REDUCING YOUTH ACCESS TO TOBACCO AND NICOTINE:

STRATEGIES FOR REDUCING RETAIL SALES TO YOUTH WHILE ADDRESSING EMERGING PRODUCTS AND NEW LAWS AND POLICIES

JBS INTERNATIONAL, INC. | 5515 Security Lane, Suite 800
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Who We Are

A JBS International and CamBright Research Partnership

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Disclaimer

The views and opinions expressed in this presentation are based on 20 years of technical assistance provided by JBS International and its partners, including CamBright Research, to the Substance Abuse and Mental Health Services Administration (SAMHSA), all 50 States, and nine federal Jurisdictions.

The views, opinions, and content of this presentation are those of the presenters and do not necessarily reflect the views or opinions of SAMHSA or the U.S. Department of Health and Human Services.

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Overview of Presentation

Our Approach

Logic Model Example

Using Data to Inform Action

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Strategic Prevention Framework

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Each State is Unique

POLICIES AND REGULATIONS

ENFORCEMENT

INFRASTRUCTURE AND CAPACITY

RESOURCES

CONTEXTUAL CONDITIONS

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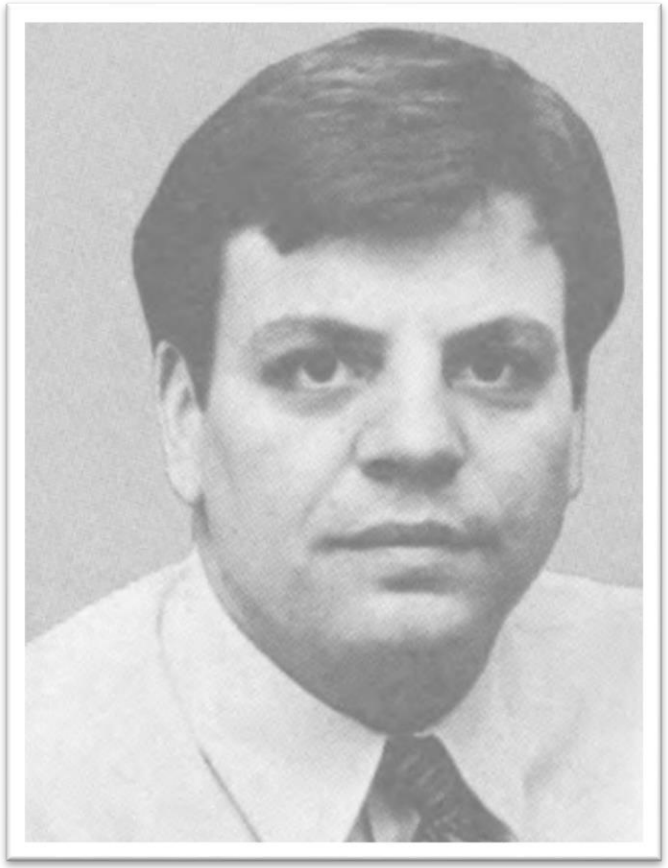
The Synar Amendment



Enacted in 1992, the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (PL 102-321) - amendment (section 1926) designed to reduce youth access to tobacco.

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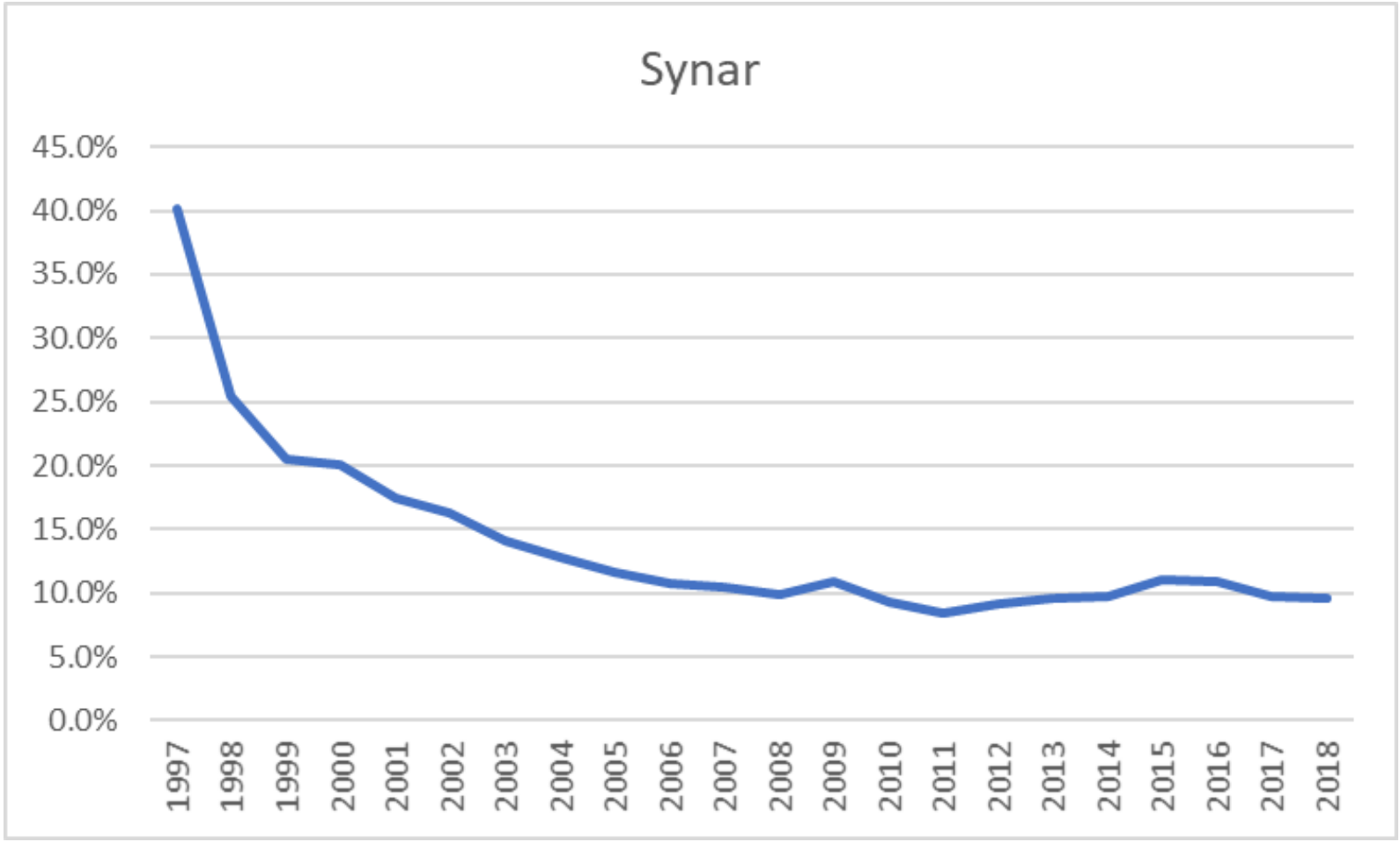
Efforts to Reduce Retail Access Work



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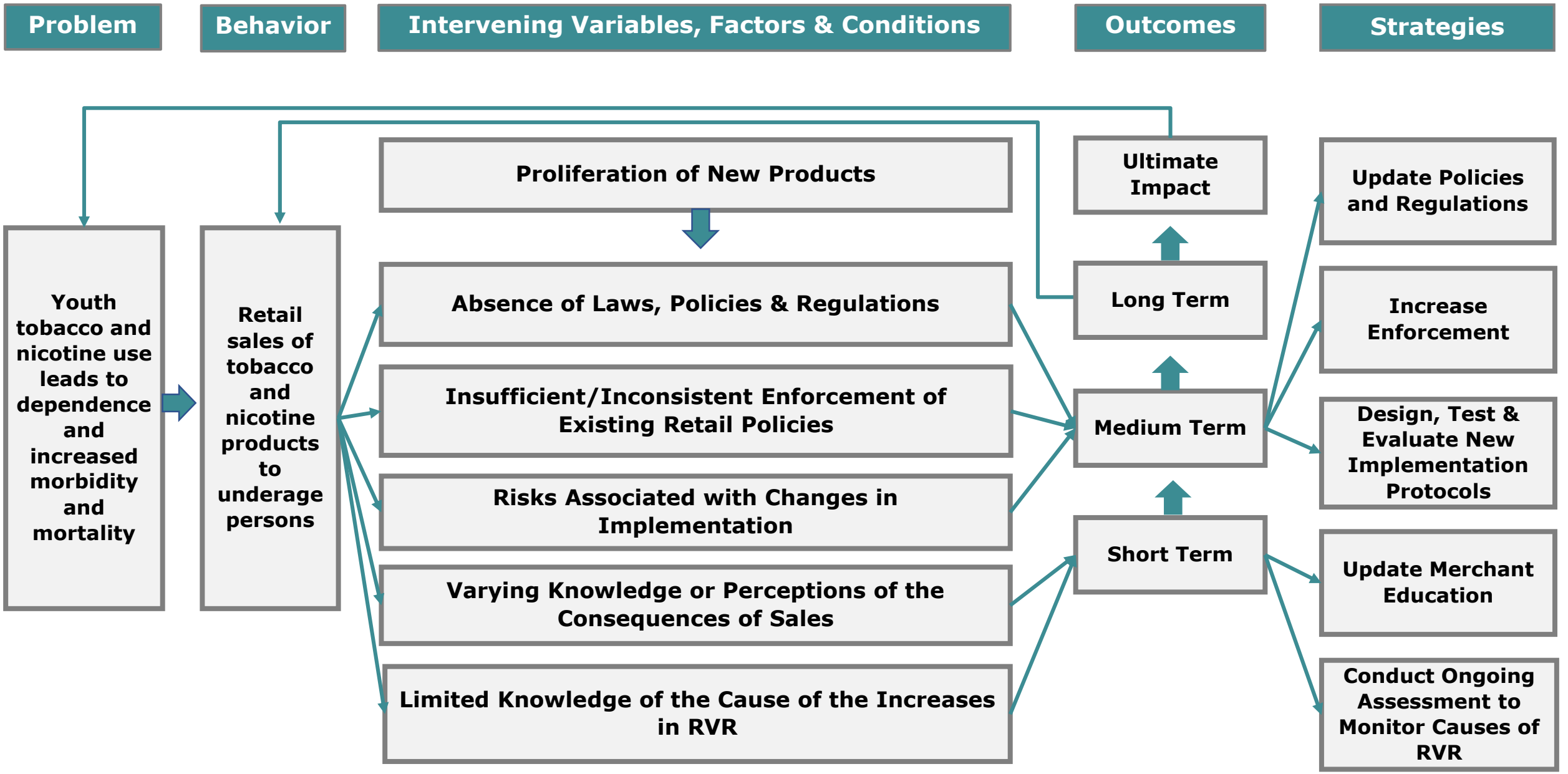
Logic Model


Problem
Behavior
Intervening Variables, Factors & Conditions
Outcomes
Strategies
Youth tobacco and nicotine use leads to dependence and increased morbidity and mortality
Retail sales of tobacco and nicotine products to underage persons
Proliferation of New Products
Absence of Laws, Policies & Regulations
Insufficient/Inconsistent Enforcement of Existing Retail Policies
Risks Associated with Changes in Implementation
Varying Knowledge or Perceptions of the Consequences of Sales
Limited Knowledge of the Cause of the Increases in RVR
Ultimate Impact
Long Term
Medium Term
Short Term
Update Policies and Regulations
Increase Enforcement
Design, Test & Evaluate New Implementation Protocols
Update Merchant Education
Conduct Ongoing Assessment to Monitor Causes of RVR

WORKING WITH SYNAR INSPECTION DATA

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Using Data to Solve Problems

- The approach is generic and can be applied in many other settings
- Review logic model for data possibilities
  - Existing data
  - New data
- Form hypothesis about problem (embedded in logic model)
- Collect data, analyze data, form conclusions that can be used to inform policy

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Why Synar Requires Valid Statistical Sampling

What benefits does statistical sampling provide?

What important limitations result from non-statistical sampling?

Example

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Overview of Synar Inspection Data

Each state must annually conduct a SAMHSA approved statistically valid Synar study designed to determine its retail violation rate for tobacco sales to youth.

- Must use a SAMHSA approved statistical sample design – outlets for Synar inspections will be randomly selected

Outlet inspections are conducted using SAMHSA approved methodology

- SAMHSA provides an Excel add-in tool, SSES, for analyzing the data collected. Its use is not mandatory; however, all but a few states use the SSES tool.

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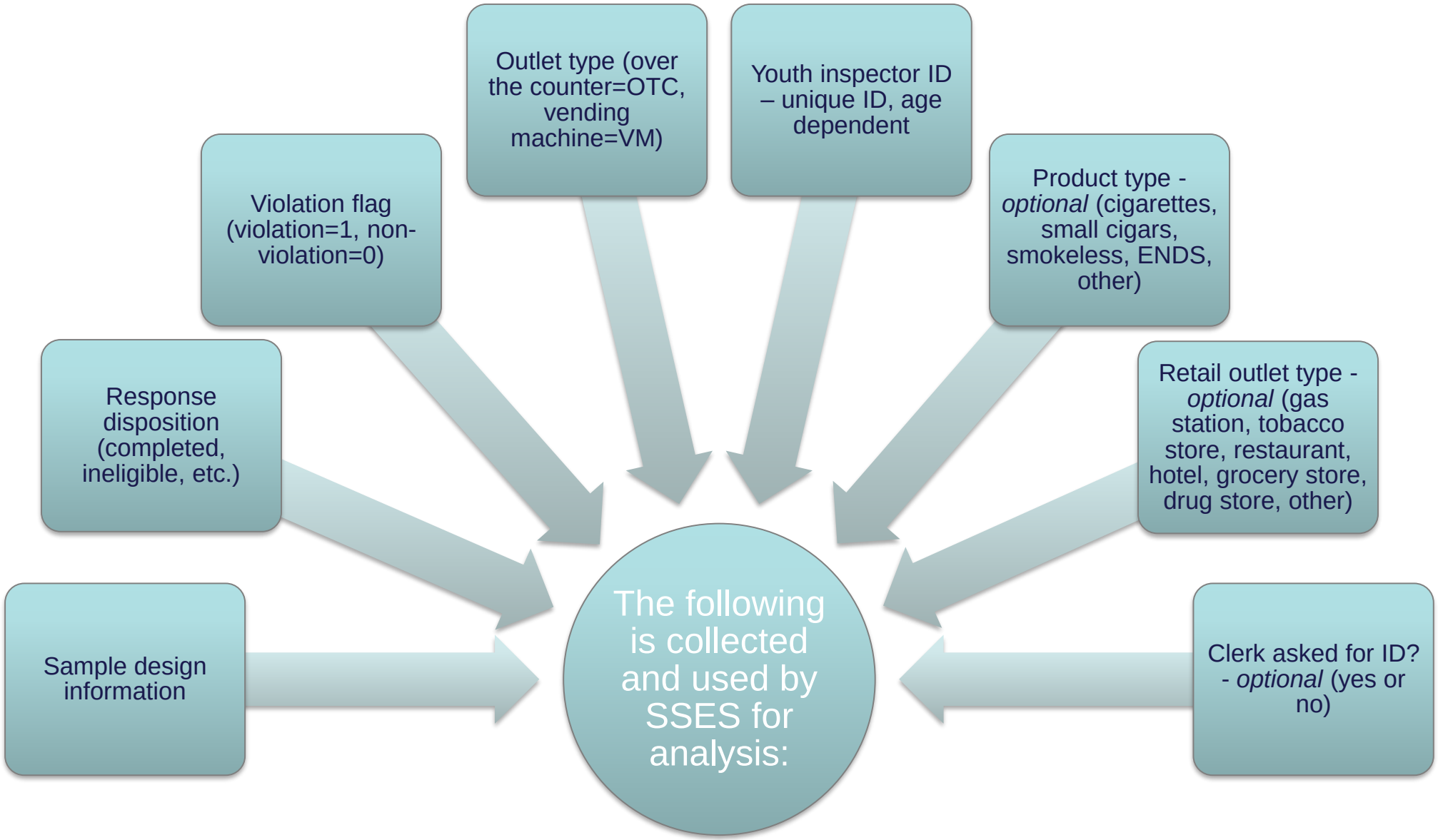
Data Collected for Synar Study



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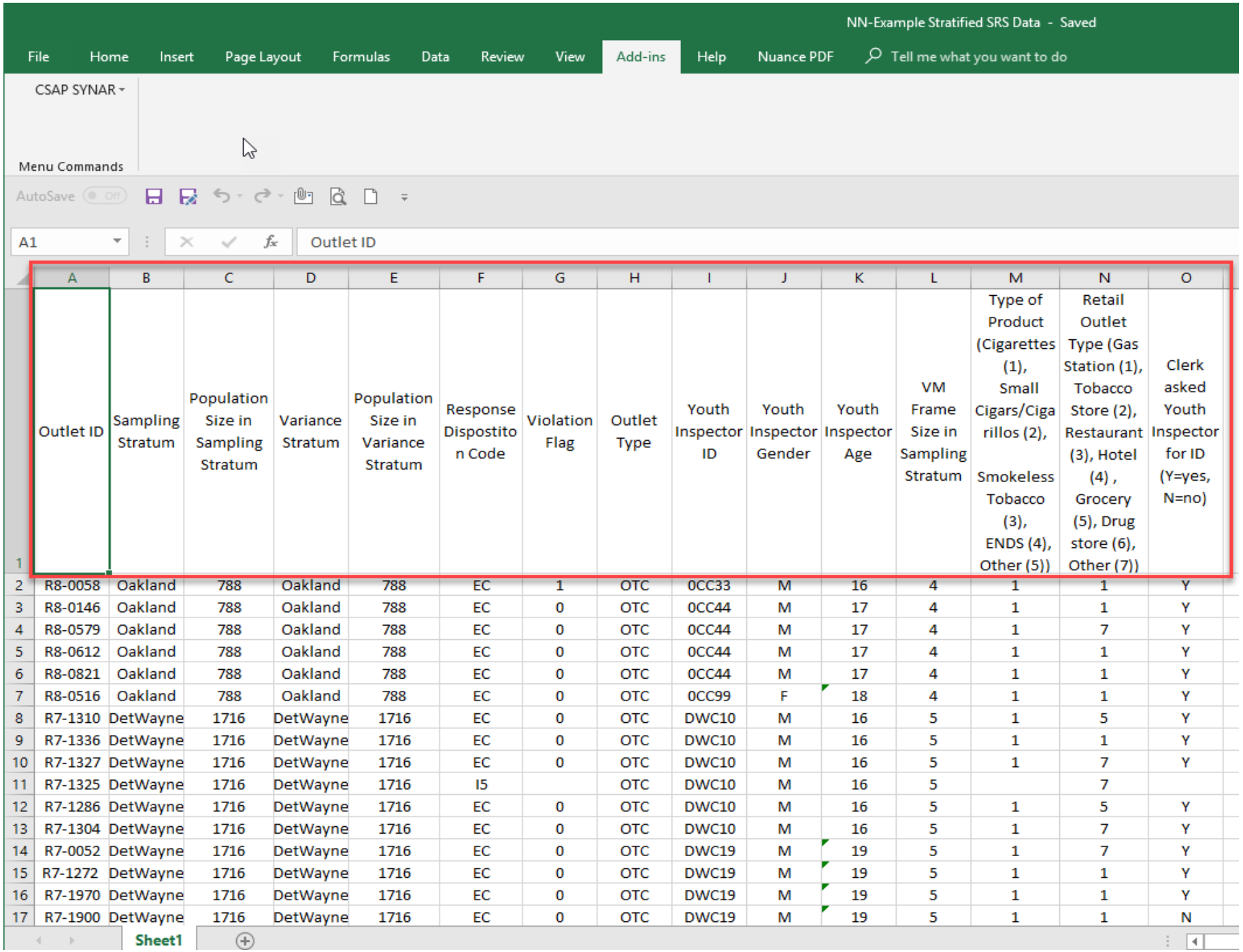
SSES Data



NN-Example Stratified SRS Data - Saved

File Home Insert Page Layout Formulas Data Review View Add-ins Help Nuance PDF Tell me what you want to do

CSAP SYNAR

Menu Commands

AutoSave Off

A1 Outlet ID

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Outlet ID	Sampling Stratum	Population Size in Sampling Stratum	Variance Stratum	Population Size in Variance Stratum	Response Dispositio n Code	Violation Flag	Outlet Type	Youth Inspector ID	Youth Inspector Gender	Youth Inspector Age	VM Frame Size in Sampling Stratum	Type of Product (Cigarettes (1), Small Cigars/Ciga rillos (2), Smokeless Tobacco (3), ENDS (4), Other (5))	Retail Outlet Type (Gas Station (1), Tobacco Store (2), Restaurant (3), Hotel (4) , Grocery (5), Drug store (6), Other (7))	Clerk asked Youth Inspector for ID (Y=yes, N=no)
2	R8-0058	Oakland	788	Oakland	788	EC	1	OTC	0CC33	M	16	4	1	1	Y
3	R8-0146	Oakland	788	Oakland	788	EC	0	OTC	0CC44	M	17	4	1	1	Y
4	R8-0579	Oakland	788	Oakland	788	EC	0	OTC	0CC44	M	17	4	1	7	Y
5	R8-0612	Oakland	788	Oakland	788	EC	0	OTC	0CC44	M	17	4	1	1	Y
6	R8-0821	Oakland	788	Oakland	788	EC	0	OTC	0CC44	M	17	4	1	1	Y
7	R8-0516	Oakland	788	Oakland	788	EC	0	OTC	0CC99	F	18	4	1	1	Y
8	R7-1310	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC10	M	16	5	1	5	Y
9	R7-1336	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC10	M	16	5	1	1	Y
10	R7-1327	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC10	M	16	5	1	7	Y
11	R7-1325	DetWayne	1716	DetWayne	1716	I5		OTC	DWC10	M	16	5		7	
12	R7-1286	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC10	M	16	5	1	5	Y
13	R7-1304	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC10	M	16	5	1	7	Y
14	R7-0052	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC19	M	19	5	1	7	Y
15	R7-1272	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC19	M	19	5	1	1	Y
16	R7-1970	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC19	M	19	5	1	1	Y
17	R7-1900	DetWayne	1716	DetWayne	1716	EC	0	OTC	DWC19	M	19	5	1	1	N

Sheet1

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SSES Analysis

	A	B	C
1	SSES Table 1 (Synar Survey Estimates and Sample Sizes)		
2			
3		**CSAP-SYNAR REPORT**	
4		State	NN
5		Federal Fiscal Year (FFY)	2019
6		Date	8/7/2018 8:34
7		Data	MI_newtabledata.xlsx
8		Program Version	Version 7.0
9		Analysis Option	Stratified SRS with FPC
10			
11		**Estimates**	
12		Unweighted Retailer Violation Rate	10.7%
13		Weighted Retailer Violation Rate	10.7%
14		Standard Error	1.5%
15		Is SAMHSA Precision Requirement met?	YES
16		Right-sided 95% Confidence Interval	[0.0%, 13.1%]
17		Two-sided 95% Confidence Interval	[7.8%, 13.6%]
18		Design Effect	1.0
19		Accuracy Rate (unweighted)	96.8%
20		Accuracy Rate (weighted)	96.7%
21		Completion Rate (unweighted)	99.8%
22			
23		**Sample Size for Current Year**	
24		Effective Sample Size	330
25		Target (Minimum) Sample Size	334
26		Original Sample Size	434
27		Eligible Sample Size	420
28		Final Sample Size	419
29		Overall Sampling Rate	4.9%
30			

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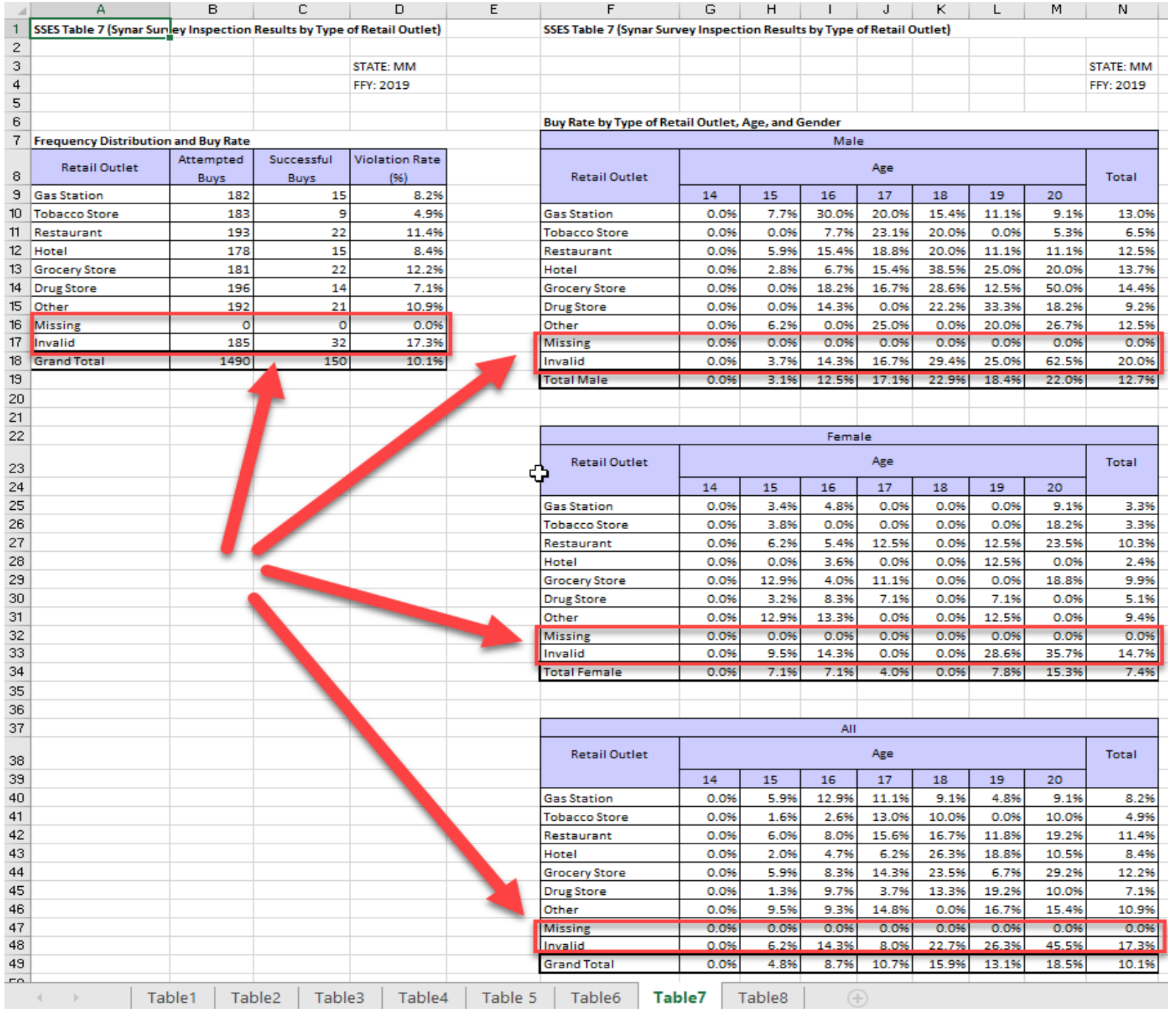
SSES Store Type Analysis



SSES Table 7 (Synar Survey Inspection Results by Type of Retail Outlet)

STATE: MM
FFY: 2019

Frequency Distribution and Buy Rate

Retail Outlet	Attempted Buys	Successful Buys	Violation Rate (%)
Gas Station	182	15	8.2%
Tobacco Store	183	9	4.9%
Restaurant	193	22	11.4%
Hotel	178	15	8.4%
Grocery Store	181	22	12.2%
Drug Store	196	14	7.1%
Other	192	21	10.9%
Missing	0	0	0.0%
Invalid	185	32	17.3%
Grand Total	1490	150	10.1%

SSES Table 7 (Synar Survey Inspection Results by Type of Retail Outlet)

STATE: MM
FFY: 2019

Buy Rate by Type of Retail Outlet, Age, and Gender

Male

Retail Outlet	Age							Total
	14	15	16	17	18	19	20	
Gas Station	0.0%	7.7%	30.0%	20.0%	15.4%	11.1%	9.1%	13.0%
Tobacco Store	0.0%	0.0%	7.7%	23.1%	20.0%	0.0%	5.3%	6.5%
Restaurant	0.0%	5.9%	15.4%	18.8%	20.0%	11.1%	11.1%	12.5%
Hotel	0.0%	2.8%	6.7%	15.4%	38.5%	25.0%	20.0%	13.7%
Grocery Store	0.0%	0.0%	18.2%	16.7%	28.6%	12.5%	50.0%	14.4%
Drug Store	0.0%	0.0%	14.3%	0.0%	22.2%	33.3%	18.2%	9.2%
Other	0.0%	6.2%	0.0%	25.0%	0.0%	20.0%	26.7%	12.5%
Missing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Invalid	0.0%	3.7%	14.3%	16.7%	29.4%	25.0%	62.5%	20.0%
Total Male	0.0%	3.1%	12.5%	17.1%	22.9%	18.4%	22.0%	12.7%

Female

Retail Outlet	Age							Total
	14	15	16	17	18	19	20	
Gas Station	0.0%	3.4%	4.8%	0.0%	0.0%	0.0%	9.1%	3.3%
Tobacco Store	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	18.2%	3.3%
Restaurant	0.0%	6.2%	5.4%	12.5%	0.0%	12.5%	23.5%	10.3%
Hotel	0.0%	0.0%	3.6%	0.0%	0.0%	12.5%	0.0%	2.4%
Grocery Store	0.0%	12.9%	4.0%	11.1%	0.0%	0.0%	18.8%	9.9%
Drug Store	0.0%	3.2%	8.3%	7.1%	0.0%	7.1%	0.0%	5.1%
Other	0.0%	12.9%	13.3%	0.0%	0.0%	12.5%	0.0%	9.4%
Missing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Invalid	0.0%	9.5%	14.3%	0.0%	0.0%	28.6%	35.7%	14.7%
Total Female	0.0%	7.1%	7.1%	4.0%	0.0%	7.8%	15.3%	7.4%

All

Retail Outlet	Age							Total
	14	15	16	17	18	19	20	
Gas Station	0.0%	5.9%	12.9%	11.1%	9.1%	4.8%	9.1%	8.2%
Tobacco Store	0.0%	1.6%	2.6%	13.0%	10.0%	0.0%	10.0%	4.9%
Restaurant	0.0%	6.0%	8.0%	15.6%	16.7%	11.8%	19.2%	11.4%
Hotel	0.0%	2.0%	4.7%	6.2%	26.3%	18.8%	10.5%	8.4%
Grocery Store	0.0%	5.9%	8.3%	14.3%	23.5%	6.7%	29.2%	12.2%
Drug Store	0.0%	1.3%	9.7%	3.7%	13.3%	19.2%	10.0%	7.1%
Other	0.0%	9.5%	9.3%	14.8%	0.0%	16.7%	15.4%	10.9%
Missing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Invalid	0.0%	6.2%	14.3%	8.0%	22.7%	26.3%	45.5%	17.3%
Grand Total	0.0%	4.8%	8.7%	10.7%	15.9%	13.1%	18.5%	10.1%

Table1 | Table2 | Table3 | Table4 | Table 5 | Table6 | **Table7** | Table8

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Digging Deeper

Limitations of Synar Data

- No central repository for all states. Must get state data individually.
- SSES data does not have store name, only store type
- Sample sizes are not large – designed for state level retail violation rate estimation
- Some data elements are optional and not collected by all states

Synar Data Opportunities

- State level field files often contain names of tobacco outlets
- Files often contain geographical data that can help in the analysis of Synar data
- Optional fields, when available, are useful in teasing out connections to retail violation rate

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Digging Deeper: Example #1

State NN has experienced increased RVR over past several years.

JBS/Campbell conducted the following analyses:

- Review ASRs to see which enforcement and compliance activities are conducted.
- Review design of annual Synar study to see if improvements possible
- Review previous years' data to see if any connections between study design features, gender, age, or geography can explain rise in RVR
- This work is ongoing, and cyclical

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Digging Deeper: Example #2

The RVR for State MM had risen substantially during a 5-year period.

JBS/Campbell conducted the following analyses:

- Combined data across 5 years (FY2013-FY2017) to look for trends and patterns
- Analyzed data by gender, age, sampling stratum, and county. Strata based on percentage of tobacco outlets in the state contained in a particular county (<6%, 6-10%, >10%). Analyzed gender and age distributions across years
- Performed a logistic regression with gender, age, sampling stratum, population of county, and year of survey to model the violation rate.

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Digging Deeper: Example #2 Findings

Logistic regression findings	• Population size was significant, but just barely at 5% level. Year, stratum and gender were also significant, while age was not • Confirmed a difference across years in RVR; in particular, 2016 RVR is greater than both 2012 and 2013.
County level data analysis revealed 3 groupings	• Those consistent with state trend. • Those faring worse than state trend. • Those whose RVRs did not rise, and, in some cases, fell. We recommended that the state inquire which RVR reduction strategies were implemented to see if they might be exported.

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Using Data to Drive Synar Study Design

Current Synar issues

ENDS products	Tobacco 21

General concerns

Preserving RVR trends	Staying under the 20% RVR threshold	Mixing of two distinct and separate populations	Relative maturity of state programs for the two populations	Limited state resources

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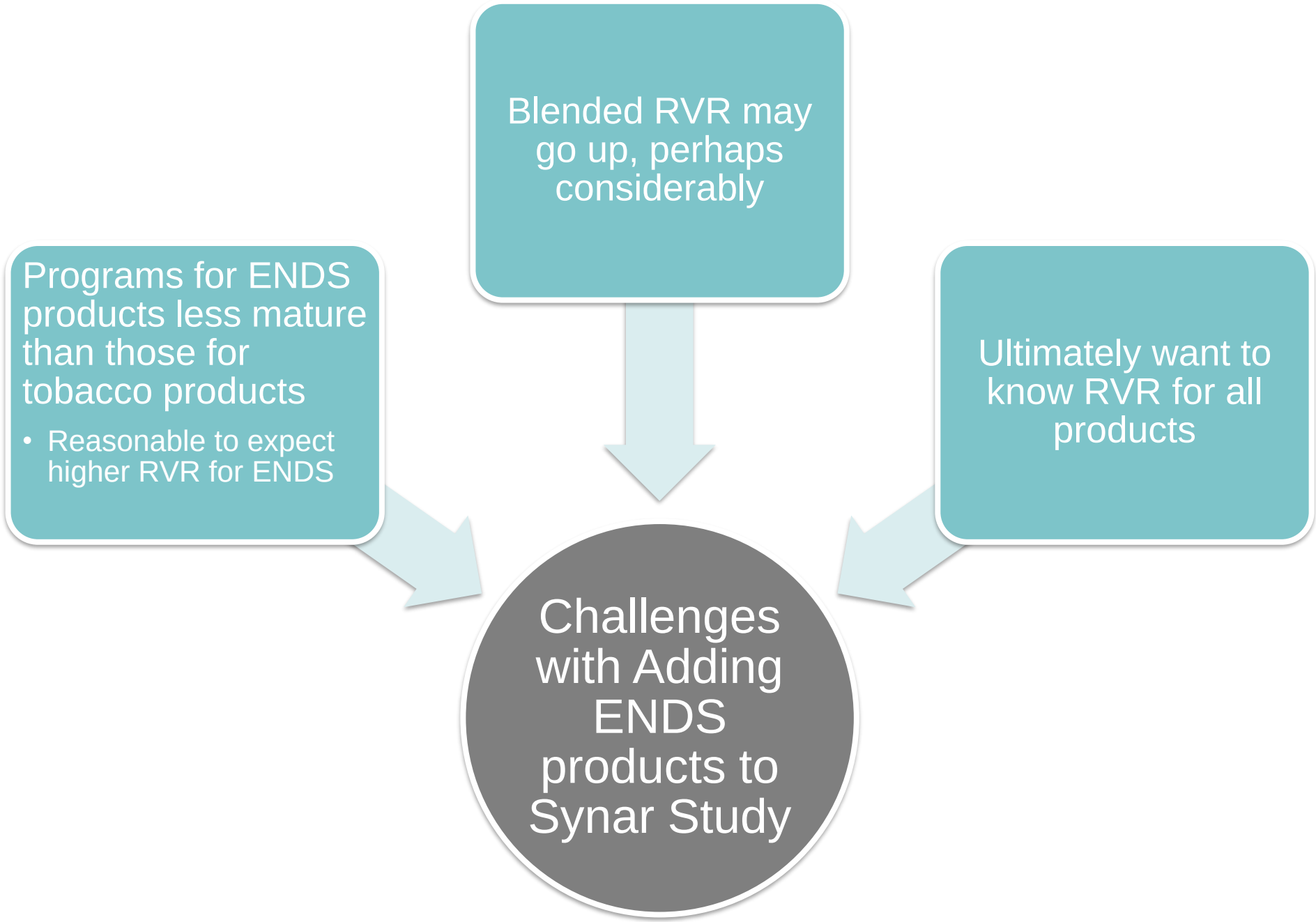

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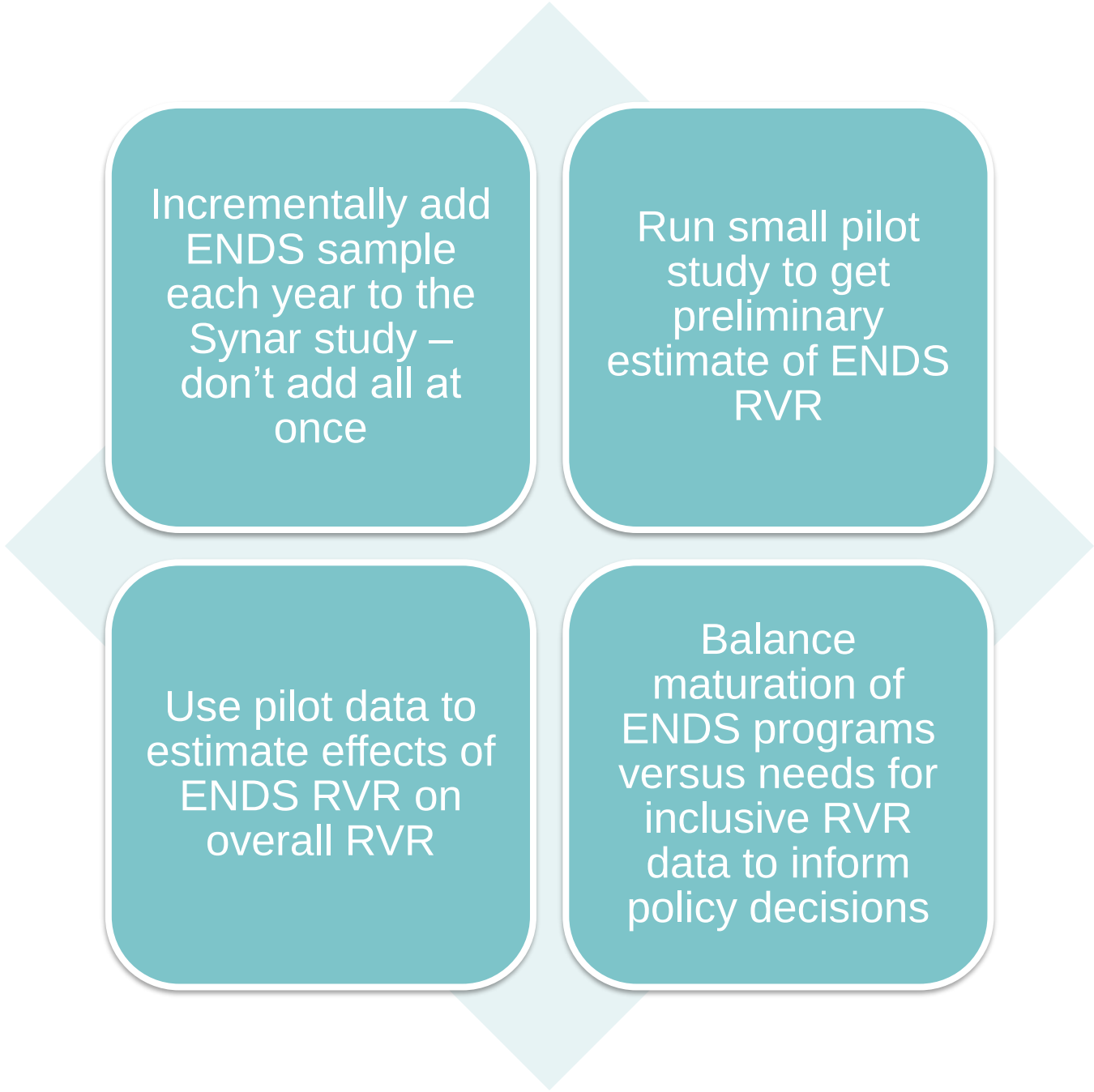
Recommended Approach for Adding ENDS Products



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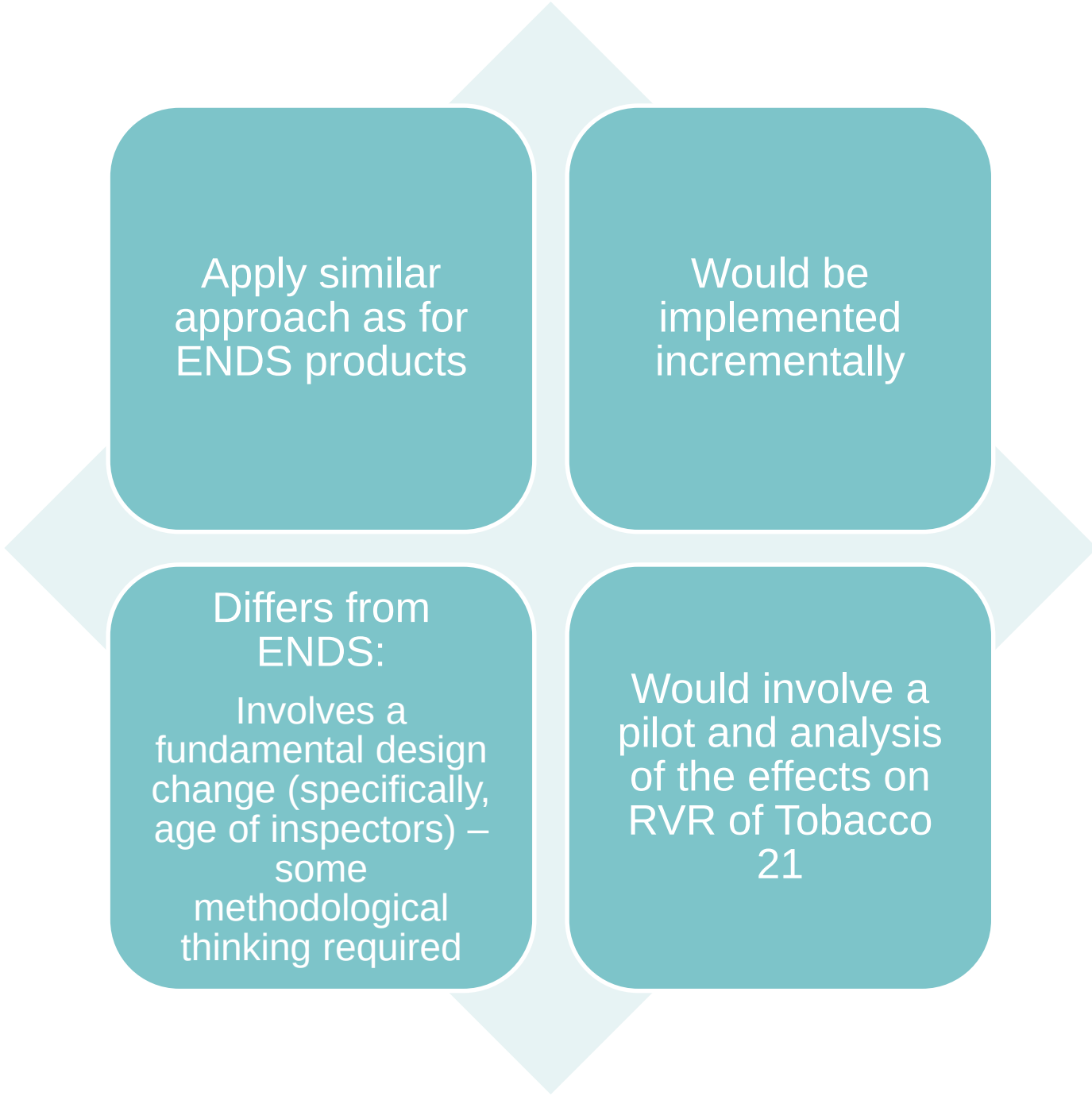
Implementing Tobacco 21 in Synar



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QUESTIONS

Thank you

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