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Active Management Framework to Monitor and Manage Data Collection



Telling Canada's
story in numbers

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Active Management (AM) - Main Drivers

- ❑ Improving data quality and survey response rates
- ❑ Improving cost-efficiencies in collection processes and practices
- ❑ Providing detailed real-time, factual and evidence-based information to all levels data collection managers in the field and in head office
- ❑ Increasing complexity of the survey data collection strategies and processes
- ❑ Change in the data collection vision
 - ◆ Management of a national sample rather than regional samples



AM Definition

- ❑ In the data collection context, Active Management is defined as a set of plans and tools used to monitor and manage survey data collection **while collection is still in progress**

Key components

- ❑ Planning
 - ❑ Survey Monitoring
 - ❑ Timely analysis
 - ❑ Communication
- *Almost all data sources are used: key survey planning assumptions, production plan, budget information, sample file, transactions files, audit trail, interviewer's claims, etc.*



AM - Objectives

- ❑ Determine if the observed key indicators are aligned with key planning assumptions and milestones

- ❑ Determine potential problem(s) as soon as possible
 - ❑ *Find the problem when it occurs (or even before), not when collection has ended – pro-active rather than re-active*

- ❑ Identify the most appropriate corrective action(s)

- ❑ Make effective use of collection resources
 - *Active Management is the cornerstone of the decision-making process of any effective collection strategy*



AM - Planning

- ❑ Considering the limited number of resources available determine before the survey starts the level of risks associated with the survey and the level of support that will be offered.

- ❑ Developed and implemented a survey risk evaluation tool
 - ❑ Developed a tool to assess the level of risk of missing the targeted response rate, for household surveys.
 - ❑ Developed a questionnaire to be filled by SMA in collaboration with the front door services assessing those criteria's.
 - ❑ Developed a framework for the active monitoring of surveys at risk.
 - ❑ Implemented active monitoring for surveys at risk.

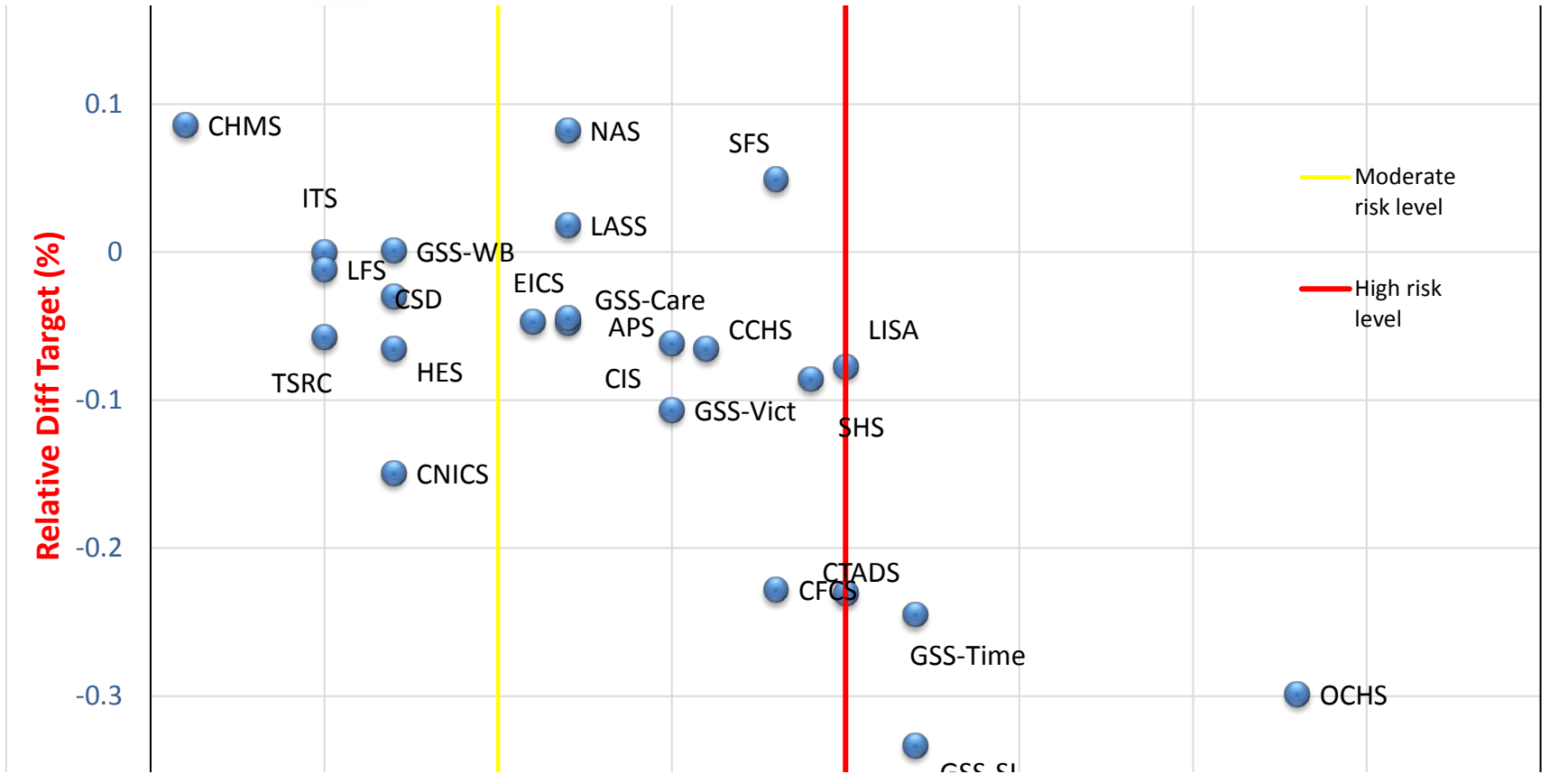


Factors in the risk evaluation tool

- High weight
 - Voluntary, mandatory or incentives (V/ M or I)
- Medium weight
 - EQ multi-mode surveys (Y/N)
 - Historical response rate problems, longitudinal or redesign (Regular/ Longitudinal or Redesign)
 - Survey Burden (Low/ Medium/ High)
 - Difficult to reach population (Y/N)
 - Tracing (Y/N)
 - Frame and contact information quality (Low/ Medium or High)
- Low weight
 - Length of collection period (Short/ Average or Long)
 - Sample Size (Small/ Average or High)
 - Sensitive subject (Y/N)



Risk evaluation for recent household surveys VS Relative Difference(%) with targeted RR



Active Monitoring activities of surveys at risk

Risk level	Low risk surveys: Risk score 0-9	Moderate risk surveys: Risk score 10-19	High risk surveys : Risk score 20+
Examples of Surveys	TSRC, CHMS, HES	NAS, LASS, SFS	OCHS, LISA, CTA DS
Active Monitoring Activities	<ul style="list-style-type: none"> • DIPP reports are produced • Active monitoring report may be executed • Ad hoc request will be answered 	<ul style="list-style-type: none"> • DIPP reports are produced • Active monitoring reports are produced from the start of collection • Active monitoring is done and follow-up between ROs and CPRD are done, if required (bi-weekly meeting with DCM's) • Questions from ROs and CPRD staff will be answered by the Research unit 	<ul style="list-style-type: none"> • Implication of the Research unit from the planning stage • DIPP reports are produced • Active monitoring reports are produced from the start of collection • Executive dashboard can be provided • Active monitoring is done and regular follow-up between ROs and CPRD is scheduled (bi-weekly meeting with DCM's) • On-going active monitoring is done by the Research unit



Example of AM Survey Progress Reporting Form and Analysis

Survey: CCHS
Cycle: 201704

Collection Start Date: 03/04/2017
Collection End Date: 31/06/2017

% of Collection Period: 22.7%

National Target RR%: 60%

Validation of Production Plan:

Notes:

Key elements	Overall Status	Indicators/ comments
Response Rate		Edmonton slightly below weekly target (but progressing well).
Budget		
Guidelines		Guideline compliance in Halifax, little work on weekend in some ROs.
Survey specific	N/A	



Response Rate Metrics

RO	Sample Size	RR% Flag	Resp Rate	Weekly Target RR%	% of Weekly Target	Final Target RR%	% of Final Target RR
National	19100		28.2%	27.0%	104%	60.0%	47%
Edmonton	2692		25.0%	28.0%	89%	60.0%	42%
Halifax	2073		26.8%	27.0%	99%	60.0%	45%
Sherbrooke	4119		24.8%	21.0%	118%	62.0%	40%
Sturgeon Falls	6213		32.9%	31.0%	106%	60.0%	55%
Winnipeg	4003		27.2%	26.0%	105%	60.0%	45%

Key Collection Metrics

RO	Observed Hit Rate%	Budgeted Hit Rate%	# Not Started	Initial Refusal%
National	97.3%	98%	652	14.1 %
Edmonton	98.4%	98%	110	8.6%
Halifax	96.1%	98%	112	15.2%
Sherbrooke	98.1%	98%	217	8.8%
Sturgeon Falls	97.3%	98%	147	17.6%
Winnipeg	96.5%	98%	66	17.3%



Example of Active Management Dashboard

Collection period

Survey	Cycle	First	Last	Current	% of Collection
GSS31W4	201708	01/08/17	29/09/17	21/09/17	86.4%

RO	Sample	Cases resolved	Cases in-progress	% of cases resolved	response	non response	Out-of-Scope (voids)	Not start	Hit Rate	Response rate	Attempts		No Contact		Refus		SI_IP or PM		Overlap between Refus and SI_IP_PM				
											Total number of attempts	Average number of attempts by case	Total of in-scope cases - not contacted	% of in-scope cases - not contacted	# of cases in Refusal group at least once	% Refusal cases converted as respondent	# of cases in SI_IP or PM groups at least once	% of cases in SI_IP or PM groups at least once	# of cases in SI_IP or PM groups at least once	% of cases in SI_IP or PM groups at least once			
NAT	9,493	5,467	4,026	57.6%	4,328	4,384	780	1	91.8%	49.7%	91,187	9.6	1,081	12.4%	1,860	19.6%	15.9%	1,185	12.5%	4.7%	2,280	24.0%	14.6%
EDM	1,858	848	1,010	45.6%	719	1,009	130	0	93.0%	41.6%	18,463	9.9	324	18.8%	201	10.8%	5.5%	132	7.1%	6.8%	308	16.6%	6.5%
HFX	1,935	1,247	688	64.4%	981	776	178	0	90.8%	55.8%	18,438	9.5	124	7.1%	453	23.4%	15.7%	232	12.0%	7.3%	525	27.1%	16.4%
SHER	1,628	1,066	562	65.5%	918	610	99	1	93.9%	60.0%	11,746	7.2	169	11.1%	301	18.5%	22.9%	185	11.4%	0.5%	360	22.1%	19.4%
STURG	2,503	1,429	1,074	57.1%	1,111	1,203	189	0	92.4%	48.0%	23,549	9.4	264	11.4%	589	23.5%	15.6%	434	17.3%	3.9%	731	29.2%	13.8%
WIN	1,569	877	692	55.9%	599	786	184	0	88.3%	43.2%	18,991	12.1	200	14.4%	316	20.1%	16.5%	202	12.9%	5.9%	356	22.7%	15.4%

	Average number of attempts for in-progress cases (A)	System Time				Productivity (C)(B)	Average interview time (min) (C)/resp.	Average non-interview time (min) (D)/Sample	TPU (min) (B)/sample	SOPS					
		Total System Time (B) Total System Time (B)	Interview system time outcome 70,71,76 (C)	non Interview system time -all outcomes NE 70,71,76 (D)	Productivity (C)(B)					Total System Time (B) Total System Time (B)	Budgeted system time	% of system time spent	Total Claimed Hours	Budgeted Hours	% of Budgeted Hours Claimed
NAT	9,493	14.8	5,199.6	2,028.1	3,171.5	39.0%	28.1	20.0	32.9	5,199.6	5,853	88.8%	6,879.3	7,804	88.2%
EDM	1,858	13.8	1,016.6	354.7	661.8	34.9%	29.6	21.4	32.8	1,016.6	1,160	87.6%	1,348.8	1,547	87.2%
HFX	1,935	15.1	1,043.9	436.7	607.2	41.8%	26.7	18.8	32.4	1,043.9	1,203	86.7%	1,427.5	1,605	89.0%
SHER	1,628	12.2	956.7	439.8	516.9	46.0%	28.7	19.1	35.3	956.7	1,005	95.2%	1,216.0	1,340	90.8%
STURG	2,503	15.0	1,318.4	528.9	789.5	40.1%	28.6	18.9	31.6	1,318.4	1,541	85.6%	1,729.8	2,055	84.2%
WIN	1,569	17.9	864.0	267.9	596.0	31.0%	26.8	22.8	33.0	864.0	944	91.6%	1,157.3	1,258	92.0%



Timely Analysis and Communications

- ❑ Survey Progress Monitoring reports are produced weekly every Tuesday and made available to all collection managers
- ❑ Detailed active monitoring reports are made available daily to all collection managers
 - ❑ Collection dashboard, active management reports, DIPP,...
- ❑ Interviewer assignment guidelines reports for CATI surveys are produced three times a week and emails are sent to data collection managers when issues are identified.



Timely Analysis and Communications

- ❑ Weekly Collection Coordinators / District Collection Managers Meeting
 - ❑ Discuss the weekly survey progress monitoring report findings in preparation to ad's meeting. Will think on this one a bit and provide more comments,
- ❑ Weekly Assistant Directors (AD) meetings
 - ❑ High level discussion about collection progress and potential issues



Recent AM progress

- Developed and implemented new active management tools
 - Frameworks for CAPI, Web & multi-mode surveys
 - Tools to monitor effort & performance at the interviewer level are made available weekly to data collection managers
 - Tools to produce production plans

- *Weekly survey progress monitoring template and analysis process including communication plan*

AM Challenges

- ❑ Large amount of information and reports available
 - In the past not enough info, lots of information – require documentation and training of data collection managers on the use of those reports
 - Need to concentrate on analyzing major issues (not on good to know info)
 - Can spend a lot of time on something not broken
 - Some analysis can wait at the end of collection
- ❑ Analysis and communication
 - Require an extra analytical step
 - Reports are not enough
 - Real challenge is to analyse, summarize and communicate the info
- ❑ Staff
 - Required staff with a wide range of knowledge (e.g. methodological, data collection) including analytical, communication and technical skills
- ❑ Integrated Collection Operation System (ICOS)
 - Management of a national sample rather than regional samples



For more information, please contact
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