambling

We would like you to note both the date and a brief description of the event. You can record this information in this paper journal or by logging in at our website at www.qer.ca and recording it online (under longitudinal participant).

These journals are not mandatory. You can continue to participate in the project even if you do not fill in the journal. However, it will really help our research if you do complete the Life Events Journal.

Please bring this Journal to your next assessment.
Appendix A: Communications Tools: Examples and Templates

QERI Project - Life Events Journal

Ideas to note in this Journal include the following:

1. **Any major life event.** These could include any of the following:
   - **School:** starting, dropping out, serious difficulties, disciplined
   - **Work:** new job, significant change in work hours, significant increase in work demands, promotion, disciplined, laid off, fired, retired, serious conflicts with co-workers or boss, significant business failure/loss
   - **Family and friends:** moving, pregnancy, new addition to family, son/daughter left home, son/daughter married, started new relationship, marriage, separated, divorced, broke up with boyfriend or girlfriend, serious conflicts with spouse, family member, close friend, neighbour, ex-spouse, death of spouse, close family member/close friend, miscarriage or abortion, serious illness or injury in family member/close friend
   - **Property and finances:** significant financial loss, bankruptcy, going on social support or welfare, significant loss or damage of property, borrowing a significant amount of money (i.e. mortgage), significant financial gain
   - **Legal matters/crime:** arrested or charged with a crime, placed in jail, became involved in a law suit, received serious threats or harassment, assaulted, robbed, victim of some other crime, caused a serious accident that injured or killed someone, witnessed a serious accident that injured or killed someone
   - **Health:** developed a serious physical illness, developed a serious mental illness, developed a drug or alcohol addiction, suffered a serious injury as result of an accident

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QERI Project - Life Events Journal

Event and Date

______________________________

______________________________

______________________________

______________________________

______________________________

______________________________

______________________________

______________________________

______________________________
9) Personalized Notice re. Assessment and Project Wrap-up and Thank You

It's Been Great
Survey 3 is now concluding and our project team is so pleased with the support we have received from the 4000+ area residents in our research study and from our many community partners. Your participation, encouragement and enthusiasm are appreciated.

We now look forward to Survey 4 which begins November 1st

If you have questions about our study, we can be reached:
613.969.8313 or 1.866.969.8313 (toll free)
info@qeri.ca

Thank You
Quinte Exhibition and Raceway Impact Study (QERI Project)
37 Pinnacle Street South, Belleville
Dear Automatique,

It is with heartfelt thanks and congratulations, tinged with a sense of disappointment, that I am sending this letter on behalf of the QERI Project team.

Because of the amazing commitment by our project participants and the unprecedented retention rate that was attained each year, the QERI Project hoped to find funds to extend the survey data collection for an additional 3 to 5 years. Regrettably, our applications were not selected for funding. Thus, the QERI data collection phase is now complete, there will be no more surveys and the Belleville Office will be closing.

The QERI survey data that has been collected is extensive and comprehensive. The researchers will now undertake the challenging yet exciting data analysis, report writing and presentation of findings. For the next few years, the University of Lethbridge will maintain the QERI Project website so you may follow these developments. The Final Research Report which will be posted there in 2012.

We enclose Newsletter #5, which provides more details about the wrap-up of this phase of the QERI Project. You may obtain copies of all our newsletters at our website: www.qeri.ca/cohort/newsletters.cfm

Both personally and on behalf of the entire QERI Project Team, thank you for your continued support to this project. It has been an exciting journey. We will miss the interactions, the regular feedback and the many friendships that have been made since 2006.

With appreciation and thanks,

Patricia McLaughlin
QERI Project Belleville Site Manager

Website: https://www.qeri.ca
Phone: 613 969-8313

After the Belleville Office closes, the QERI Project Contact will be:
Dr. Rob Williams
QERI Project
c/o Faculty of Health Sciences
University of Lethbridge
Alberta, Canada
T1K 3M4
robert.williams@uleth.ca

Email: info@qeri.ca
Toll Free Phone: 866 969-8313