Medicaid and WCLPPP Data Matching
Wisconsin Experiences

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WCLPPP - Medicaid Data Matching

- The WCLPPP – Medicaid data match links the WCLPPP Stellar lead testing with the Medicaid eligibility database.
- Multi-step process to develop the data set from which the summary analyses and statistics are derived.
- The first step is a match between the WCLPPP Stellar 'Child' table and the Medicaid eligibility database.

WCLPPP - Medicaid Data Matching

Match between WCLPPP "Stellar" data and Medicaid Eligibility Data

- sequential
- based on name, date of birth, gender
- uses SAS v 8.02 running on a stand-alone PC
- direct and 'fuzzy' matches using SAS, including Spedis and Soundex functions
- "Eligibility" defined as being 'eligible' at least once during a year of interest, as determined by 'Eligibility Begin' and 'Eligibility End' dates in the Medicaid database

WCLPPP - Medicaid Data Matching

'Normal' Match

- matching algorithms written in SAS
- matches exact spellings of first name, last name, gender
- slightly fuzzy on birthday: +/- one day and one year
- "Matched" and "Residuals" files created
- accounts for 70% to 90% of all matches

WCLPPP - Medicaid Data Matching

Spedis-Based Matching

- Built-in SAS function
- measures the 'distance' between the spelling of two words
- degree of 'dissimilarity'
- range of acceptable distance set by user
  - tolerance determined from sensitivity analyses
- match done on "Residuals" file
- exact dates of birth
- matches added to "Matched" file; "Residuals" file created
- typically accounts for 10% to 30% of all matches

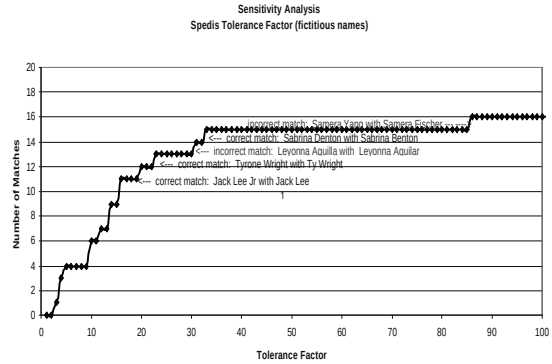
WCLPPP - Medicaid Data Matching

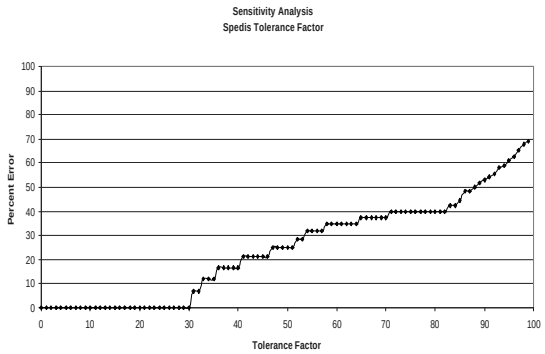
Soundex-Based Matching

- Built-in SAS function
- common coding algorithm for encoding names
  - driver's licenses
  - tax rolls
- converts each word into a short sequence of characters and numerals
- 'hard wired,' cannot be 'tweaked'
- exact dates of birth
- match done on "Residuals" file; matches added to "Matched" file
- typically only a couple hundred matches; manually checked

Spedis Match Between MA and WCLPPP Children Based on First Name, Last Name, Date of Birth and Gender (fictitious names)

Tolerance Factor	STELLAR_UN_LEAD	RECIPIENTID_MA	FIRSTNAME_LEAD	FIRSTNAME_MA	LASTNAME_LEAD	LASTNAME_MA	DATEOFBIRTH_LEAD
30	348	101010101	JESSE Jr	JESSE	GOLDEN	GOLDEN Jr	4/2/00
30	376	101010104	JACK	JACK	LEE Jr	LEE	4/25/00
30	406	101010105	STEFANY	STEFANIE	SCHEURMANN	SCHEURMAN	8/13/00
30	438	101010110	CARLOS	CARLOS	MONTEZ	MONTES	6/26/00
30	473	101010115	ROMAN	ROMAN	PETTERSEN-ZAH	PETTERSEN	11/8/99
30	552	101010122	TAYLOR	TAYLOR	RAFFENSPERG	RAFFENSPERGER	2/24/01
30	596	101010123	ALFREDO	ALFREDO	MARTINES	MARTINEZ	12/31/00
30	644	101010125	ANNA	ANNA	ADAMZ	ADAMS	11/2/99
30	751	101010132	RAYMEL	RAYMELL	BROWN	BROWN	8/4/00
30	3242	101010154	TYRONE	TY	WRIGHT	WRIGHT	6/21/00
30	4764	101010159	CHRISTOPHER	CHRISTOPHE	RIVERA	RIVERA	11/7/00
30	7000	101010165	STAR	STAR	HERNANDEZ-MOR	HERNANDEZ MOR	1/12/01
30	7560	101010166	RAEKWON	RAEKWON	ENRIGHT	ENRIGHT GOLDE	1/26/01
90	946	101010135	SAMERA	SAMERA	**YANG**	**FISCHER**	1/16/01
110	30210	101010176	**GEORGE**	**RONALD**	**DOEDEN**	**RANDLE**	9/8/00





Soundex Match Between MA and WCLPPP Children Based on First Name, Last Name, Date of Birth and Gender (fictitious names)

FIRSTNAME_LEAD	FIRSTNAME_MA	SoundexFirst NameLead	SoundexFirst NameMA	LASTNAME_LEAD	LASTNAME_MA	SoundexLast NameLead	SoundexLast NameMA
ALYSSA	ALYSSA	A42	A42	YANG	YANG	Y52	Y52
ALYSSA	ALYSSA	A42	A42	YANG	YANG	Y52	Y52
ALYSSA	ALYSSA	A42	A42	YANG	YANG	Y52	Y52
ALEXANDRIA	ALEXANDRIA	A42536	A42536	PRADO	PRADO	P63	P63
ALEJANDRO	ALEJANDRO	A42536	A42536	GALINDO JR	GALINDO JR	G45326	G45326
ANDREW	ANDREW	A536	A536	MCCANN	MCCANN	M25	M25
ARIANNA	ARIANNA	A65	A65	SUTTON	SUTTON	S35	S35
ARIONNE	ARIONNE	A65	A65	DARRINGTON	DARRINGTON	D65235	D65235
BRENDAN	BRENDAN	B6535	B6535	DANIELS	DANIELS	D542	D542
CHRISTOPHE	CHRISTOPHE	C6231	C6231	CROSBY	CROSBY	C621	C621
CORNESHA	CORNESHA	C652	C652	COPE	COPE	C1	C1
DEVIN	DEVIN	D15	D15	HOLBROOK	HOLBROOK	H4162	H4162
DIONNE	DIONNE	D5	D5	HUTCHINSON	HUTCHINSON	H32525	H32525
ETHAN	ETHAN	E35	E35	BLACK	BLACK	B42	B42
ETHAN	ETHAN	E35	E35	ROMAN	ROMAN	R55	R55
FABIOLA	FABIOLA	F14	F14	LEE	LEE	L	L
HANNAH	HANNAH	H5	H5	WILCOX	WILCOX	W422	W422
JOSEPH	JOSEPH	J21	J21	MARTIN	MARTIN	M635	M635
JOCELYN	JOCELYN	J245	J245	SMITHEE	SMITHEE	S53	S53
JANIECE	JANIECE	J52	J52	WILLIAMS	WILLIAMS	W452	W452
KEVIN	KEVIN	K15	K15	SHAW	SHAW	S	S
KIRSTEN	KIRSTEN	K6235	K6235	MOORE JR	MOORE JR	M626	M626
LUIS GUSTA	LUIS GUSTA	L2223	L2223	STRUM	STRUM	S365	S365
LONA	LEYONNA	L5	L5	AGUILAR	AGUILAR	A246	A246
LEONARDO	LEONARDO	L563	L563	DAVIS	DAVIS	D12	D12
MICAYLA	MICAYLA	M24	M24	PEAK	PEAK	P2	P2
MAKAYLA	MAKAYLA	M24	M24	MCCANN	MCCANN	M25	M25
MICHAEL	MICHAEL	M24	M24	DE LA GARZA	DE LA GARZA	D4262	D4262
MADISON	MADISON	M325	M325	PAWLAK	PAWLAK	P42	P42
MARK	MARK	M62	M62	SANDERS	SANDERS	S5362	S5362
MARTAVIUS	MARTAVIUS	M6312	M6312	BYERS	BYERS	B62	B62
MEREDITH	MEREDITH	M633	M633	BLAKE	BLAKE	B42	B42