

# Clues to Finding “Missing” UDS Quality Measure Data

Data Workgroup Presentation

By Ben Fouts, Data Analyst

November 12, 2024



# Agenda

- Introduction and Context
- Comparison of Quality Measure Results to Other Health Centers
- Quality Measure Value Set Understanding Reports
- Checking Composite Quality Measures
- Multiple Sources of Numerator Data

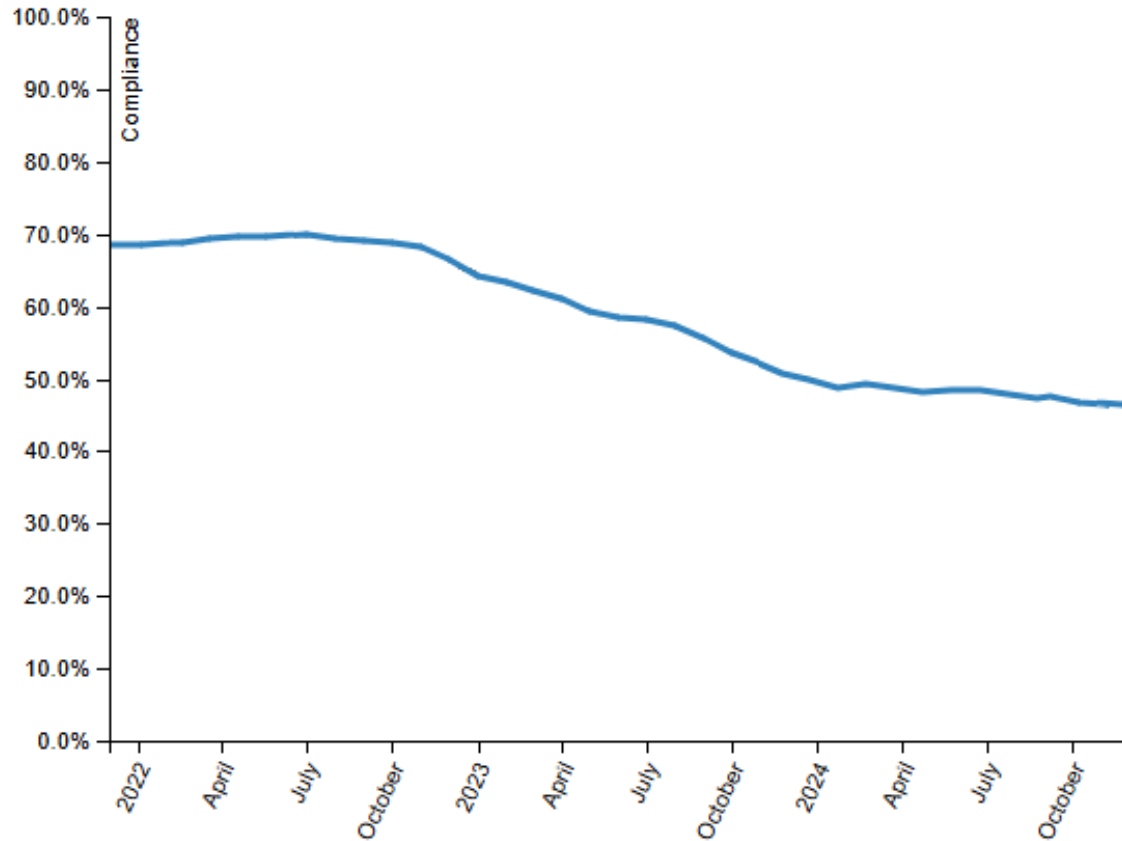


# Introduction and Context



# Clues For Data Problems Using Run Charts

COMPLIANCE TREND BY PERCENTAGE ▾



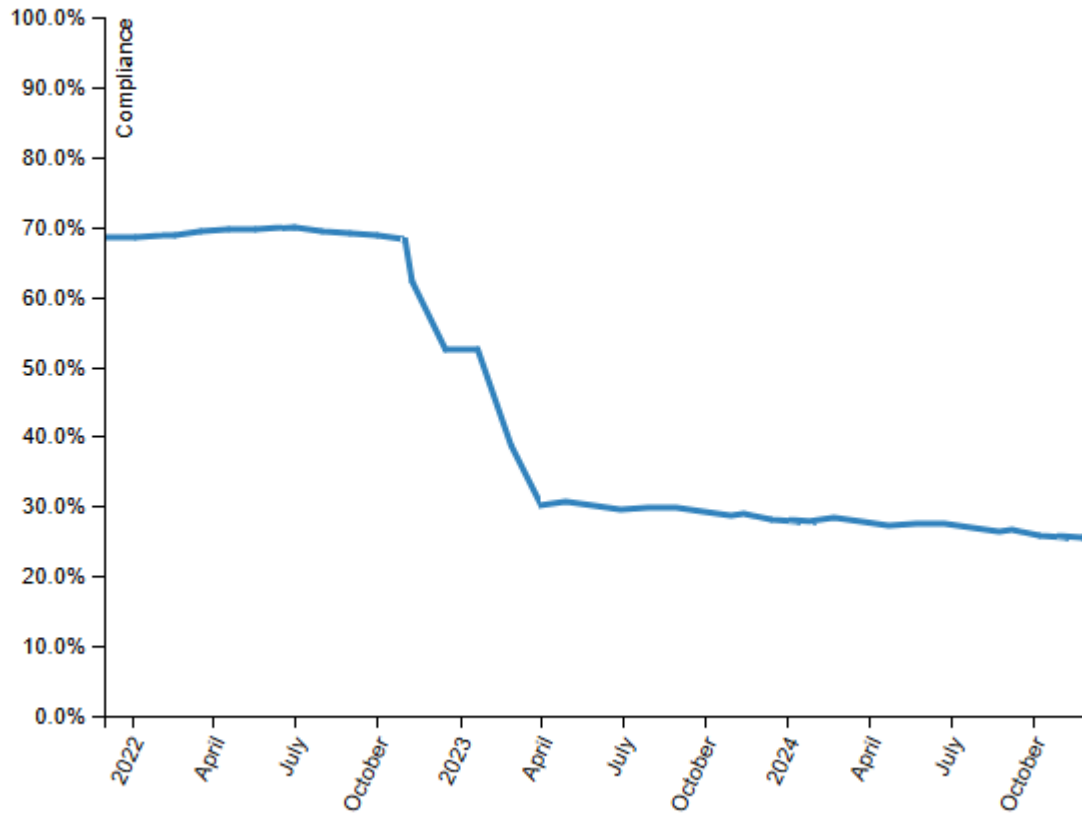
## Example #1 (more obvious)

- Is this a clinical performance issue, a data entry issue, or a Relevant data processing issue?
- One possible explanation: users not entering data into the standard field already coded in the Transformer. Needs training or other reinforcement of correct data entry practice



# Clues For Data Problems Using Run Charts

COMPLIANCE TREND BY PERCENTAGE ▾



Example #2 (more obvious)

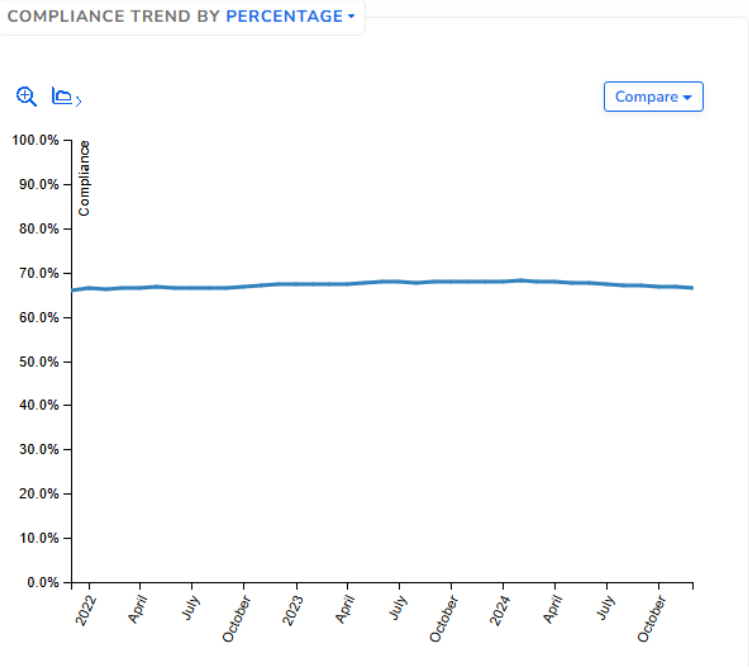
- Is this a clinical performance issue, a data entry issue, or a Relevant data processing issue?
- One possible explanation: switch to Epic
- Another explanation: a completely new field for the data point was added to the template but not changed in Relevant



# Quality Measure Consistency and Predictability

Your Relevant Quality Measure graphs may look stable over the past years and the results may be consistent with previous years

Cervical Cancer Screening (UDS 2024 Table 6B)

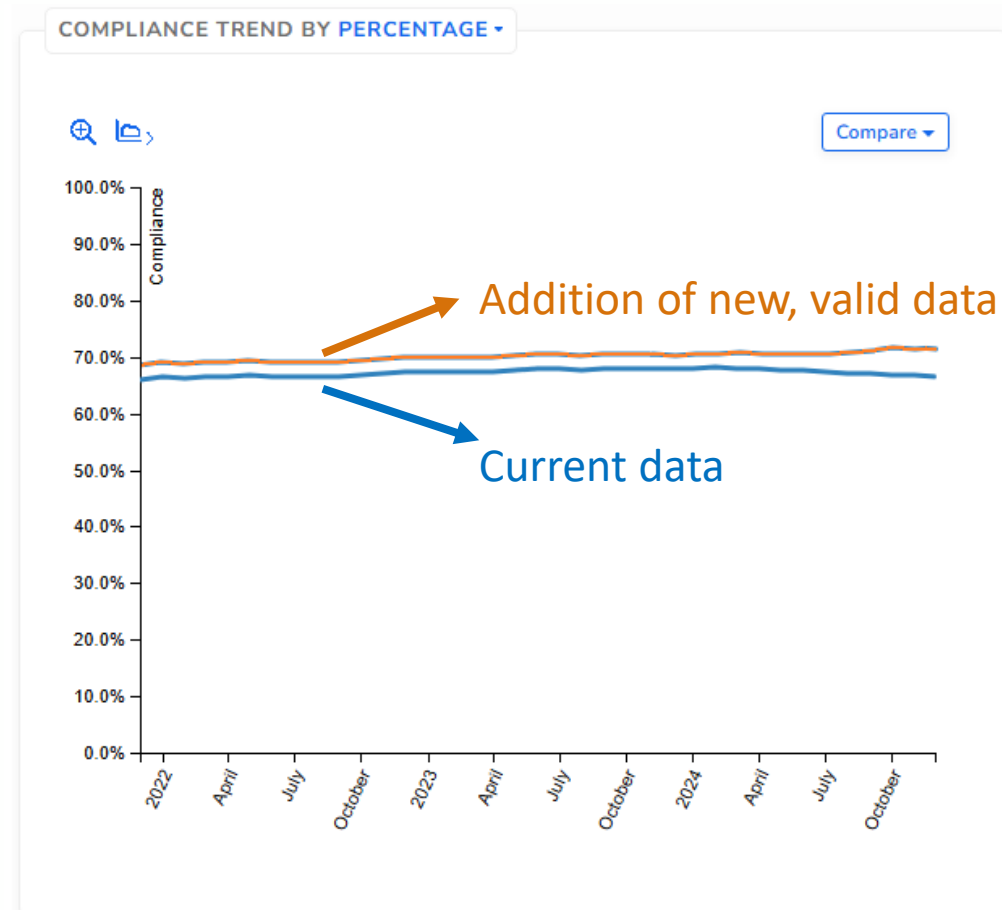


UDS Year	Numerator
2022	66.70%
2023	67.30%
2024	66.40%



# Potential for Finding “Missing” Data

- Graphs look “good enough”
- Consistency and predictability are important, but you could still be missing something
- Look for “missing” data you do not know is missing



# Typical Data Definition Approach

For a particular data concept (say, physical activity counseling), the typical approach could include:

- Ask a clinical lead where the data is being entered into the EHR
- Look over health center guidelines and training materials for how and where data is being entered
- Read the data entry workflows that OCHIN (or your EHR) provides
- Consult Data Standards and Integrity Council (DSIC) meeting notes and documents about agreements on specific data entry agreements





# Typical Data Definition Approach

- Once you feel like you have defined all the EHR data sources, they are programmed into the Relevant Data Elements and validated
- Then monitor the Relevant record discrepancies for users pointing to situations where data is not being recognized by Relevant
- This approach works most of the time but may be hit-or-miss
- How can you find data you are “missing” when you do not even know you are missing it?



# Note on Non-Standard Data

- I am NOT talking about finding data entered into non-standard EHR locations or entered incorrectly
- Generally, it is good to have clear data entry standards defined in clinical workflow guidelines and training materials that are mirrored by the programming in Relevant
- **Do not chase non-standard data.** Generally, chasing is demanding because the number of ways data can be entered in a non-standard manner can be very large and cause the programming to be very complex. It also adds the potential for false-positives and false-negatives, especially if you are text-mining notes or using ambiguous fields meant for other purposes



# Comparison of Quality Measure Results to Other Health Centers



# Compare Results to Other Health Centers

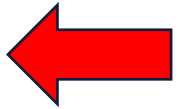
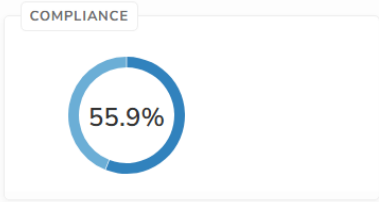
- You can compare your measure results to state-wide or national benchmarks. Both UDS and HEDIS publish these averages
- The best comparison is to other health centers with similar populations. This minimizes possible variation due to patient factors
- Look for health centers of similar size to your own and/or close in distance
- Data source: Relevant Aggregate



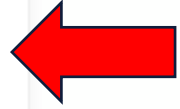
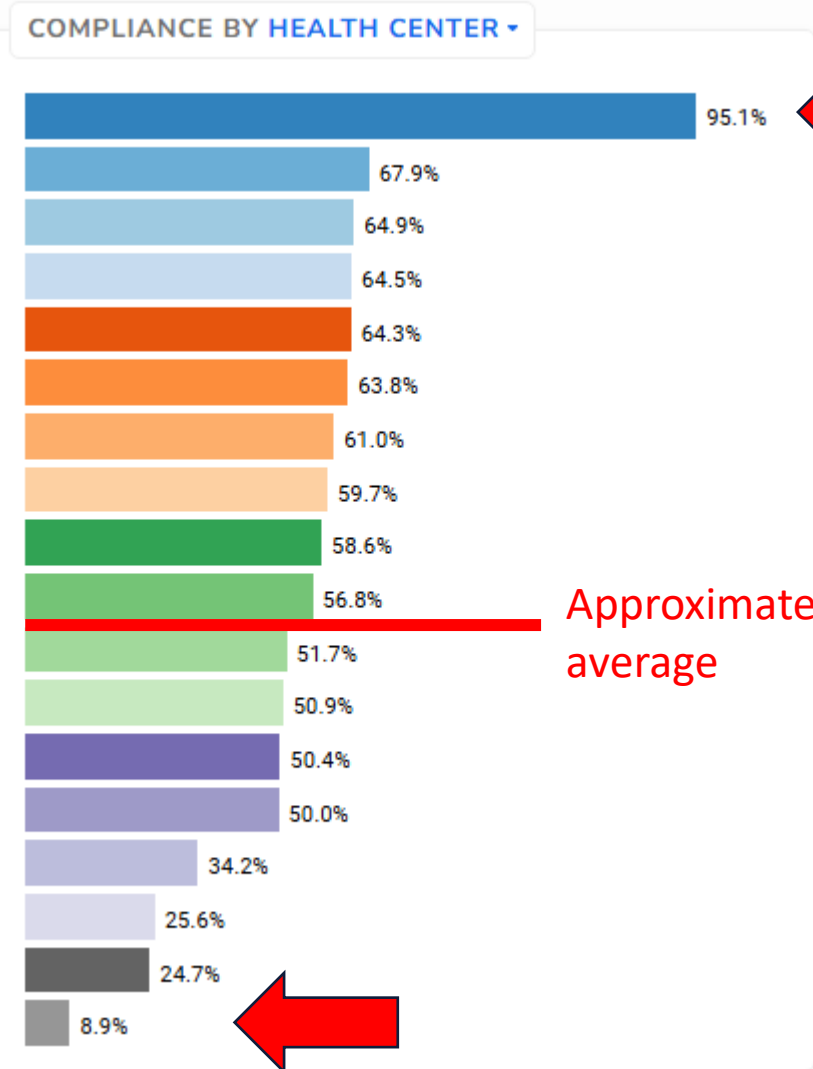
# Compare Results to Other Health Centers

- Remember that we are not looking at a performance comparison, but rather clues that there might be a problem with the data
- There will always be health centers that do better and health centers that do worse on any particular measure.
- However, if your health center is an outlier and there is no obvious explanation for it, that might be a clue that there is something going on with the data

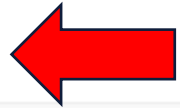




# Aliados Health Aggregate Comparison




- (Screenshot does not have HC names)
- Identify the weighted average
- Your health center should not be exceptionally low or exceptionally high compared to the others
- Look to see if you are an outlier
- Do a reality check. There might be an explanation why your health center compares in a certain way



# Identify and Investigate the Numerator Data Elements

- These are not labeled as such, but since the Data Elements have descriptive names, you should be able to see which are involved with the numerator from the measure description (or by reading the SQL code)
- Example: **HIV Screening (UDS 2024 Table 6B)**

<b>Required data elements</b>	<ul style="list-style-type: none"><li>✓ Visit Billing Codes</li><li>✓ HIV Screening Tests</li><li>✓ Patients</li><li>✓ Billing Codes</li><li>✓ HIV Cases</li><li>✓ Visits</li></ul>
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- Investigate the numerator Data Elements (and associated Transformers)




# Quality Measure Value Set Understanding Reports





# List of Value Sets



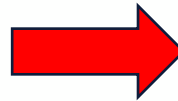
**2024 HEDIS Quality Measure Instructions**

How to Set-up the Data Elements for the HEDIS Quality Measures Associated with the QIP, MCAS and PHMI Measure Sets in Relevant

**Version 1**  
July, 2024

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## Appendix A: Value Set References

The following table shows the Value Set references needed to properly code the Data Elements for the HEDIS, QIP and PHMI Quality Measures.

General Measure Name	Value Set Source	Relevant Data Element	Value Set Name	Value Set OID	Code System Name(s)
Adults' Access to Preventive / Ambulatory Health Services	HEDIS	in SQL	Ambulatory Visits	2.16.840.1.113883.3.464.1004.1022	ICD10CM, CPT
Antidepressant Medication Management	HEDIS	in SQL	Major Depression	2.16.840.1.113883.3.464.1004.1166	ICD9CM
Antidepressant Medication Management	HEDIS	Antidepressant Prescriptions	Antidepressant Medications	2.16.840.1.113883.3.464.1004.1503	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Cases	Asthma	2.16.840.1.113883.3.464.1004.1025	ICD9CM, ICD10CM
Asthma Medication Ratio	HEDIS	in SQL	Respiratory Diseases With Different Treatment Approaches Than Asthma	2.16.840.1.113883.3.464.1004.2467	ICD9CM, ICD10CM
Asthma Medication Ratio	HEDIS	Asthma Medications	Albuterol Medications	2.16.840.1.113883.3.464.1004.1980	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Beclothemethasone Medications	2.16.840.1.113883.3.464.1004.1961	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Benralizumab Medications	2.16.840.1.113883.3.464.1004.1982	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Budesonide Formoterol Medications	2.16.840.1.113883.3.464.1004.1983	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Budesonide Medications	2.16.840.1.113883.3.464.1004.1984	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Ciclesonide Medications	2.16.840.1.113883.3.464.1004.1985	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Dupilumab Medications	2.16.840.1.113883.3.464.1004.2233	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Flunisolide Medications	2.16.840.1.113883.3.464.1004.1987	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Fluticasone Medications	2.16.840.1.113883.3.464.1004.1988	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Fluticasone Salmeterol Medications	2.16.840.1.113883.3.464.1004.1989	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Fluticasone Vilanterol Medications	2.16.840.1.113883.3.464.1004.1990	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Formoterol Mometasone Medications	2.16.840.1.113883.3.464.1004.1991	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Levalbuterol Medications	2.16.840.1.113883.3.464.1004.1992	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Mepolizumab Medications	2.16.840.1.113883.3.464.1004.1993	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Mometasone Medications	2.16.840.1.113883.3.464.1004.1994	NDC, RbNorm
Asthma Medication Ratio	HEDIS	Asthma Medications	Montelukast Medications	2.16.840.1.113883.3.464.1004.1995	NDC, RbNorm

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# QM Value Set Understanding Reports

- Do not use the old reports
- A set of new reports should be released soon
- They will contain the 2024 Quality Measure Value Sets for CQM/UDS and HEDIS/QIP measures



# QM Value Set Understanding Reports

The reports are:

1. List of QM Value Set Codes
2. QM Lab Names and Attributes in EHR
3. QM Medications in EHR
4. QM Vaccines in EHR

*Look for the e-mail announcement from Aliados*



# How to use the reports

- Make sure that your health center is using the correct value sets in each associated Transformer or Data Element (set to current = TRUE)
- Double-check lists of labs, medications and vaccines to make sure the Value Set is picking up what is expected
- In some cases (for example, if a needed lab does not have a LOINC or a vaccine does not have a CVX), you may have to add it to the Transformer outside of the Value Set



# Checking Composite Quality Measures



# Composite Quality Measures

These measures have two components

1. The screening component (i.e., was the patient screened?)
2. The follow-up component (i.e., did patients with a positive screen get follow-up?)



# List of Composite Quality Measures

The “Preventive Care and Screening” measures:

1. Adult Weight Screening and Follow-up
2. Tobacco Use Assessment and Cessation Intervention
3. Screening for Clinical Depression and Follow-Up Plan



# Main Issue

- Since the proportion of patients in the screening part of the measure is much greater than the proportion in the follow-up part, the screening part may mask the follow-up part in the end result.
- In other words, you could have an average or good overall rate because you are doing really well with the larger screening part of the measure (i.e., capturing all the data) while at the same time not doing well with the smaller, follow-up part (i.e., not capturing all the data)





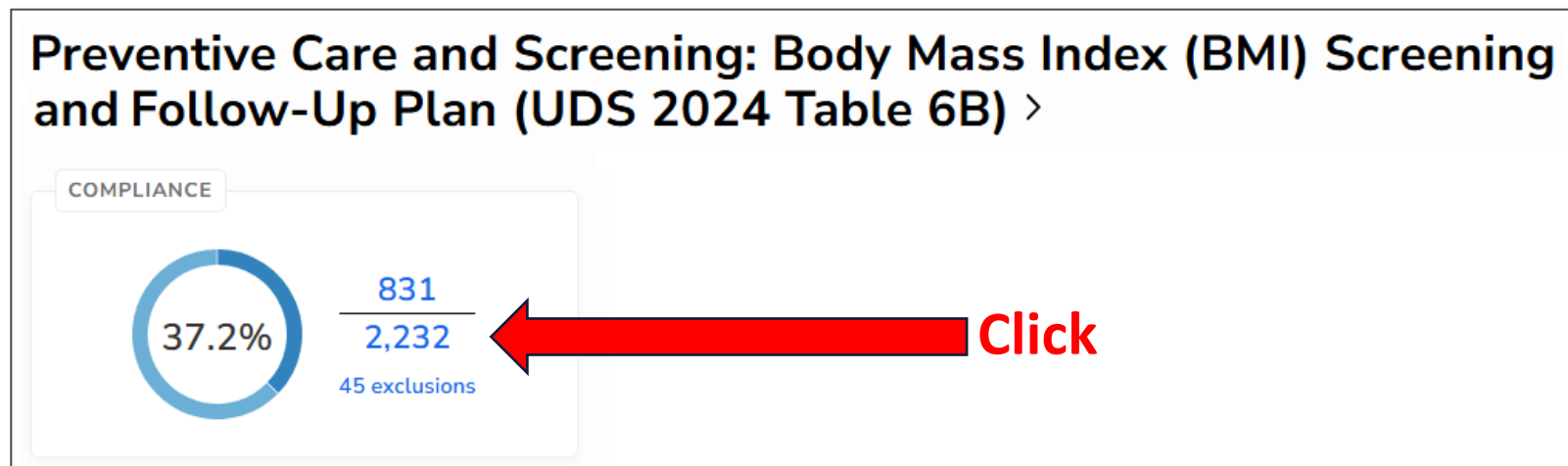
# Investigation

- Can be done with SQL in DataGrip
- Can be done with formulas in the Excel output
- The next few slides will describe how to investigate using Excel

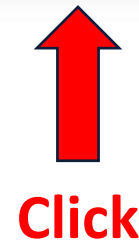


# Procedure to Break Measure Into Components

- Can be done in DataGrip or a report using SQL code
- The method demonstrated here will use Excel formulas
- First, click on the Quality Measure denominator to go to the patient list and then export to Excel



Export to Excel



# Example #1: Body Mass Index (BMI) Screening and Follow-Up Plan

In the measurement\_value column, there are four basic text patterns distinguishing the four result sub-groups

Outcome	measurement_value (examples)
Not screened	No BMI
Screened with normal result	BMI: 22.46, 07/17/2024, (Normal)
Positive screen, had follow-up	BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)
Positive screen, did not have follow-up	BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)



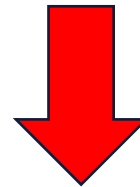
# Set-up the Formulas

- Add formulas to the cells in the first row to distinguish the four result sub-groups
- The formula COUNTIF will display “1” if the condition is met and “0” if the condition is not met. A star (\*) can be used as a wild-card
- Add formulas to the first row and then drag to copy down
- Add a summary row so you can COUNTA the total rows and SUM the subgroups

measurement_value	Screen	Positive	Positive-followup
No BMI <span style="color: red;">Cell A2</span>	=COUNTIF(A2,"BMI*")	=COUNTIF(A2,"*Abnormal*")	=IF(C2=1,1-COUNTIF(A2,"*none*"),0)
BMI: 22.46, 07/17/2024, (Normal)	Copy down	Copy down	Copy down
BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)			
BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)			
=COUNTA(A2:A5)	=SUM(B2:B5)	=SUM(C2:C5)	=SUM(D2:D5)

# Formulas and Data

measurement_value	Screen	Positive	Positive-followup
No BMI	=COUNTIF(A2,"BMI*")	=COUNTIF(A2,"*Abnormal*")	=IF(C2=1,1-COUNTIF(A2,"*none*"),0)
BMI: 22.46, 07/17/2024, (Normal)	Copy down	Copy down	Copy down
BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)			
BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)			
=COUNTA(A2:A5)	=SUM(B2:B5)	=SUM(C2:C5)	=SUM(D2:D5)



measurement_value	Screen	Positive	Positive-followup
No BMI	0	0	0
BMI: 22.46, 07/17/2024, (Normal)	1	0	0
BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)	1	1	1
BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)	1	1	0

4

3

2

1



# Make Calculations

Column A	Column B	Column C	Column D
measurement_value	Screen	Positive	Positive-followup
No BMI	0	0	0
BMI: 22.46, 07/17/2024, (Normal)	1	0	0
BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)	1	1	1
BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)	1	1	0
4	3	2	1



Column	COUNTA or SUM	Percentage	Formula Description
Column A	4	--	Total patients
Column B	3	75%	Screened (out of total patients). Formula B / A
Column C	2	67%	Positive screen (out of those screened). Formula C / B
Column D	1	50%	Positive-followup (out of those with positive screen). Formula D / C



# Example #1: Body Mass Index (BMI) Screening and Follow-Up Plan

Outcome	measurement_value (examples)
Not screened	No BMI
Screened with normal result	BMI: 22.46, 07/17/2024, (Normal)
Positive screen, had follow-up	BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)
Positive screen, did not have follow-up	BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)

measurement_value	Screen	Positive	Positive-followup
No BMI <span style="color: red;">Cell A2</span>	=COUNTIF(A2,"BMI*")	=COUNTIF(A2,"*Abnormal*")	=IF(C2=1,1-COUNTIF(A2,"*none*"),0)
BMI: 22.46, 07/17/2024, (Normal)	Copy down	Copy down	Copy down
BMI: 40.60, 07/25/2024, (Abnormal, Followup: 07/25/2024)	Copy down	Copy down	Copy down
BMI: 25.10, 08/01/2024, (Abnormal, Followup: none)	Copy down	Copy down	Copy down
=COUNTA(A2:A5)	=SUM(B2:B5)	=SUM(C2:C5)	=SUM(D2:D5)

*COPY FORMULAS FROM THIS SLIDE*



# Example #2: Screening for Depression and Follow-Up Plan

Outcome	measurement_value (examples)
Not screened	Patient not screened for depression within 14 days up to and including the qualifying visit on 2024-05-13
Screened with normal result	Negative screen on 12/14/2023
Positive screen, had follow-up	Positive screen on 06/20/2024, Follow-up documented within 2 days of
Positive screen, did not have follow-up	Positive screen on 06/17/2024, Follow-up not documented within 2 days of qualifying visit on 2024-06-25

measurement_value	Screen	Positive	Positive-followup
Patient not screened for depression within 14 days up to and including the qualifying visit on 2024-05-13 <b>Cell A2</b>	=1-COUNTIF(A2,"Patient not*")	=COUNTIF(A2,"*Positive screen*")	=IF(C2=1,COUNTIF(A2,"*Follow-up documented*"),0)
Negative screen on 12/14/2023	Copy down	Copy down	Copy down
Positive screen on 06/20/2024, Follow-up documented within 2 days of qualifying visit on 2024-06-20	Copy down	Copy down	Copy down
Positive screen on 06/17/2024, Follow-up not documented within 2 days of qualifying visit on 2024-06-25	Copy down	Copy down	Copy down
=COUNTA(A2:A5)	=SUM(B2:B5)	=SUM(C2:C5)	=SUM(D2:D5)

**COPY FORMULAS FROM THIS SLIDE**





# Example #3: Tobacco Use: Screening and Cessation Intervention

Outcome	measurement_value (examples)
Not screened	Not screened
Screened with normal result	Screened: 06/13/24, No tobacco use
Positive screen, had follow-up	Screened: 04/02/24, Tobacco user, Counseled for cessation on: 04/02/24
Positive screen, did not have follow-up	Screened: 03/04/24, Tobacco user, No cessation

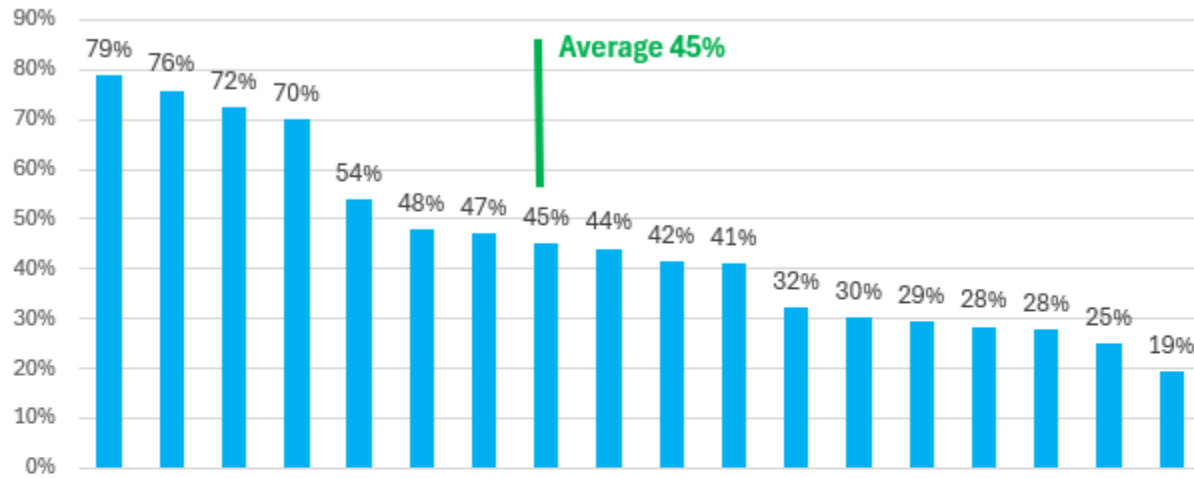
measurement_value	Screen	Positive	Positive-followup
Not screened <span style="color: red;">Cell A2</span>	=COUNTIF(A2,"Screened*")	=COUNTIF(A2,"*Tobacco user*")	=IF(C2=1,COUNTIF(A2,"*Counseled for*"),0)
Screened: 06/13/24, No tobacco use	Copy down	Copy down	Copy down
Screened: 04/02/24, Tobacco user, Counseled for cessation on: 04/02/24	Copy down	Copy down	Copy down
Screened: 03/04/24, Tobacco user, No cessation	Copy down	Copy down	Copy down
=COUNTA(A2:A5)	=SUM(B2:B5)	=SUM(C2:C5)	=SUM(D2:D5)

***COPY FORMULAS FROM THIS SLIDE***

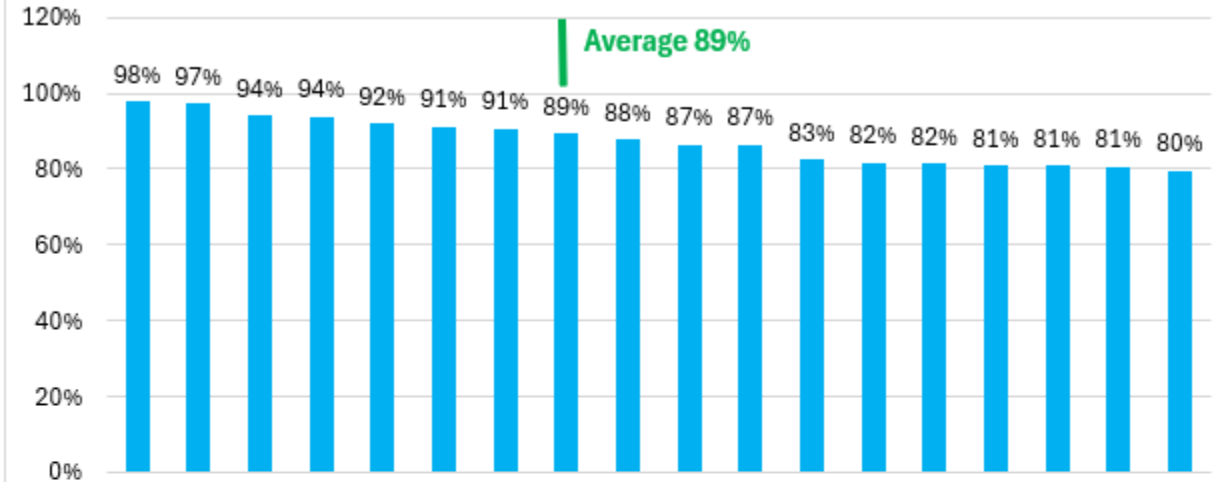


# Body Mass Index (BMI) Screening and Follow-Up Plan

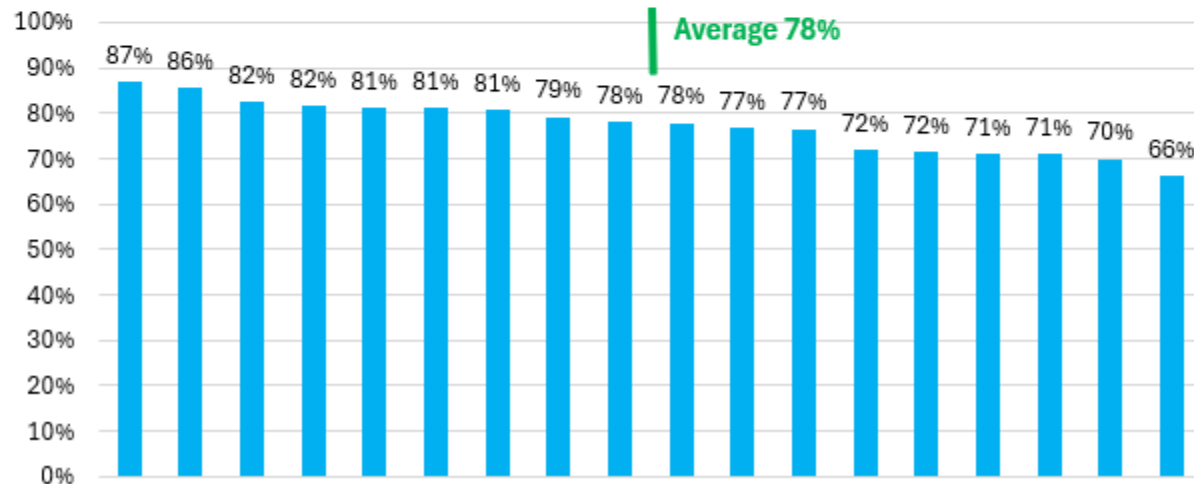
Numerator



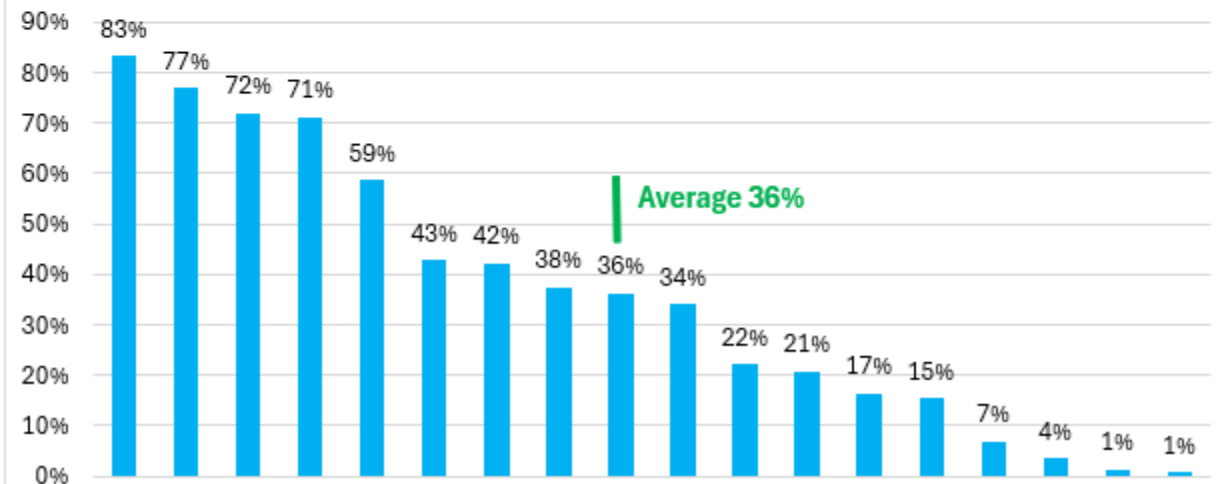
Screened (out of total patients)



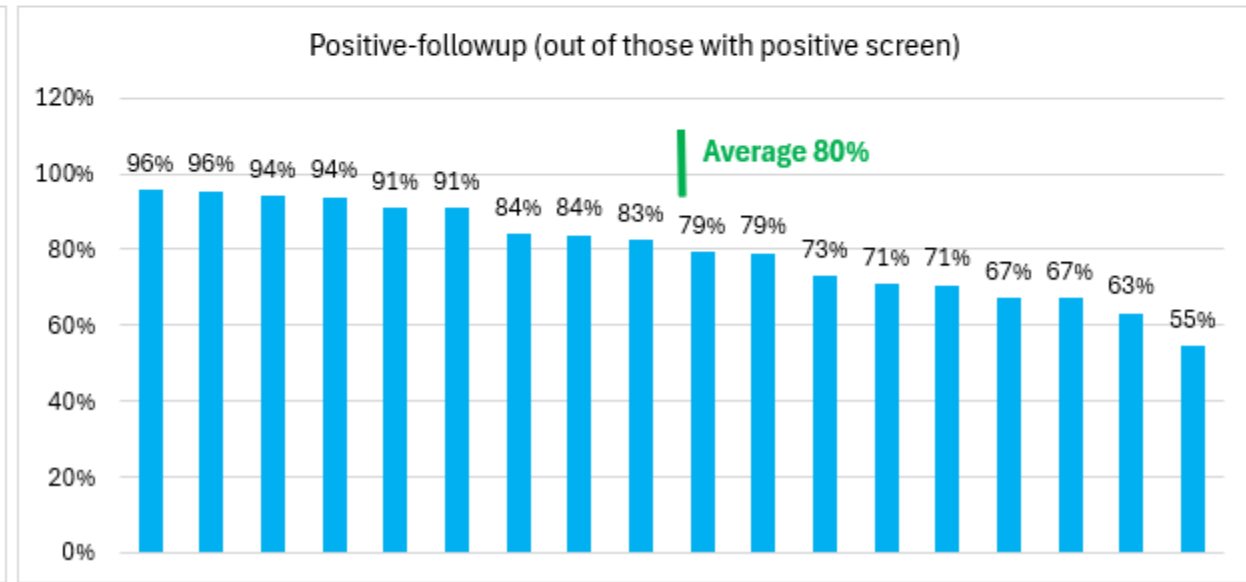
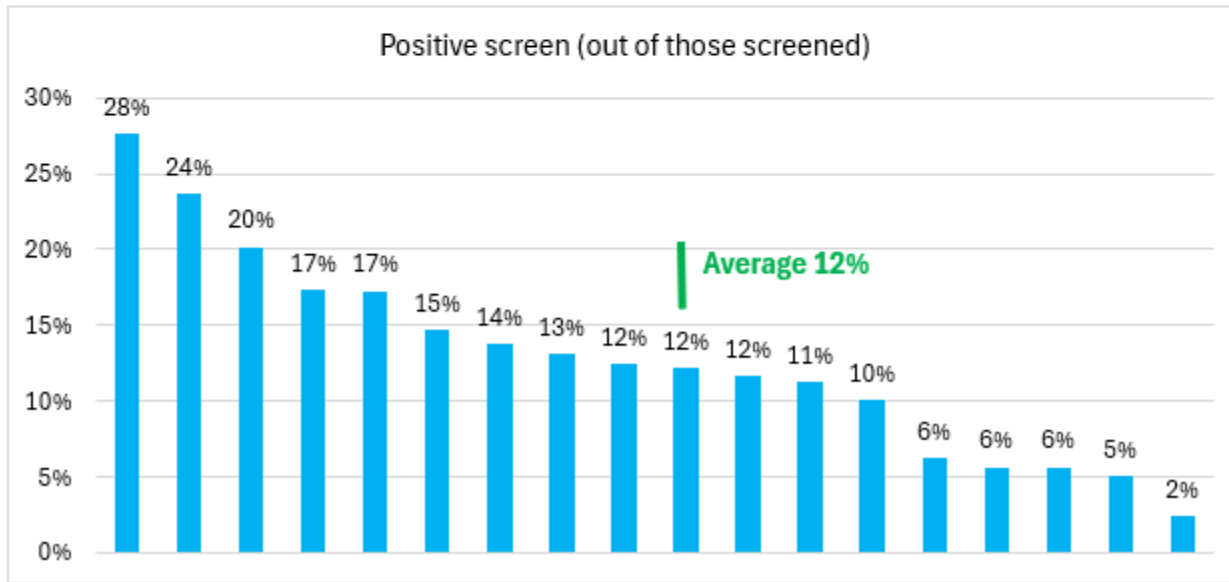
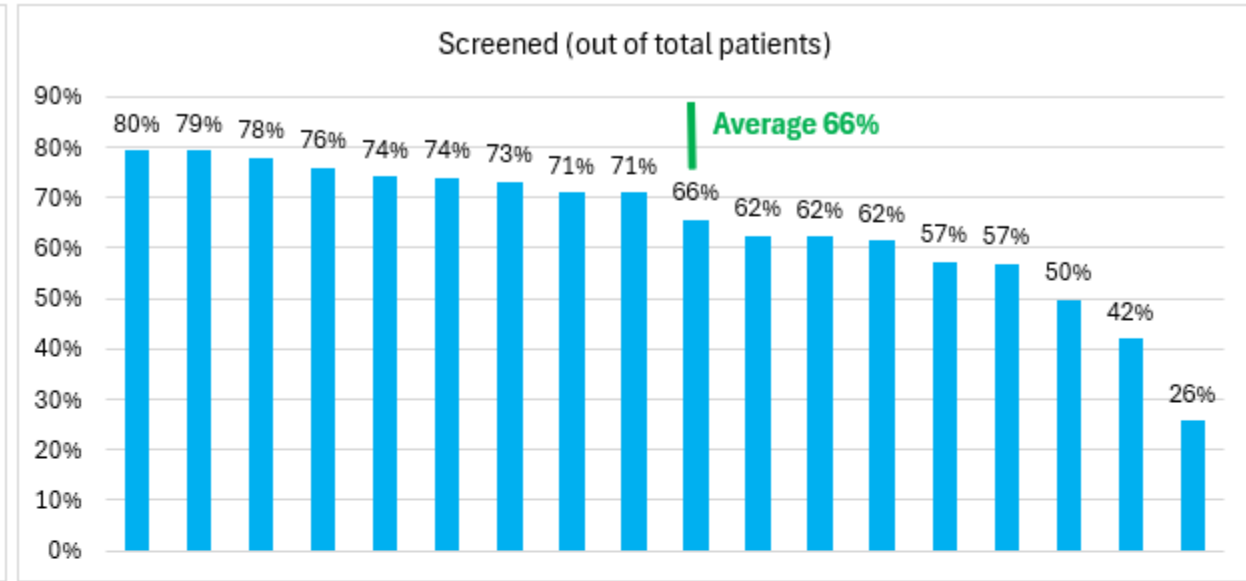
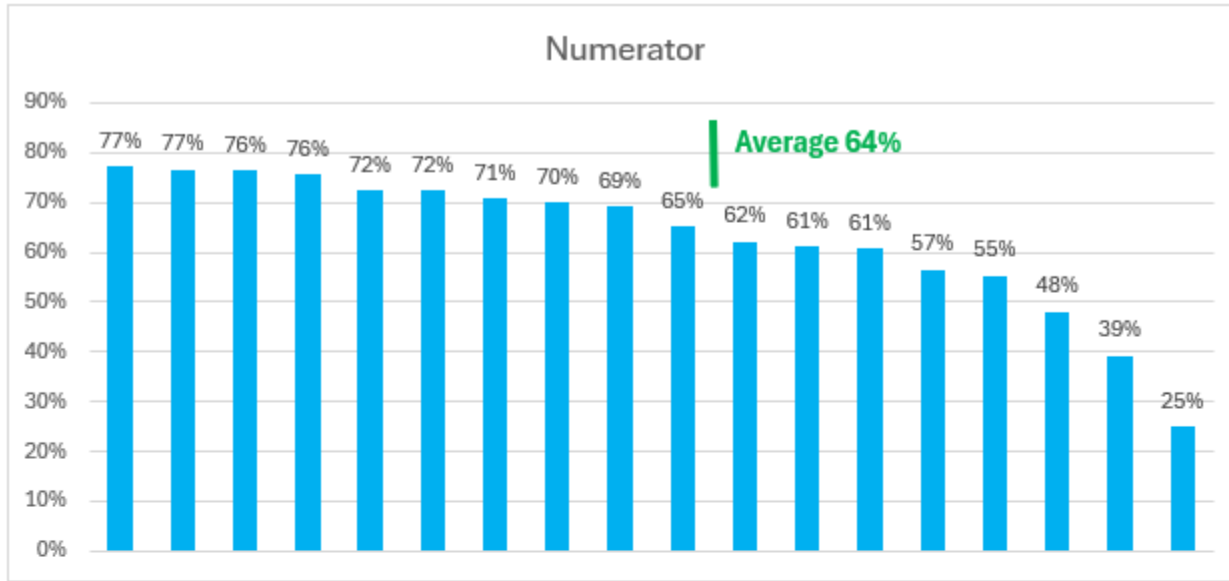
Positive screen (out of those screened)



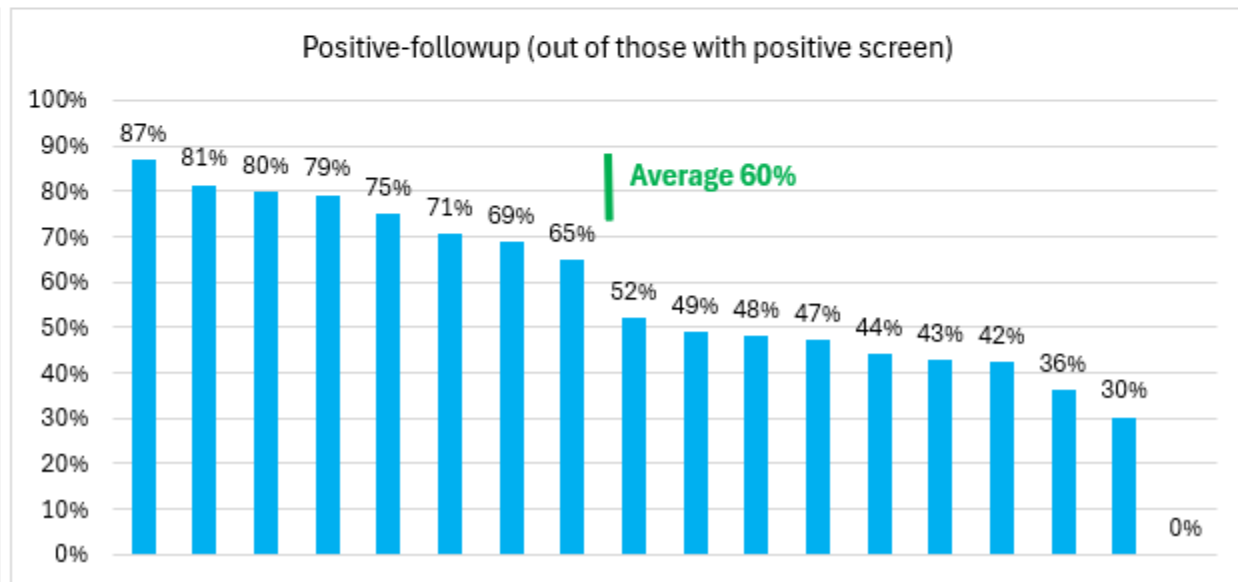
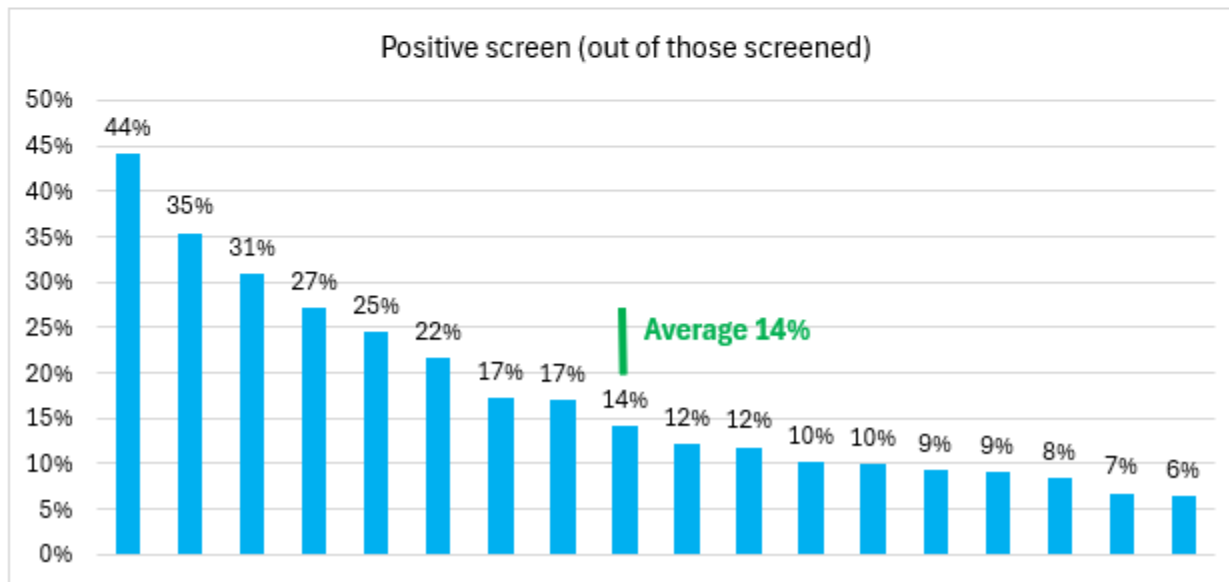
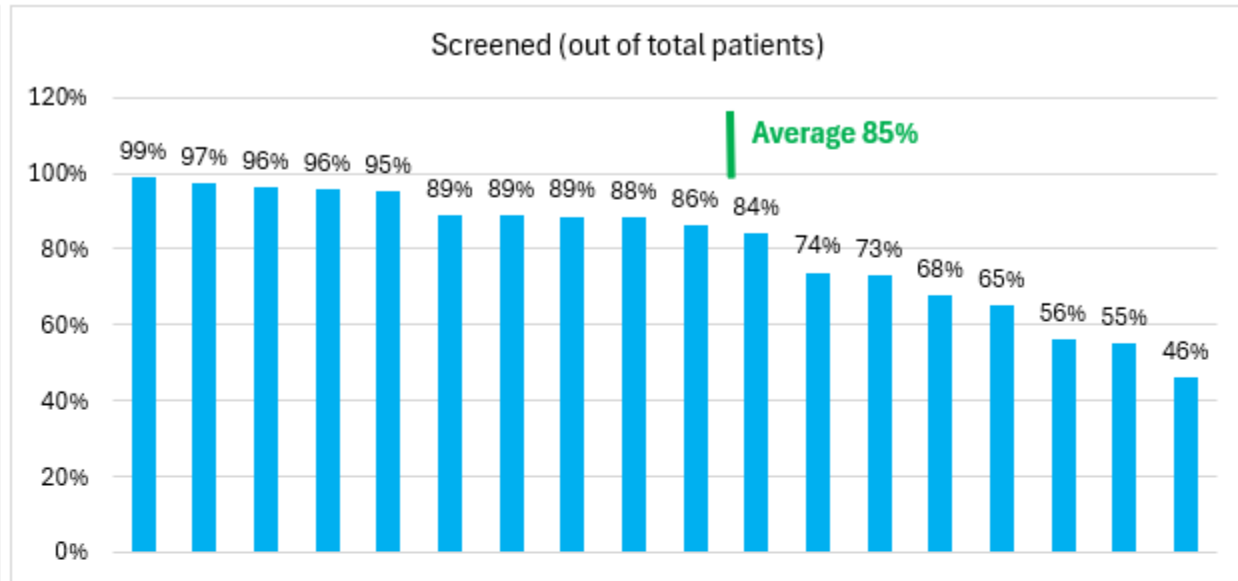
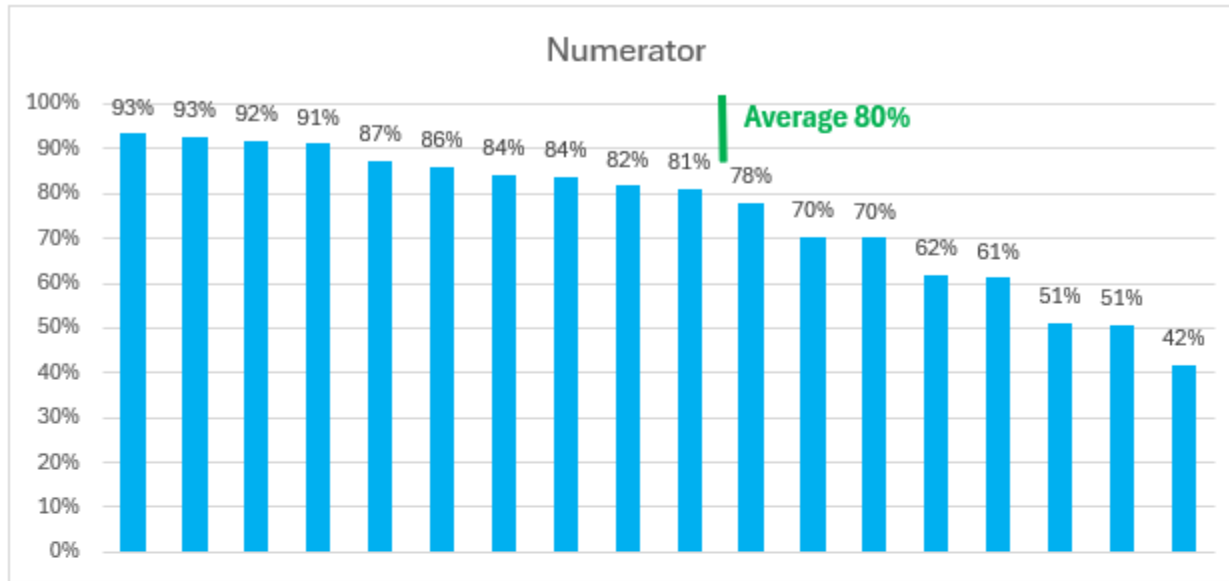
Positive-followup (out of those with positive screen)



# Screening for Depression and Follow-Up Plan



# Tobacco Use: Screening and Cessation Intervention



# Multiple Sources of Numerator Data



# Main Issue

- You could have an average or good overall rate because you are doing really well with one of the numerator sources, but you are still not capturing all the data for all of the numerator sources
- Make sure that data is present for all of your numerator sources and that the number makes sense
- For example, for colorectal screening, you might see that a large portion of patients in the numerator had a FOBT and a small portion had a sigmoidoscopy. This might make sense if you know that your health center screens mostly with FOBT and refers out only a small number of sigmoidoscopies



# Multiple Sources of Numerator Data

- Some Quality Measures use more than one Data Element for the numerator
- These Data Elements can be distinguished in the measurement\_value field
- NOTE: sometimes only one piece of numerator evidence is displayed in the measure-results field, so you might get an under count depending on the measure
- NOTE: sometimes numerator dates outside of the accepted time periods are displayed in the measure\_result column (like with the cancer screening measures)



# Multiple Sources of Numerator Data

Quality Measures the use more than one Data Element for the numerator:

- Colorectal Cancer Screening (UDS and QIP)
- Cervical Cancer Screening (UDS and QIP)
- Weight Assessment And Counseling For Nutrition And Physical Activity For Children And Adolescents (UDS)
- Diabetes: Retinal Eye Exam (QIP)





# Colorectal Cancer Screening

- Field measurement\_value shows last screening date and type
- Some records not in numerator show an “old” date
- Screening type (and Data Element name)
  1. FOBT/FIT (rdm.fecal\_occult\_blood\_tests)
  2. FIT-DNA (rdm.stool\_dna\_tests)
  3. Colonoscopy (rdm.colonoscopies)
  4. Sigmoidoscopy (rdm.sigmoidoscopies)
  5. CT colonography (rdm.ct\_colonographies)



# Colorectal Cancer Screening (Formulas)

## Formulas for the Excel Export

measurement_value	Screen	FOBT/FIT	FIT-DNA	Colonoscopy	Sigmoidoscopy	CT colonography
Screen: None before end of msrmt period	= 1 - COUNTIF(A2,"Screen: None*")	= COUNTIF(A2,"*FOBT*")	= COUNTIF(A2,"*FIT-DNA*")	= COUNTIF(A2,"*Colonosc*")	= COUNTIF(A2,"*Sigmoid*")	= COUNTIF(A2,"*colonogr*")
Screen: FOBT/FIT on 11/04/23	Copy down	Copy down	Copy down	Copy down	Copy down	Copy down
Screen: colonoscopy on 01/31/20	Copy down	Copy down	Copy down	Copy down	Copy down	Copy down
Screen: sigmoidoscopy on 02/20/24	Copy down	Copy down	Copy down	Copy down	Copy down	Copy down
Screen: FIT-DNA on 04/23/24	Copy down	Copy down	Copy down	Copy down	Copy down	Copy down
Screen: CT colonography on 11/15/23	Copy down	Copy down	Copy down	Copy down	Copy down	Copy down
=COUNTA(A2:A7)	=SUM(B2:B7)	=SUM(C2:C7)	=SUM(D2:D7)	=SUM(E2:E7)	=SUM(F2:F7)	=SUM(G2:G7)

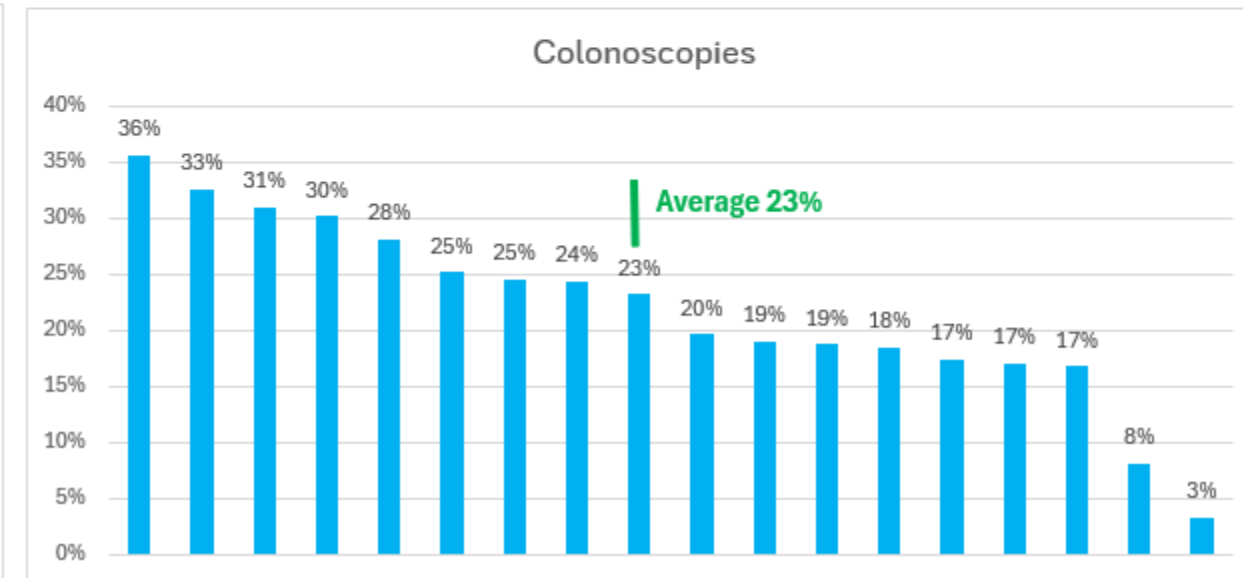
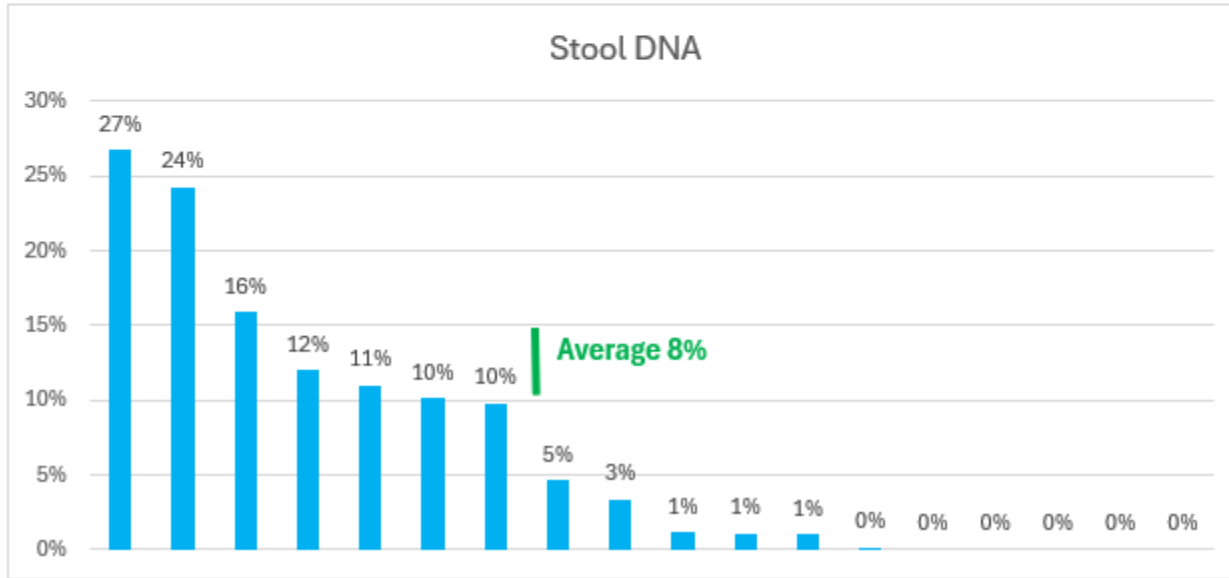
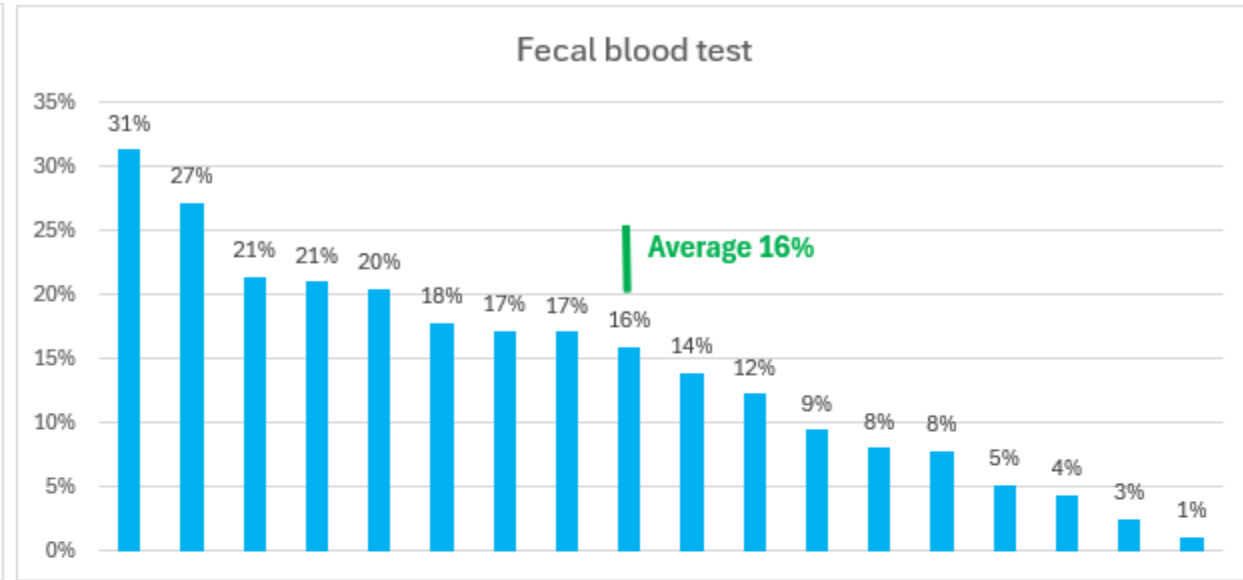
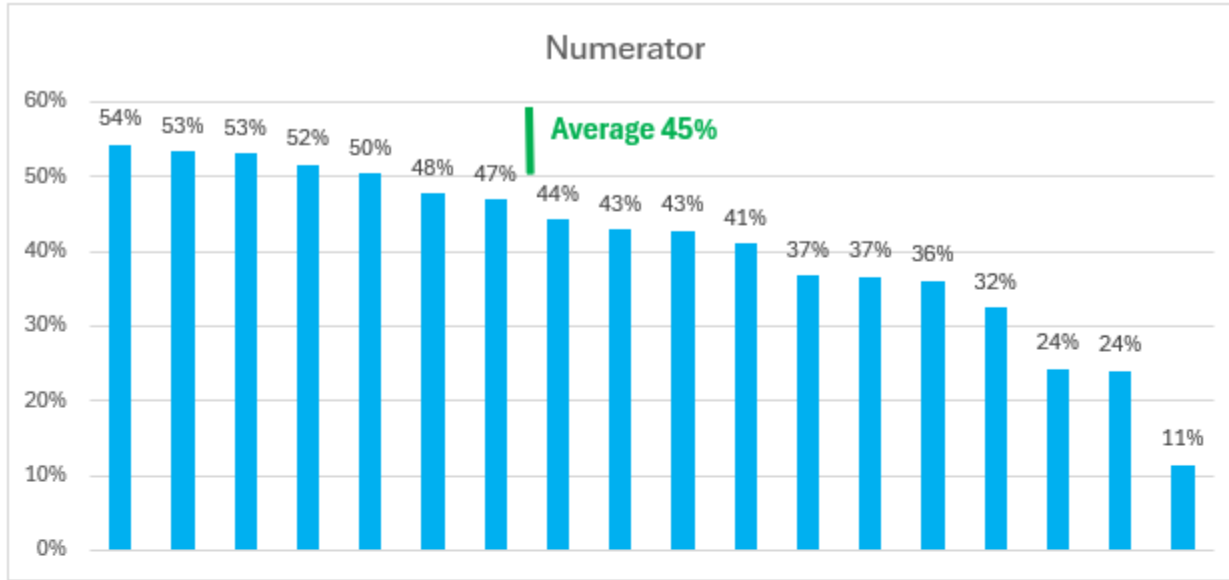
### *COPY FORMULAS FROM THIS SLIDE*

Use formulas only for patients in the numerator (non-numerator records may display an old date and the text “not recent enough” which trick the formulas). So, sort your data by the numerator column and delete cells in the measurement\_value column that have the “not recent enough” text)



# Colorectal Cancer Screening (Data)

Nearly zero for sigmoidoscopies and CT Colonographies (not shown)



# Cervical Cancer Screening (Formulas)

measurement_value	Screen	Cervical cytology	HPV
Screen: none	= 1 - COUNTIF(A2,"Screen: none")	= COUNTIF(A2,"*Cervical cytology*")	= COUNTIF(A2,"*HPV*")
Screen: Cervical cytology performed on 06/19/2024	Copy down	Copy down	Copy down
Screen: HPV test performed on 10/13/20	Copy down	Copy down	Copy down
=COUNTA(A2:A4)	=SUM(B2:B4)	=SUM(C2:C4)	=SUM(D2:D4)

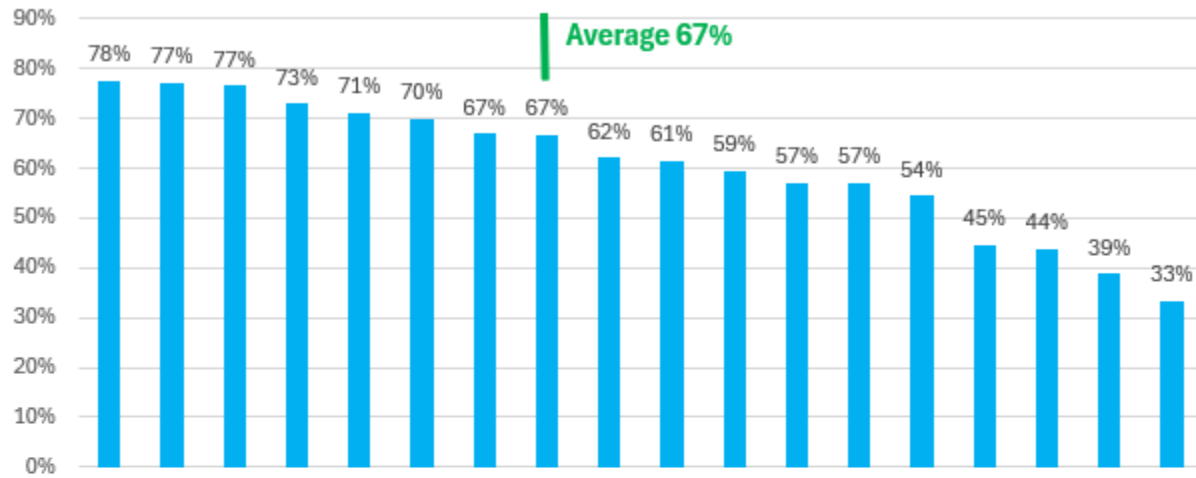
## *COPY FORMULAS FROM THIS SLIDE*

Use formulas only for patients in the numerator (non-numerator records may display an old date and the text “outside of numerator qualification date range” which trick the formulas). So, sort your data by the numerator column and delete cells in the measurement\_value column that have the “outside of numerator qualification date range” text)

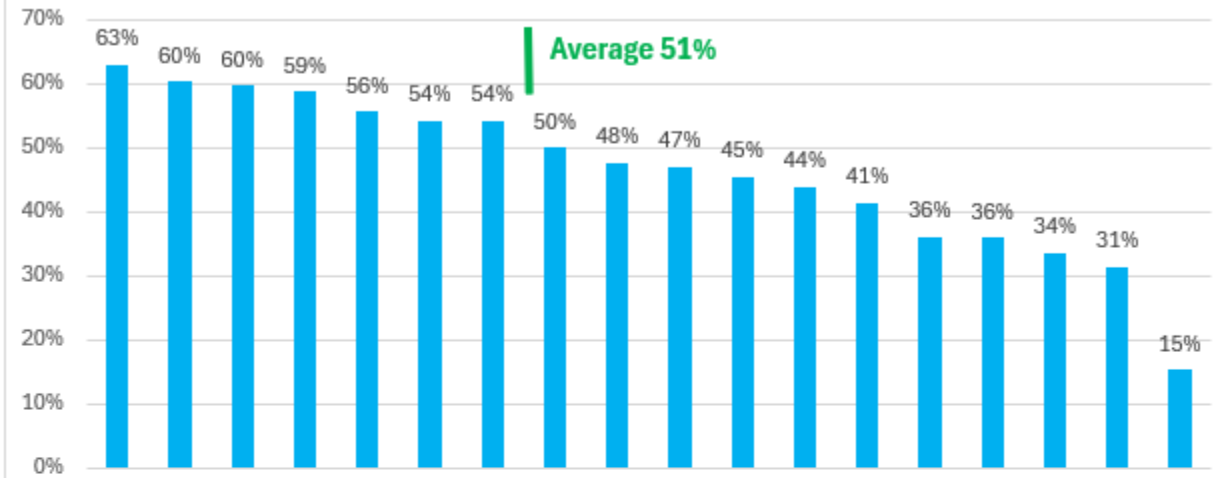


# Cervical Cancer Screening (Data)

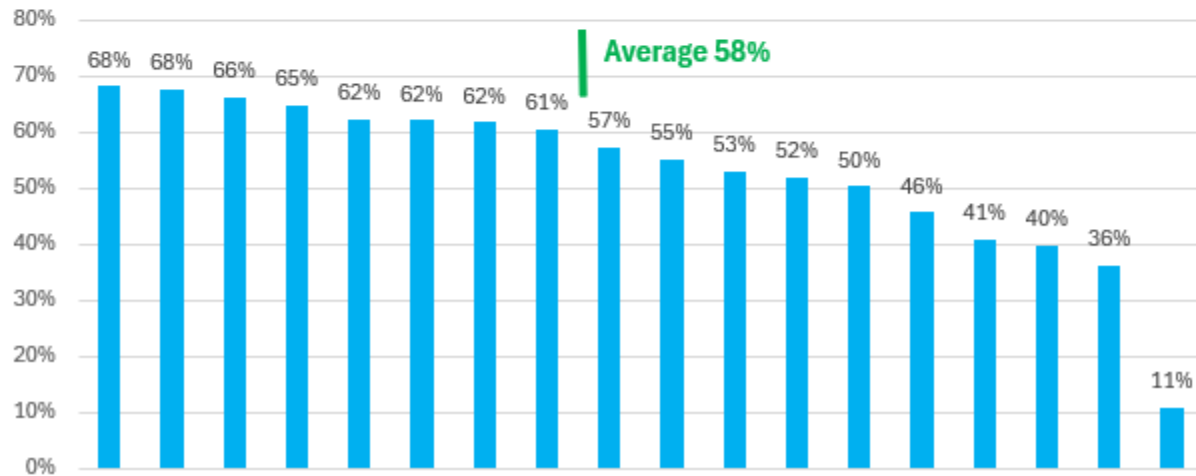
### Numerator



### Pap tests



### HPV tests



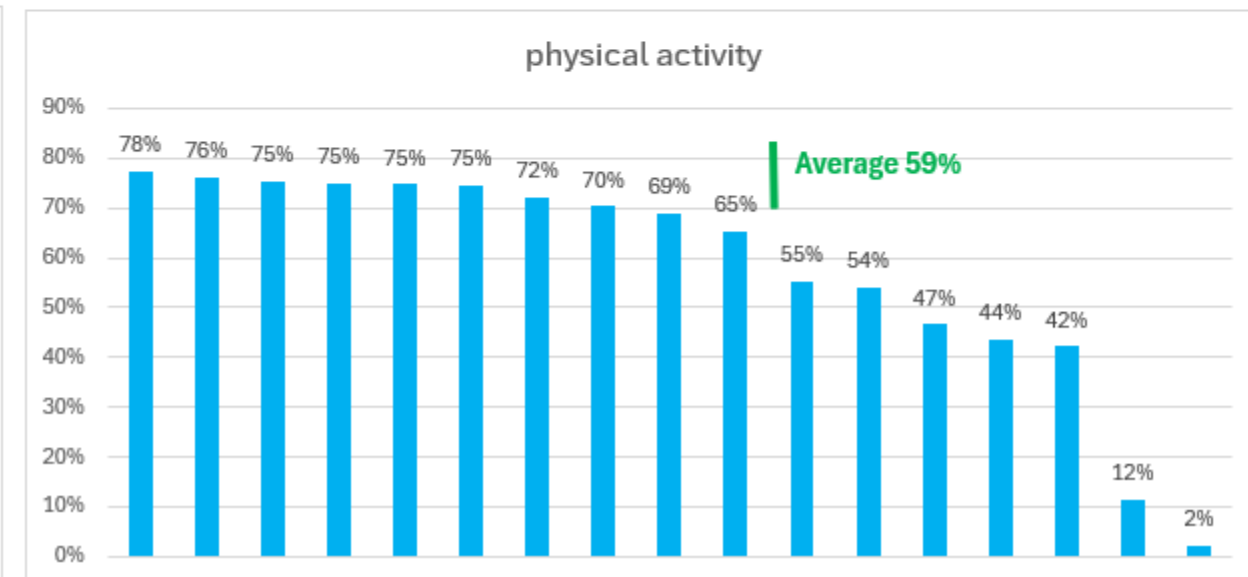
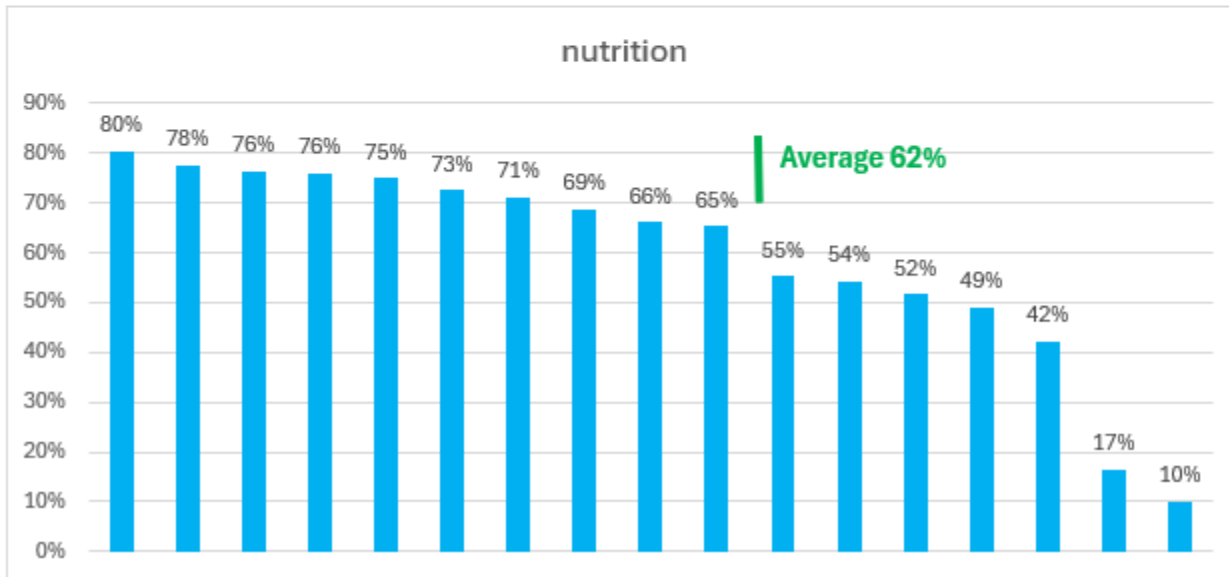
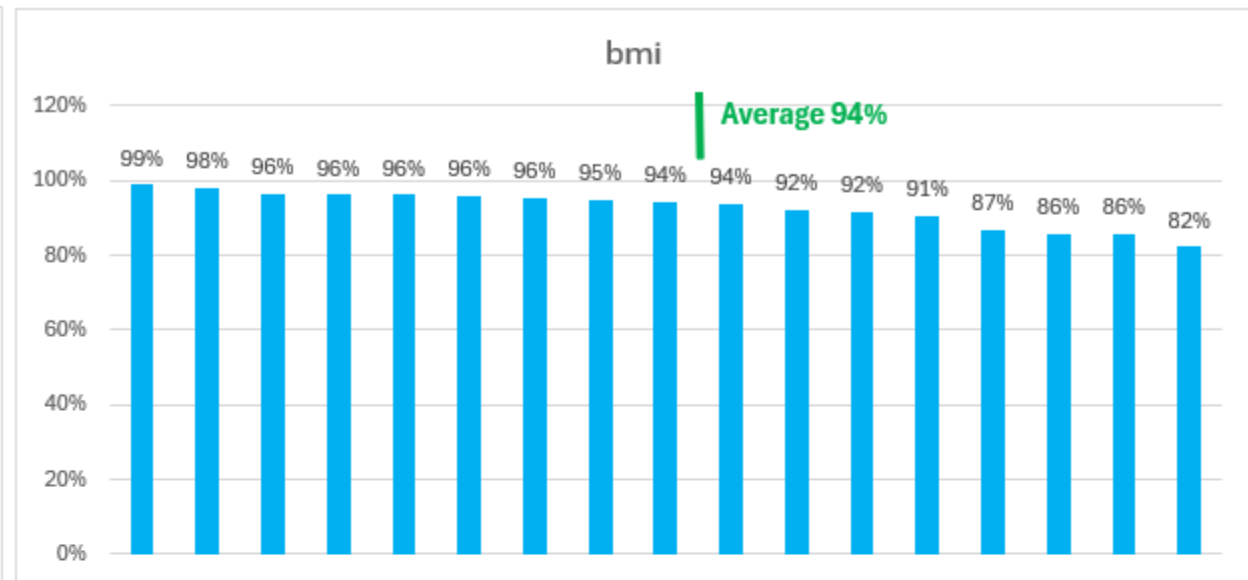
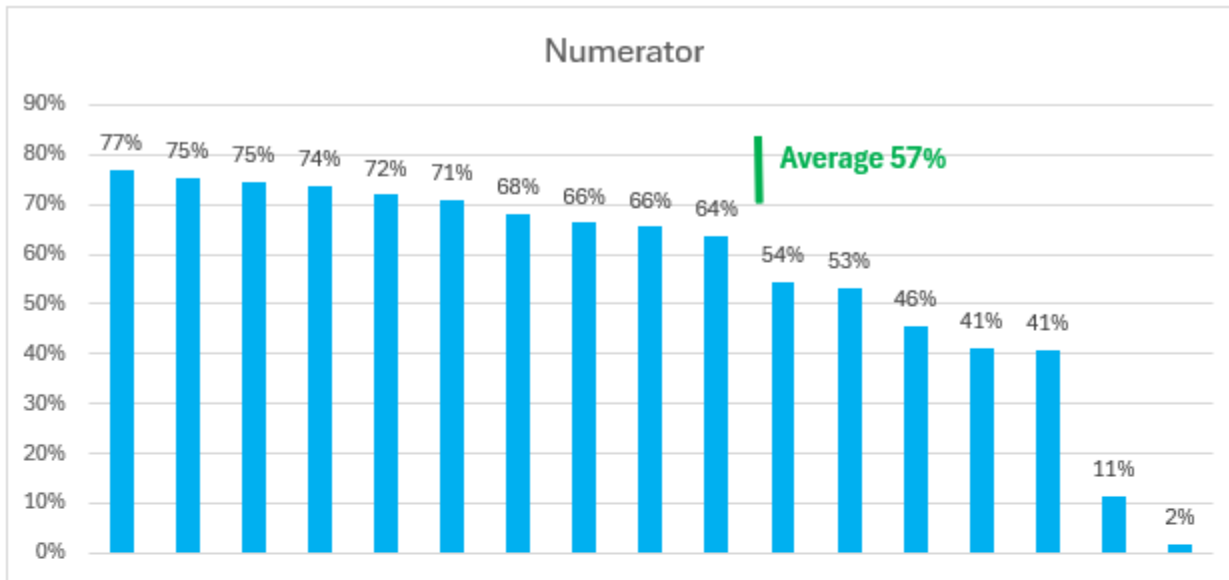
# Child Weight Assessment And Counseling (Formulas)

measurement_value	BMI Percentile	Height Measurement	Weight Measurement	Phys Act Counseling	Nutrition Counseling
BMI Percentile Measurement Date: 01/02/2024, Height Measurement Date: 01/02/2024, Weight Measurement Date: 01/02/2024, Phys Act Counseling Date: 12/26/2023, Nutrition Counseling Date: 09/26/2024	= 1 - COUNTIF(A2,"BMI Percentile Measurement Date: None*")	= 1 - COUNTIF(A2,"*Height Measurement Date: None*")	= 1 - COUNTIF(A2,"*Weight Measurement Date: None*")	= 1 - COUNTIF(A2,"*Phys Act Counseling Date: None*")	= 1 - COUNTIF(A2,"*Nutrition Counseling Date: None*")
BMI Percentile Measurement Date: None during msrmt period, Height Measurement Date: None during msrmt period, Weight Measurement Date: None during msrmt period, Phys Act Counseling Date: None during msrmt period, Nutrition Counseling Date: None during msrmt period	Copy down	Copy down	Copy down	Copy down	Copy down
=COUNTA(A2:A3)	=SUM(B2:B3)	=SUM(C2:C3)	=SUM(D2:D3)	=SUM(E2:E3)	=SUM(F2:F3)

***COPY FORMULAS FROM THIS SLIDE***



# Child Weight Assessment And Counseling (Data)



# Diabetes: Retinal Eye Exam (Formulas)

Data Elements are “Retinal Eye Exams” and “Eye Enucleations” (negative eye exams are counted in their own column but are on the same Data Element)

measurement_value	Screen	Eye exam	Negative eye exam	Eye enucleation
No eye exam	= 1 - COUNTIF(A2,"No eye exam")	= COUNTIF(A2,"Eye exam*")	= COUNTIF(A2,"Negative eye exam*")	= COUNTIF(A2,"Eye enucleation*")
Eye exam: 01/02/24	Copy down	Copy down	Copy down	Copy down
Negative eye exam: 10/03/23	Copy down	Copy down	Copy down	Copy down
Eye enucleation: 11/08/19	Copy down	Copy down	Copy down	Copy down
=COUNTA(A2:A4)	=SUM(B2:B4)	=SUM(C2:C4)	=SUM(D2:D4)	=SUM(E2:E4)

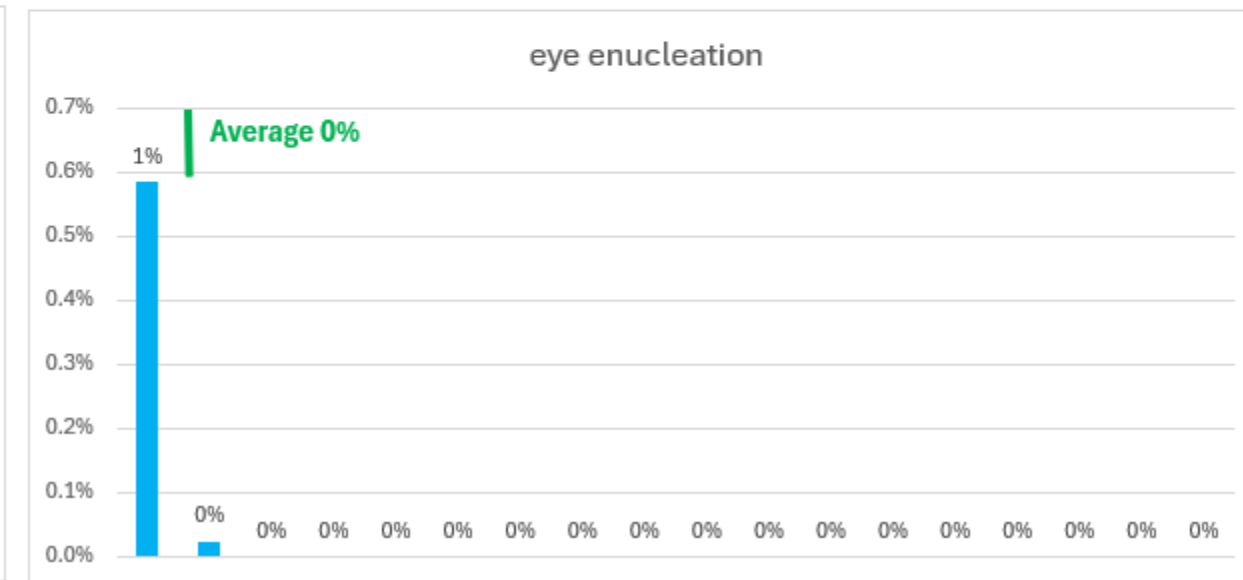
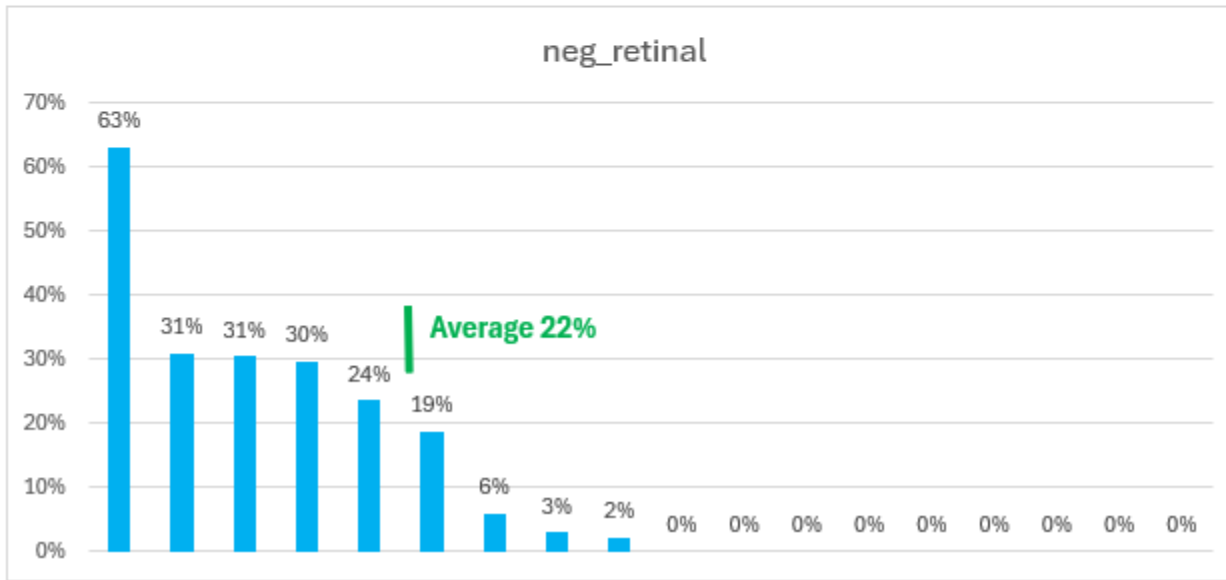
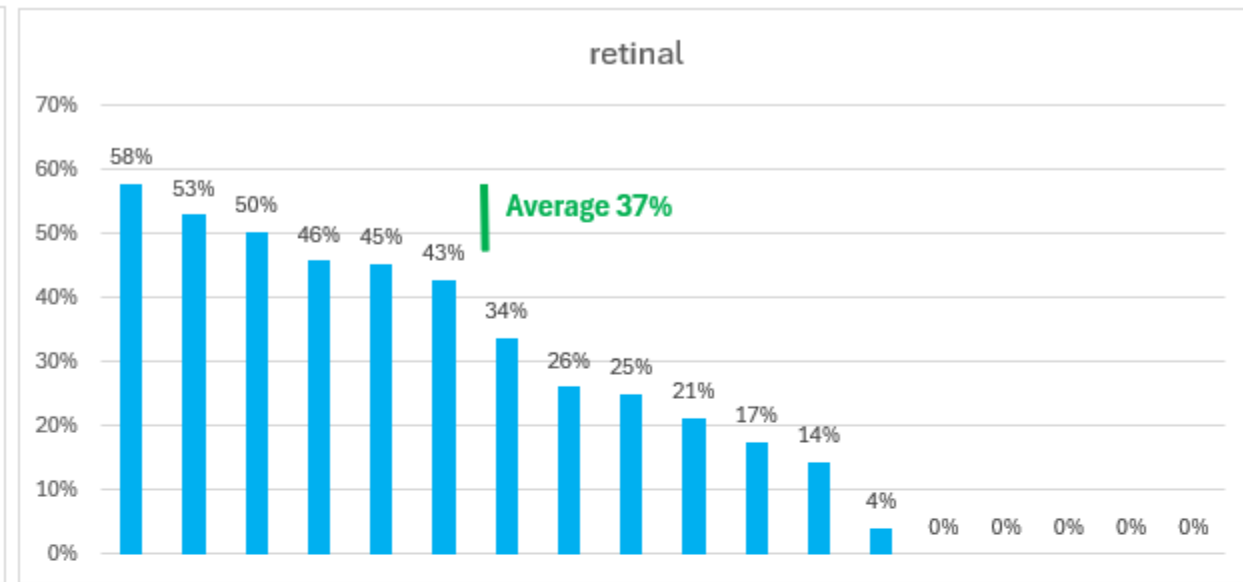
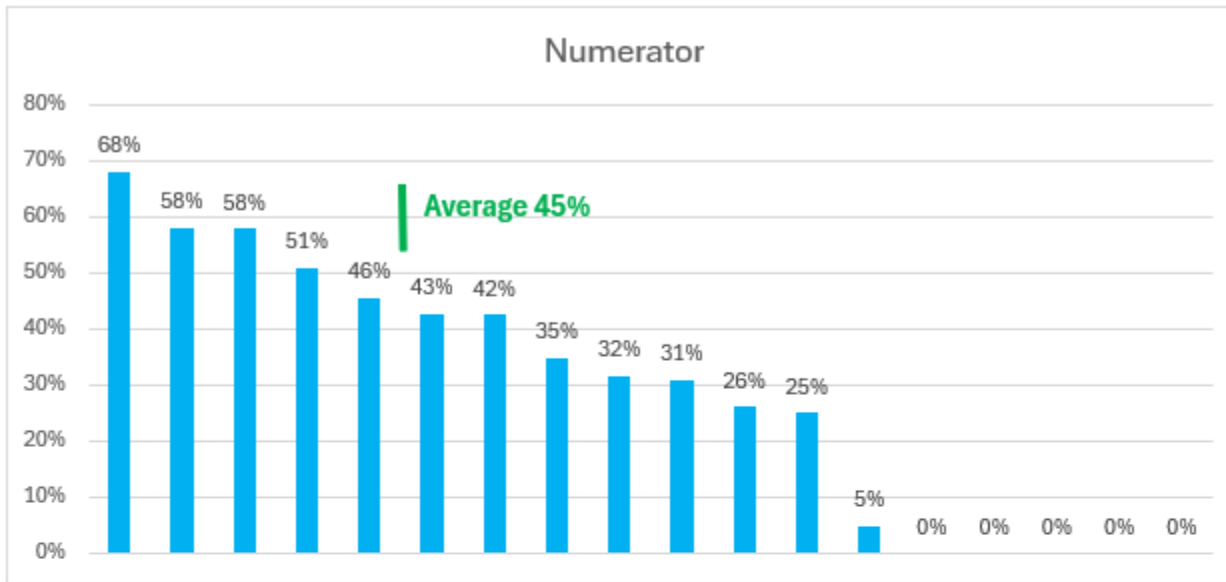
***COPY FORMULAS FROM THIS SLIDE***





# Diabetes: Retinal Eye Exam (Data)

*Average for health centers with any numerator value*



# Immunization Measures

- Childhood Immunizations and Immunizations for Adolescents
- More complicated because the measurement\_value column shows only those that are missing
- However, the approach is the same if you want to experiment



# Questions?

