Data Quality Report

Healthy Baby Prenatal Benefit

June 2001 – July 2019

Administrative data from the Healthy Child Manitoba Healthy Baby Prenatal Benefit program, a program that provides financial benefits to help women meet nutritional needs during pregnancy and acts as a mechanism for connecting women to health and community resources in their area. Data are available for all women who have applied for the benefit as well as the applicant's spouse. Details include income, education, marital status, benefit eligibility, and benefits received.

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Contents

Overview of Database

Domain	SPDS Table	Dataset Label	Number of Records	Number of Fields
SOCIAL	HCM_HBPNB_20 01JUN	Healthy Baby Prenatal Benefit June 2001 onwards	81954	40

Summary

- This extract of Healthy Baby Prenatal Benefit data is provided as one table as compared to the previous extract which was provided in multiple tables. Current data years is June 2001 to July 2019.
- The percentage of linkable records is high at 99.75%

Data Model

HCM_HBPNB_2001JUN		
ACQDT	Date	8
ETHNICCODE	Char	2
REGIONCODE	Char	2
MARITALSTATUSCODE	Char	2
APPLICATIONID	**Num**	**8**
BENEFITAMOUNTROLLUP	Num	8
CREATED_DT	Date	8
RECEIVED_DT	Date	8
CONFINEMENT_DT	Date	8
TERMINATION_DT	Date	8
TERMINATION_NOTIFICATION_DT	Date	8
ELIGIBILITY_DT	Date	8
COMPLETION_DT	Date	8
EDUCATIONCODE	Char	2
FIRSTPREGNANCYIND	Char	2
EDDCONFIRMEDIND	Char	2
INCOMEAMOUNT_APPLICANT	Num	8
INCOMEAMOUNT_SPOUSE	Num	8
SOCALLOWTYPEIND	Char	2
GENDER	Char	2
BIRTH_DT	Date	8
MHSCNUM	Num	8
TREATYSTATUSIND	Char	2
ONRESERVEIND	Char	2
FIRSTNATIONCODE	Num	8
IAFIRSTNATIONCODE	Num	8
NEWCOMERTOCANADA	Char	2
AMOUNTPAID	Num	8
AVG_CHEQUEAMOUNT	Num	8
NUM_CHEQUES	Num	8
CITYNAME	Char	41
PROVINCESTATE	Char	3
POSTALZIPCODE	Char	9
PERSONID	**Num**	**8**
RECID	Num	8
CANCODE	Char	1
LINK	Char	5
SEX	Char	1
FILEPHIN	Num	8
FILEPHINTYPE	Char	1

Legend

Primary Key
Foreign Key

Accuracy: Completeness and Correctness (VIMO Table)

Dataset Label: Healthy Baby Prenatal Benefit June 2001 onwards	Records: 81954	Legend (Potential Data Quality Problems):		
		None or Minimal < 5%	Moderate 5-30%	Significant > 30%	Unknown or N/A
Dataset Name: hcm_hbpnb_2001jun	Period: 2001-2019			
SUPPRESSED = Variables being suppressed in data file				
* = All postal codes listed here have frequency count > 20		Legend for comment column		
= No variance or 100% missing value		Blank = variables have not been tested (no formats have been specified for the variables)		
		? = Variables have been tested against the associated formats and no invalid values found		

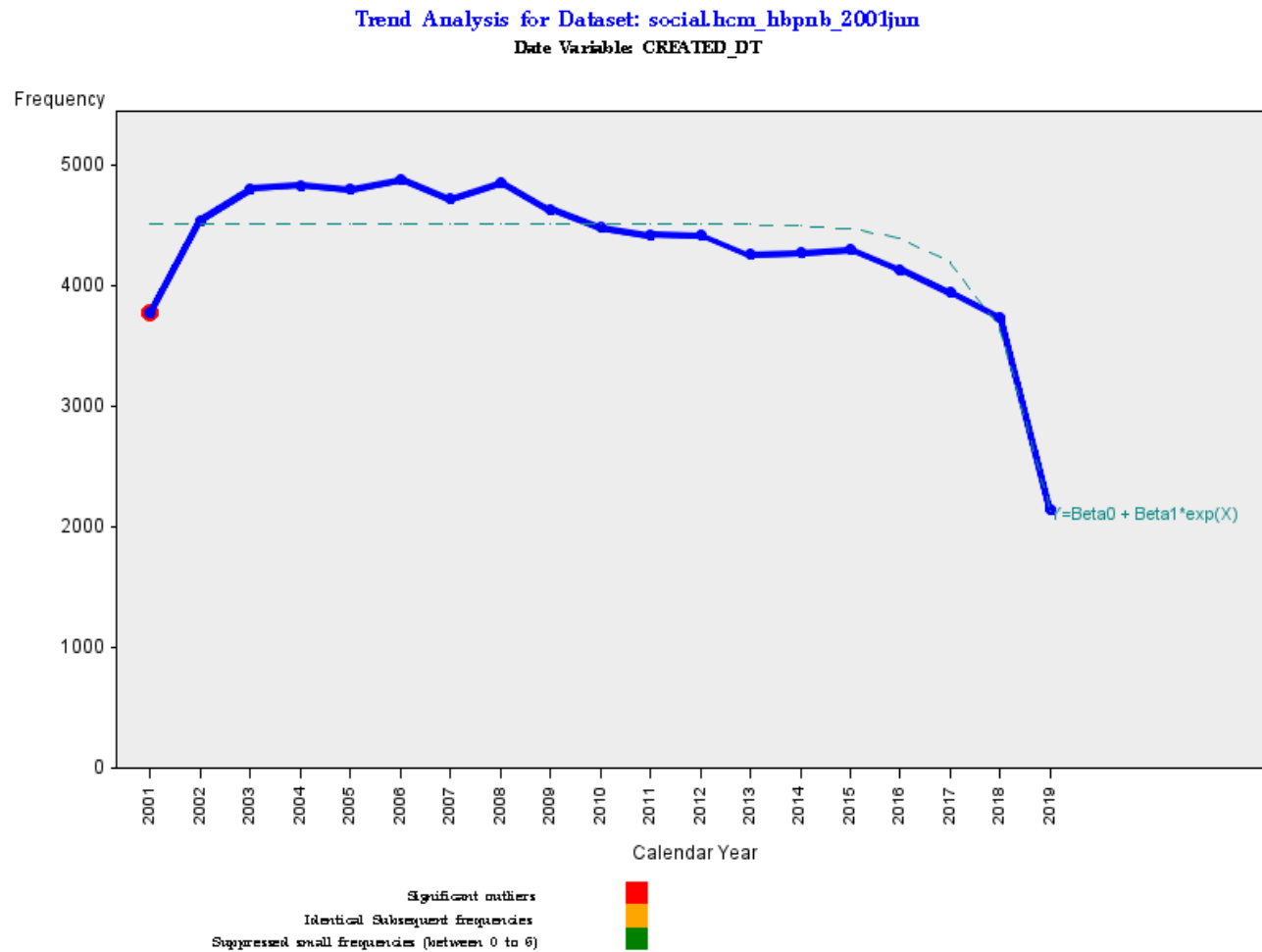| TYPE	Variable Name	Variable Label	VALID	INVALID	MISSING	OUTLIER	MIN	MAX	MEAN	MEDIAN	STD	COMMENT
ID	APPLICATIONID	Application Number	100.00		.00							
	FILEPHIN	MH Scrambled PHIN	100.00		.00							
	PERSONID	Person Id Number	100.00		.00							
	RECID	Record ID	100.00		.00							
Num	AMOUNTPAID	Total Amount Paid to the applicant	91.57		8.43	.00	10.00	732.69	444.68	488.46	134.45	
	AVG_CHEQUEAMOUNT	Avg cheque amount	83.08		8.43	8.50	10.00	189.96	78.17	81.41	12.23	
	BENEFITAMOUNTROLLUP	Benefit Amount	83.26		2.39	14.35	0.00	81.41	73.36	81.41	22.22	
	FIRSTNATIONCODE	First Nation Code	82.29		.00	17.71	0.00	62.00	8.64	.00	16.78	
	IAFIRSTNATIONCODE	First Nation Code	82.17		.00	17.83	0.00	62.00	8.83	.00	16.89	
	INCOMEAMOUNT_APPLICANT	Applicant income from CRA	53.37		46.46	.17	-3371.00	642460273	22073.25	5005.13	3067075.35	
	INCOMEAMOUNT_SPOUSE	Spousal income from CRA	24.97		74.98	.05	-12274.00	304320.00	13679.66	11401.69	12739.35	
	MHSCNUM	MHSC number	98.60		1.40	.00	0.00	677125361	502490.44	490349.52	2396871.77	
	NUM_CHEQUES	Number of cheques received	91.57		8.43	.00	1.00	9.00	5.69	6.00	1.46	
							Top 10 Observed Values					
Char	CANCODE	Cancellation code	99.75		.25		0, X, 7, 2, H, J, V, I, K, G					
	CITYNAME	City	94.66		5.34		Winnipeg, Brandon, Cross Lake, Norway House, Portage La Prairie,					
	EDDCONFIRMEDIND	Due date confirmed by doctor - Y/N	100.00		.00		Y, N					?
	EDUCATIONCODE	Education Code	100.00		.00		S, G, P, E, U					?
	ETHNICCODE	Ethnic code	98.73		1.27		SUPPRESSED					?
	FILEPHINTYPE	Method to Determine FILEPHIN	100.00		.00		0, 4					
	FIRSTPREGNANCYIND	First Pregnancy Y/N	100.00		.00		N, Y, U					
	GENDER	Birth Date	100.00		.00		F, M					
	LINK	Link indicator	100.00		.00		PASS1, LINK1, LINK2, LINK3, LINK4, NONE					
	MARITALSTATUSCODE	Marital Status Code	100.00		.00		1, 2, 0					?
	NEWCOMERTOCANADA	Newcomer to Canada	100.00		.00		N, Y					
	ONRESERVEIND	On Reserve Y/N	99.98		.02		N, Y					?
	POSTALZIPCODE *	Postal Code	94.66		5.34		R0B0J0, R0B1B0, R0B0T0, R0B1C0, R0B1J0, R0H0T0, R0C3J0, R0					
	PROVINCESTATE	Province	94.66		5.34		MB, QC					
	REGIONCODE	Region Code	99.96		.04		10, 80, 40, 30, 60, 20, 70, 15, 25, 50					?
	SEX	Sex (MCHP)	100.00		.00		2, 1					
	SOCALLOWTYPEIND	Type of Social Assistance	42.14		57.86		P, B, M					?
	TREATYSTATUSIND	Treaty Status Y/N	99.98		.02		N, Y					
Date	ACQDT	Date Record was Acquired at MCHP	100.00		.00		2019-11-28	2019-11-28				
	BIRTH_DT	Birth date	99.99		.01		1947-02-24	2018-03-25				
	COMPLETION_DT	Date application completed	94.92	.00	5.08		2001-07-01	2020-07-08				2020-07-08 (1 Invalid Obs. in total)
	CONFINEMENT_DT	Expected Due Date	97.87	1.85	.28		2001-07-01	2020-03-22				1513 invalid obs. out of [2001-06-01, 2019-07-31] range
	CREATED_DT	Date applicated entered	100.00	.00	.00		1582-10-14	2019-07-29				1582-10-14 (2 Invalid Obs. in total)
	ELIGIBILITY_DT	Date eligible for benefits	94.91	.07	5.02		2001-07-01	2020-07-08				54 invalid obs. out of [2001-06-01, 2019-07-31] range
	RECEIVED_DT	Date applicated entered	100.00		.00		2001-06-14	2019-07-29				?
	TERMINATION_DT	Date pregnancy terminated - ususally if early	8.81	.02	91.17		1900-01-01	2019-11-19				1900-01-01, 2001-01-15, 2019-11-19 (17 Invalid Obs. in total)
	TERMINATION_NOTIFICATION_DT	Date notified of termination date	8.83	.06	91.11		1900-01-01	2207-07-11				49 invalid obs. out of [2001-06-01, 2019-07-31] range

Linkability

Dataset	Total Number of Records	Number of Linkable Records	% Linkable Records	Number of Linkable Individuals
HCM_HBPNB_2001JUN	81954	81749	99.75	48151

PHIN Type

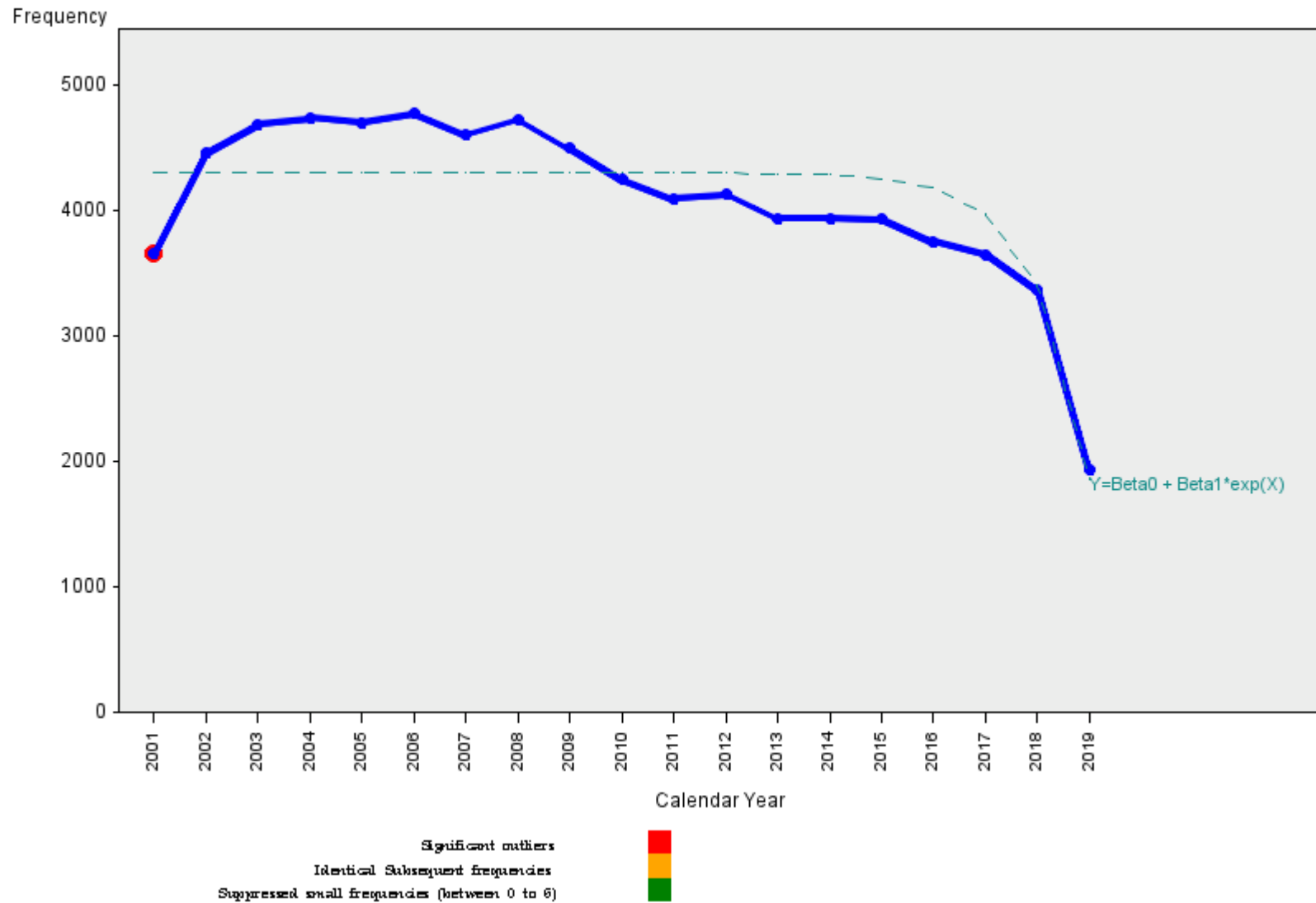| FILEPHIN TYPE	HCM_HBPNB_2001JUN
0 MH verified against concurrent registries	99.75
4 MCHP db specific ScrPHIN - No MH found	0.25

Internal Validity: Trend Analysis

Trend Analysis for Dataset: socialhcm_hbpnb_2001jun
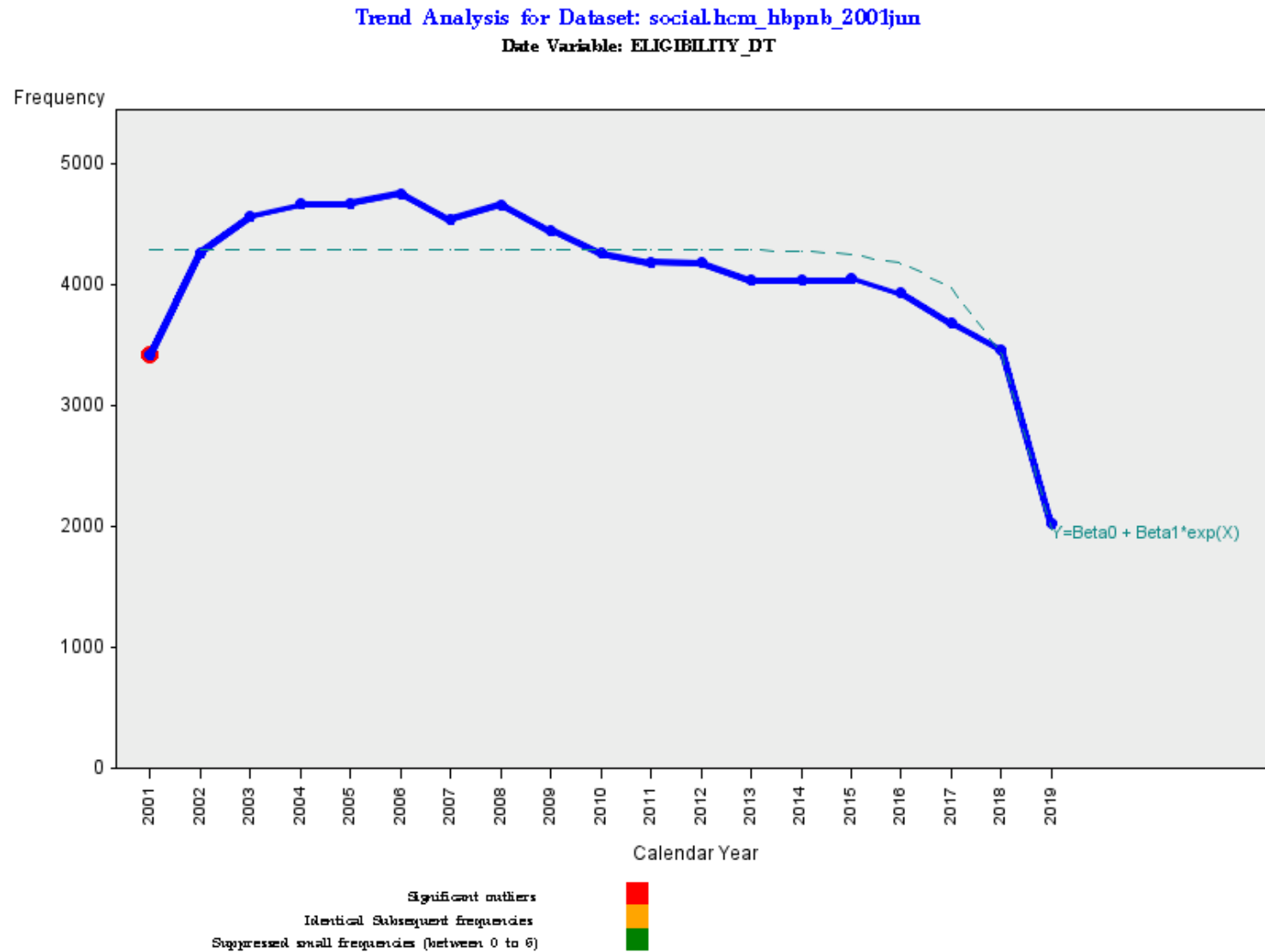## Date Variable: CREATED_DT

Trend Analysis for Dataset: socialhcm_hbpnb_2001jun
Date Variable: COMPLETION_DT

Trend Analysis for Dataset: social.hcm_hbpnb_2001jun
Date Variable: COMPLETION_DT

$Y = Beta0 + Beta1 \cdot exp(X)$

Significant outliers
Identical Subsequent frequencies
Suppressed small frequencies (between 0 to 6)

Trend Analysis for Dataset: socialhcm_hbpnb_2001jun
Date Variable: ELIGIBILITY_DT

Trend Analysis for Dataset: social.hcm_hbpnb_2001jun
Date Variable: ELIGIBILITY_DT

$Y = Beta0 + Beta1*exp(X)$

Significant outliers
Identical Subsequent frequencies
Suppressed small frequencies (between 0 to 6)

Trend Analysis for Dataset: socialhcm_hbpnb_2001jun
Date Variable: RECEIVED_DT

Trend Analysis for Dataset: social.hcm_hbpnb_2001jun
Date Variable: RECEIVED_DT

Y=Beta0 + Beta1*exp(X)

Significant outliers
Identical Subsequent frequencies
Suppressed small frequencies (between 0 to 6)