

Nursing Home Value-Based Purchasing Demonstration

Informational Conference Call

April 26, 2011

Solving problems, guiding decisions – worldwide



General Issues

- Baseline scores for Hospitalization domain were emailed to all participants in early April.
 - Maximum points were allocated between the short and long stay measures using an algorithm.
- Two papers on measure risk adjustment have recently been posted at www.nhvbp.com
 - Nurse staffing levels
 - Hospitalization rates
- Other:
 - Revised baseline survey scores
 - Year 1 reconciliation

Year 1 Rules for State Surveys

- Surveys may be conducted more or less frequently than every 12 months.
- Number of participants that had no or two surveys during year 1 (7/1/09 – 6/30/10):
 - Arizona: None - 8 Two - 1
 - New York: None - 1 Two - 4
 - Wisconsin: None - 12 Two - 0
- Rules:
 - If no survey during year 1, we use the first survey conducted after 7/1/09.
 - If two surveys, we use the earliest survey conducted during year 1.

Theme: Year 1 Performance on State Surveys and MDS Outcome Measures

- Today we will present year 1 performance of demonstration participants on two domains:
 - MDS Outcome Measures
 - State Health Inspection Surveys
- Information will be presented in aggregate by State
- Facility-specific information will be emailed to participants in May

MDS-Based Quality Measures

- NHVBP uses a subset of already-developed and validated MDS-based quality measures (QMs).
 - Measures cover a broad range of functioning and health status in multiple care areas.
 - Measures selected based on reliability, extent to which measure is under the facility's control, statistical performance, and policy considerations.
- For long-stay measures, we use the same specifications as for the measures on the CMS Nursing Home Compare web site and the 5-star rating system.
 - Only difference is that Nursing Home Compare and the 5-Star rating system use data for three quarters, while NHVBP uses a full year.
- Short-stay measures are not posted on Nursing Home Compare; Abt calculates performance using MDS assessments.
- MDS performance measures count for 20 points (20% of overall performance score).

Measures

- Chronic care (long-stay) residents: Use four of the QMs posted on Nursing Home Compare:
 - % of residents with ADL decline;
 - % of high-risk residents who have pressure ulcers;
 - % of residents who have had a catheter left in their bladder; and
 - % of residents who were physically restrained.
- Post-acute care (short-stay) Residents:
 - % of residents with improving level of Activities of Daily Living (ADL) functioning;
 - % of residents who improve status on mid-loss ADL functioning; and
 - % of residents experiencing failure to improve bladder incontinence.

Determining Points for Each Measure

- Points for long and short-stay measures
 - Long-stay measures count 3 points each (12 points total)
 - Short-stay measures count 2.67 points each (8 points total)
- For each measure, points awarded based on nursing home's rank on the measure in their State. For each measure:
 - The lowest ranked (worst) nursing home receives zero points
 - The highest ranked (best) nursing home receives the maximum number points
 - Between the minimum and the maximum, points are awarded proportionately based on the nursing home's ranking within the state.
 - Points are adjusted for facilities with missing data on either the short- or long-stay measures
- In the case of ties, rank is based on the mean of the tied facilities.

Year 1 Performance on MDS Measures: Arizona

	N	Mean	Std Dev	Min	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	Max
ADL Decline	37	14.3%	4.6%	5.2%	8.2%	11.2%	14.3%	17.0%	20.7%	25.8%
High risk pressure ulcer	37	9.3%	5.3%	0.0%	2.9%	5.3%	9.0%	13.1%	17.3%	21.8%
Catheter	37	6.1%	4.0%	1.0%	2.1%	3.1%	5.5%	8.4%	10.3%	20.6%
Restraints	37	2.4%	3.6%	0.0%	0.0%	0.0%	1.2%	3.2%	6.0%	17.9%
ADL improvement	23	13.1%	8.0%	0.0%	3.7%	7.4%	12.0%	19.4%	23.8%	32.1%
Mid-Loss ADL improvement	24	11.5%	9.2%	0.0%	3.7%	4.2%	8.5%	17.6%	25.9%	32.0%
Failure to improve incontinence	23	57.7%	16.6%	14.8%	37.8%	47.6%	58.1%	69.0%	80.0%	88.0%

Note that, for all of the performance measures except ADL improvement and Mid-Loss ADL improvement, a higher percentage is associated with worse performance.

Year 1 Performance on MDS Measures: New York

	N	Mean	Std Dev	Min	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	Max
ADL Decline	73	14.3%	5.2%	4.5%	8.5%	10.0%	13.5%	18.2%	21.3%	28.4%
High risk pressure ulcer	73	12.3%	6.2%	2.2%	5.5%	7.8%	11.3%	14.9%	21.9%	28.1%
Catheter	73	3.7%	2.3%	0.0%	1.2%	2.0%	3.4%	5.0%	7.2%	11.1%
Restraints	73	2.0%	2.2%	0.0%	0.0%	0.1%	1.2%	3.5%	5.4%	8.9%
ADL improvement	53	9.8%	7.0%	0.0%	0.5%	4.7%	9.6%	13.6%	17.3%	31.6%
Mid-Loss ADL improvement	54	6.7%	6.6%	0.0%	0.0%	2.8%	4.9%	7.3%	18.6%	26.6%
Failure to improve incontinence	54	66.7%	13.5%	14.8%	50.0%	60.6%	67.7%	76.2%	80.2%	95.2%

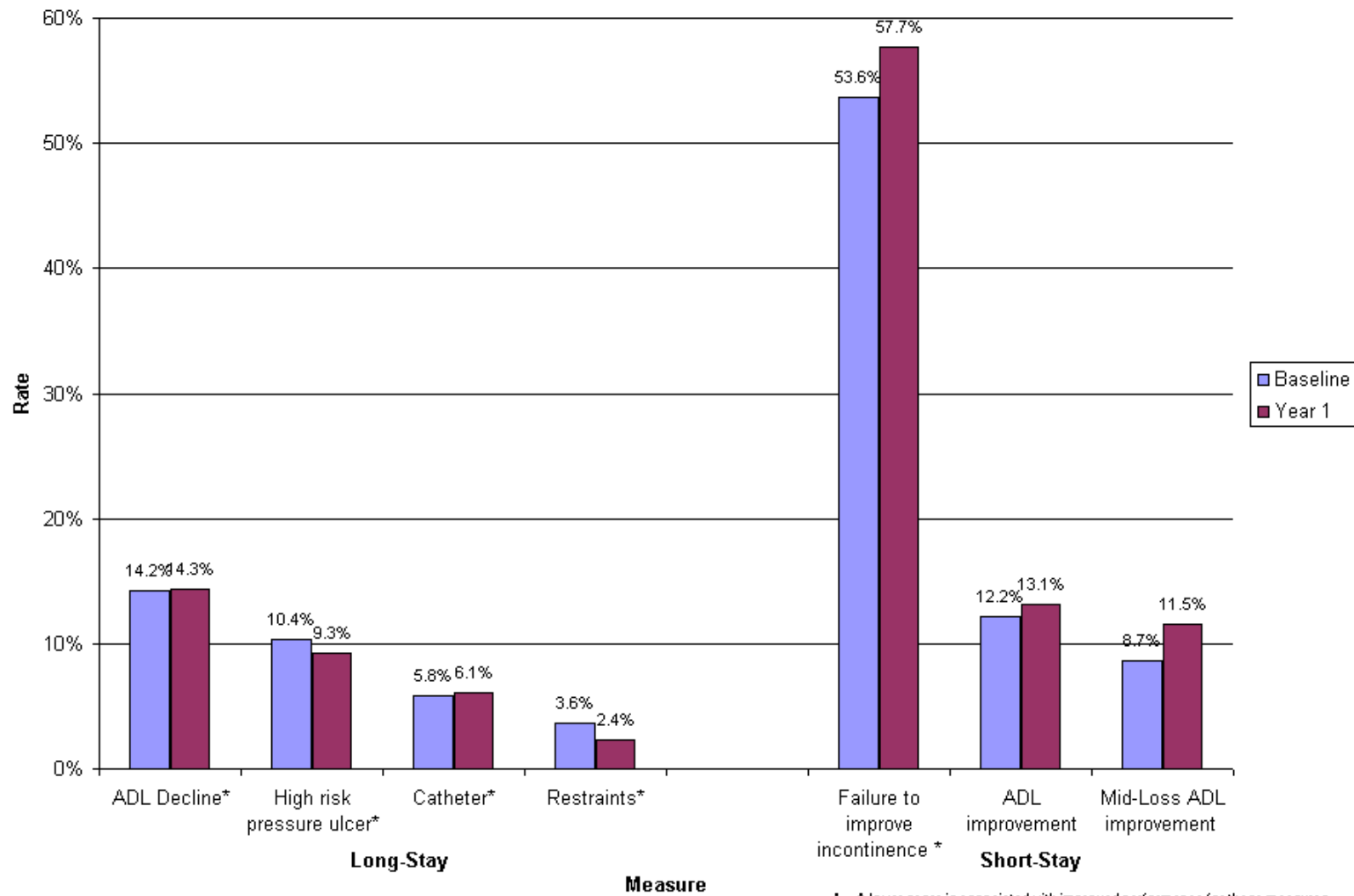
Note that, for all of the performance measures except ADL improvement and Mid-Loss ADL improvement, a higher percentage is associated with worse performance.

Year 1 Performance on MDS Measures: Wisconsin

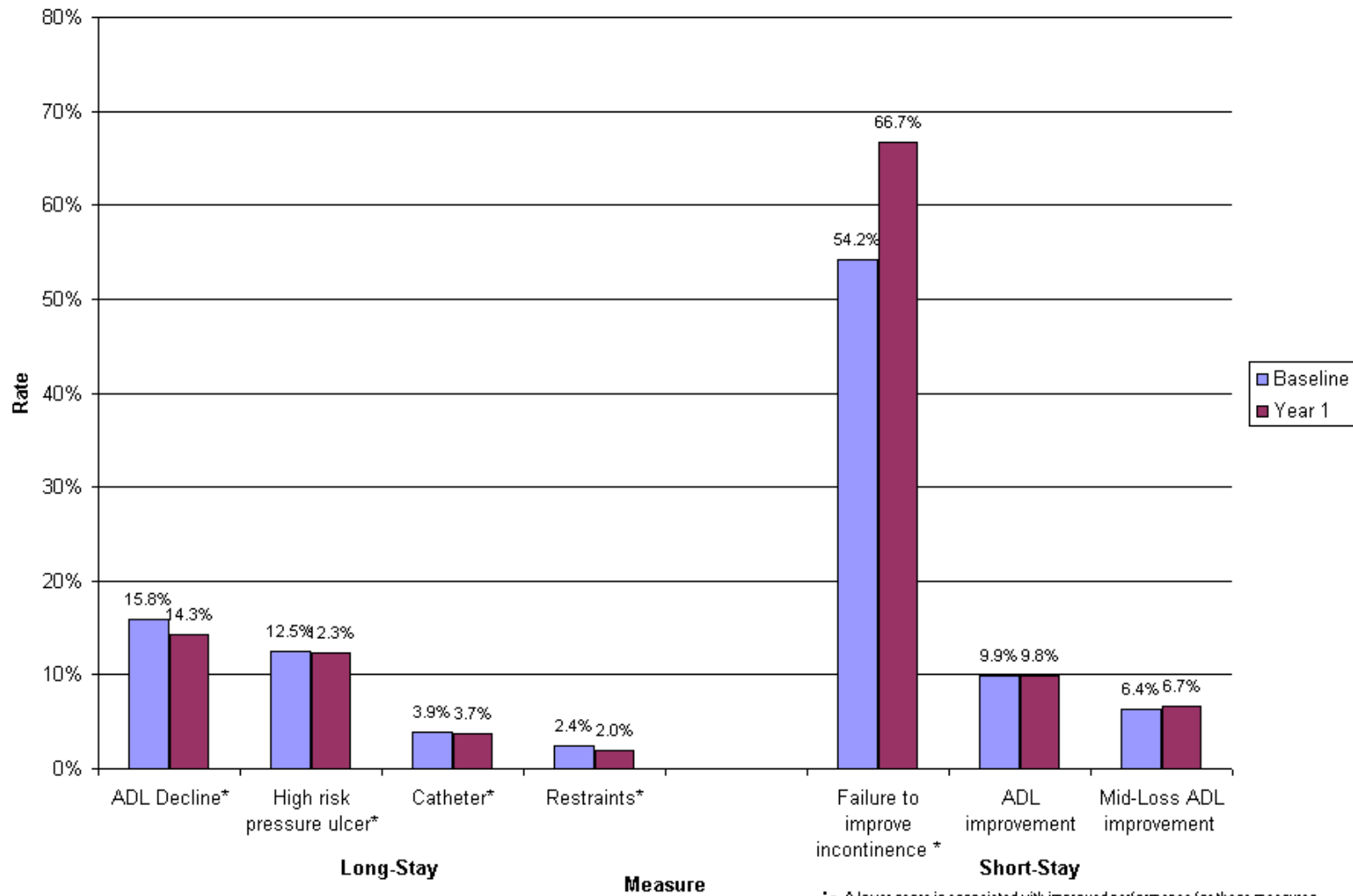
	N	Mean	Std Dev	Min	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	Max
ADL Decline	60	13.0%	4.9%	5.3%	7.4%	9.5%	12.4%	15.0%	19.7%	31.4%
High risk pressure ulcer	60	8.5%	4.9%	1.2%	3.6%	5.2%	7.7%	10.9%	14.7%	24.6%
Catheter	60	6.0%	3.4%	0.9%	2.8%	3.9%	5.0%	8.1%	10.5%	15.5%
Restraints	60	1.2%	1.8%	0.0%	0.0%	0.0%	0.0%	1.9%	3.5%	8.0%
ADL improvement	36	13.8%	10.0%	0.0%	2.6%	7.3%	10.7%	20.7%	26.5%	40.9%
Mid-Loss ADL improvement	36	11.7%	9.1%	0.0%	3.3%	4.9%	9.9%	16.8%	22.2%	38.5%
Failure to improve incontinence	36	65.8%	13.3%	32.0%	52.0%	58.8%	65.6%	73.6%	85.9%	95.7%

Note that, for all of the performance measures except ADL improvement and Mid-Loss ADL improvement, a higher percentage is associated with worse performance.

Baseline and Year 1 MDS Performance Measures: Arizona

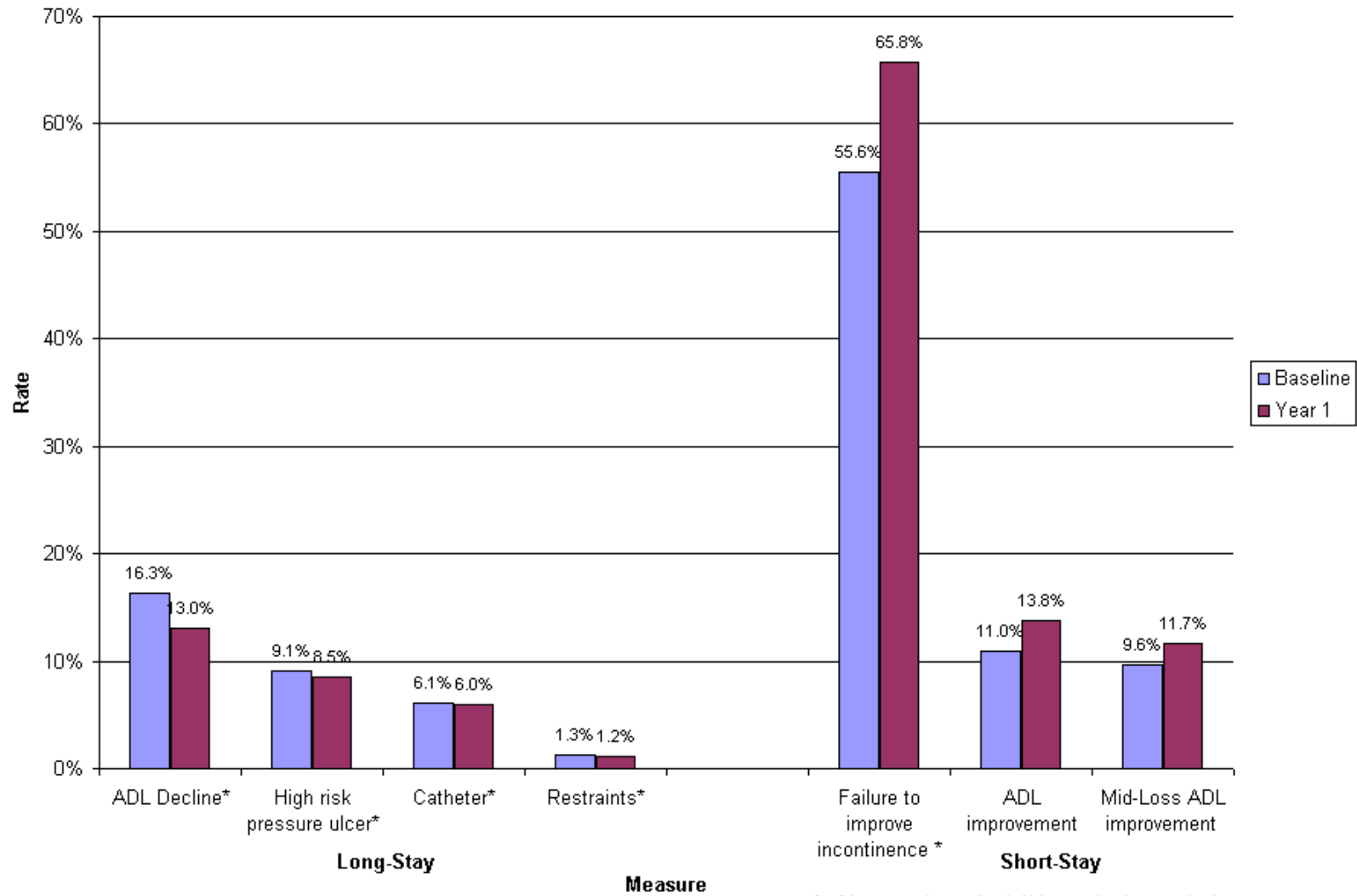


Baseline and Year 1 MDS Performance Measures: New York



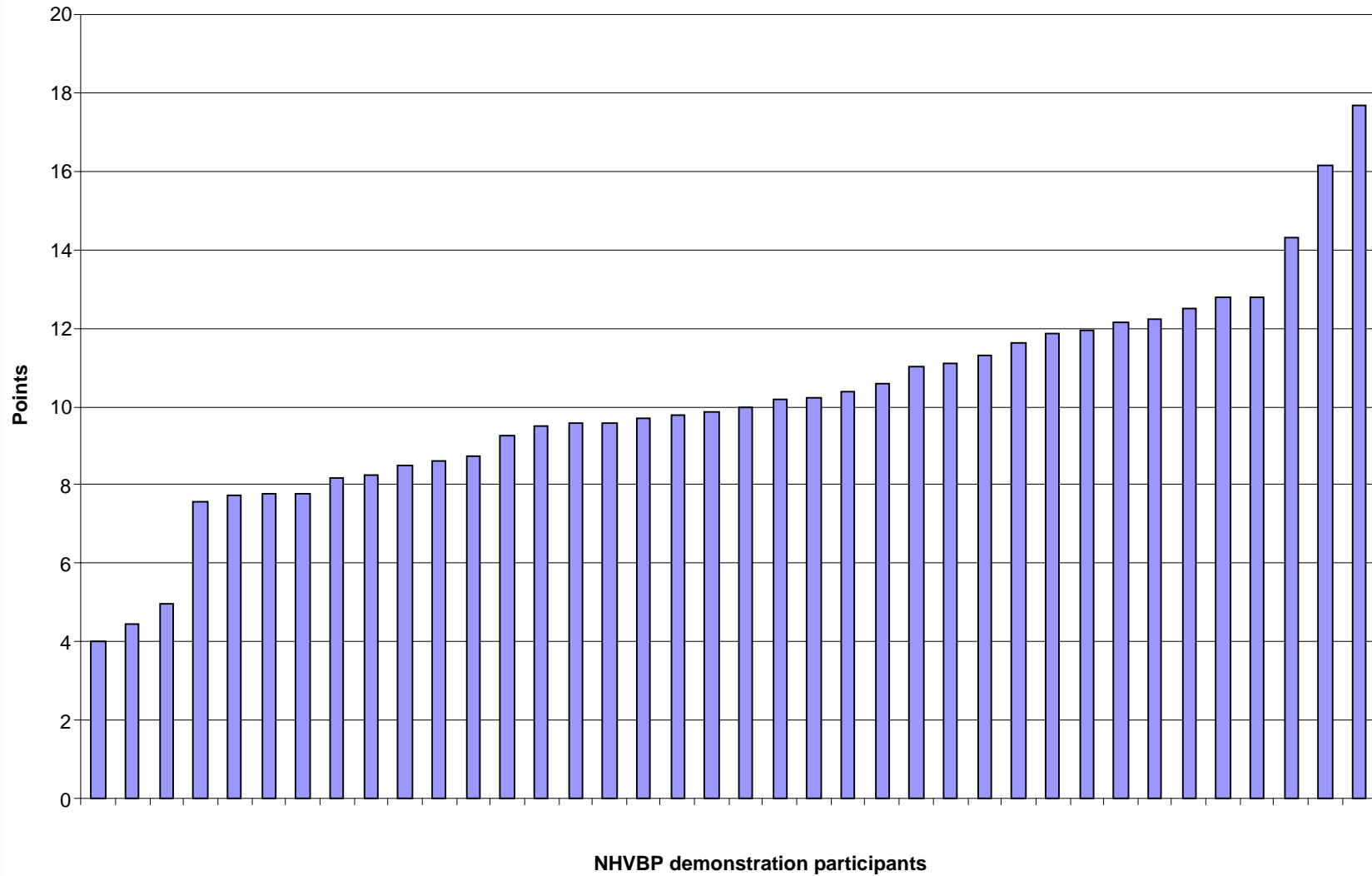
* = A lower score is associated with improved performance for these measures

Baseline and Year 1 MDS Performance Measures: Wisconsin

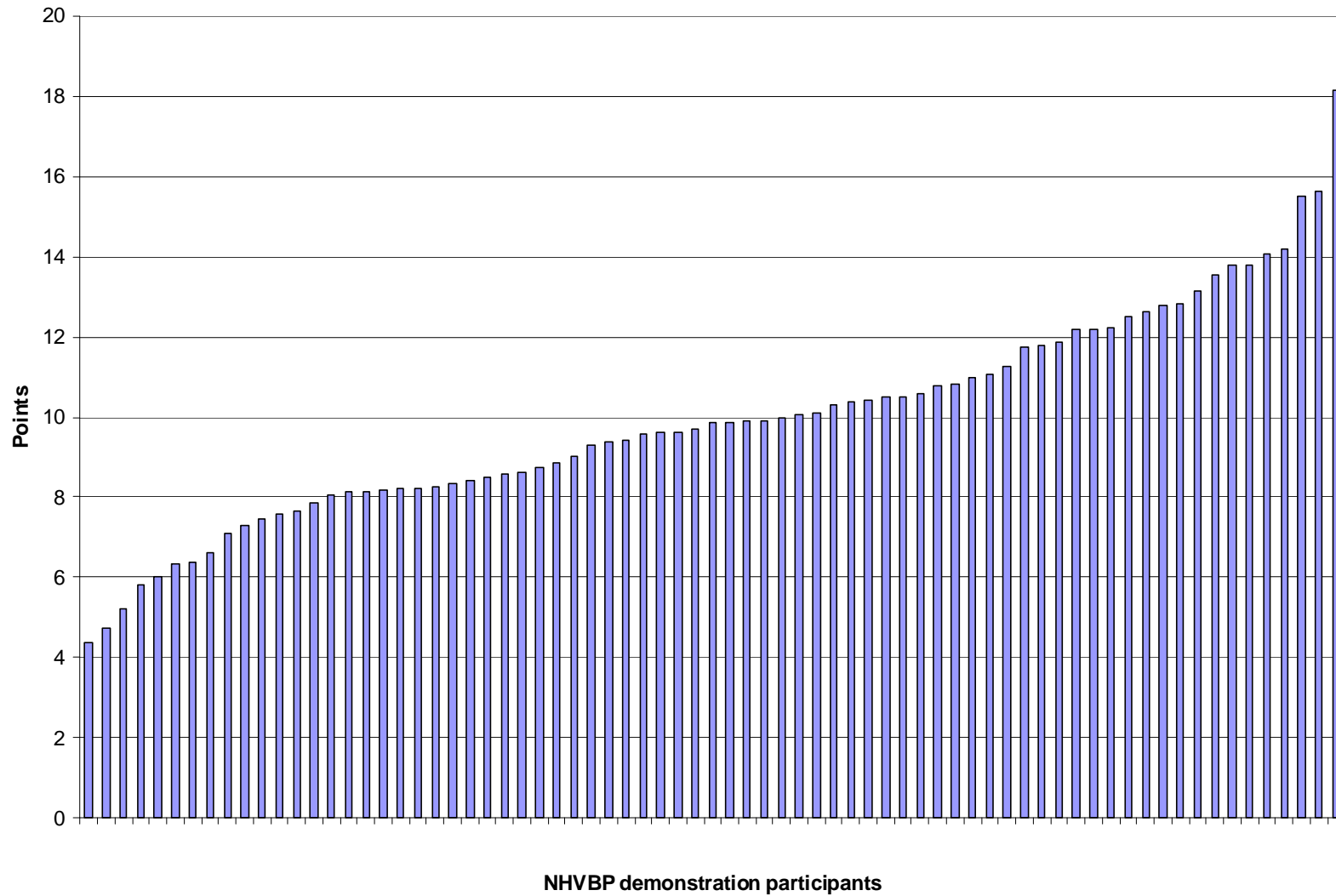


* - A lower score is associated with improved performance for these measures

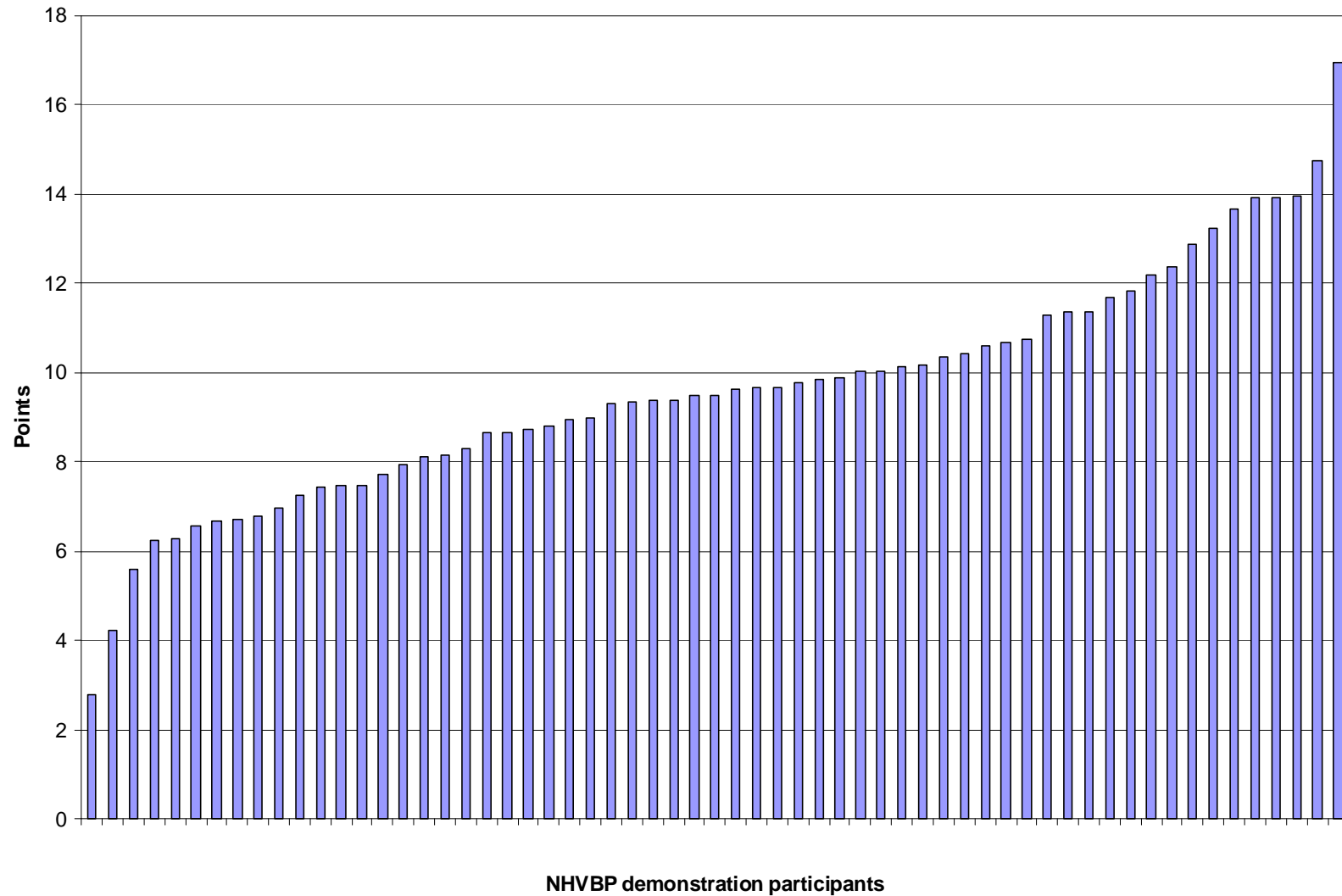
Distribution of Year 1 MDS Performance Scores: Arizona



Distribution of Year 1 MDS Performance Scores: New York



Distribution of Year 1 MDS Performance Scores: Wisconsin



State Survey Inspections

- Methodology is similar to that used on the Nursing Home Compare 5-Star Rating System, except that only one survey is considered.
- Performance on state survey inspections is based on the number, scope, and severity of deficiencies identified on the Year 1 survey, along with complaint surveys from Year 1 of the demonstration (July 1, 2009 – June 30, 2010). Repeat revisits are also considered.
- Year 1 scores are based on survey deficiency data file as of March 2011, thus allowing survey deficiency findings to be “final.”
- Survey domain counts for 20 points (out of 100 total).

Scoring Rules: Weights for Different Types of Deficiencies

Severity	Scope		
	Isolated	Pattern	Widespread
Immediate jeopardy to resident health or safety	J 50* (75)	K 100* (125)	L 150* (175)
Actual harm that is not immediate jeopardy	G 20	H 35 (40)	I 45 (50)
No actual harm with potential for more than minimal harm that is not immediate jeopardy	D 4	E 8	F 16 (20)
No actual harm with potential for minimal harm	A 0	B 0	C 0

Note: Figures in parentheses indicate weight for deficiencies that are for substandard quality of care. Shaded cells denote deficiency scope/severity levels that constitute substandard quality of care if the requirement which is not met is one that falls under the following federal regulations: 42 CFR 483.13 resident behavior and nursing home practices; 42 CFR 483.15 quality of life; 42 CFR 483.25 quality of care.

* If the status of the deficiency is “past non-compliance” and the severity is Immediate Jeopardy, then the weight associated with a ‘G-level” deficiency (i.e. a weight of 20) is assigned.

Source: Centers for Medicare & Medicaid Services

Weights for Repeat Revisits

- CMS experience is that providers that fail to demonstrate restored compliance with safety and quality of care requirements during the first revisit have lower quality of care than other nursing homes. More revisits are associated with more serious quality problems.
- No weights are assigned for the first revisit; weights are assigned only for the second, third, and fourth revisits and are proportional to the survey weight.

Revisit Number	Noncompliance weight
First	0
Second	50 percent of survey weight
Third	70 percent of survey weight
Fourth	85 percent of survey weight

Scoring Rules

- Points awarded based on nursing homes' rank on the measure in their State. In the case of ties, rank is based on the mean rank of the tied facilities.
 - The lowest ranked (worst) nursing home receives zero points
 - The highest ranked (best) nursing home receives 20 points
 - Between the minimum and the maximum, points are awarded proportionately based on the nursing home's ranking within the state.
- In the case of ties, rank is based on the mean of the tied facilities.

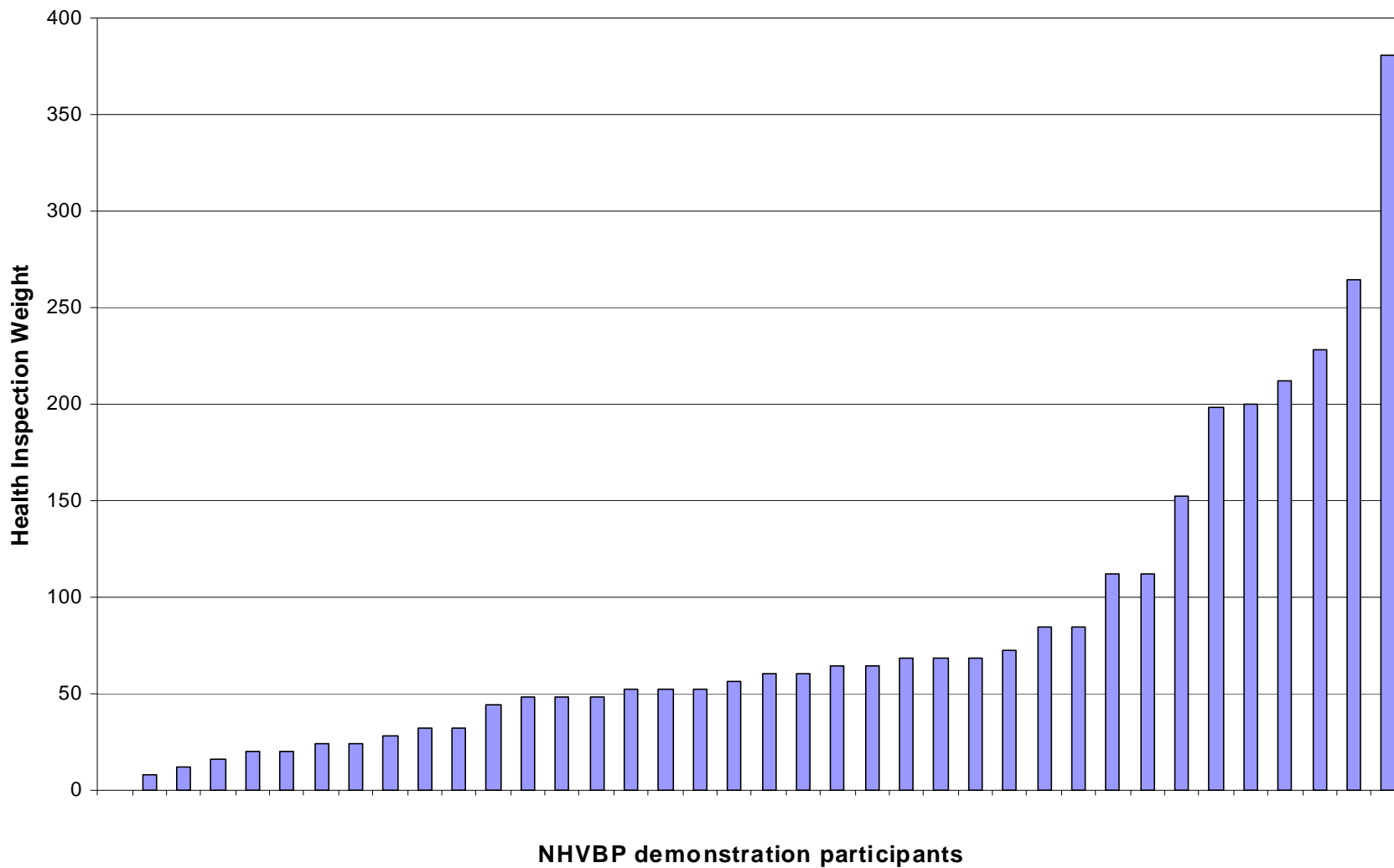
Year 1 Performance on State Survey Inspections: Arizona

	Mean	Std. Dev	25th Pctl	Median	75th Pctl
Total weight	83.32	81.96	32	58	84
Weight from standard deficiencies	65.37	53.79	24	54	84
Weight from complaint deficiencies	16.21	44.54	0	0	4
Weight from revisits	1.74	10.71	0	0	0
Total number of deficiencies	12.13	8.66	6	10.5	14
Deficiencies from standard surveys	10.13	6.26	5	9.5	13
Deficiencies from complaint surveys	2.00	5.13	0	0	1
Any substandard deficiency	0.13	0.34	0	0	0

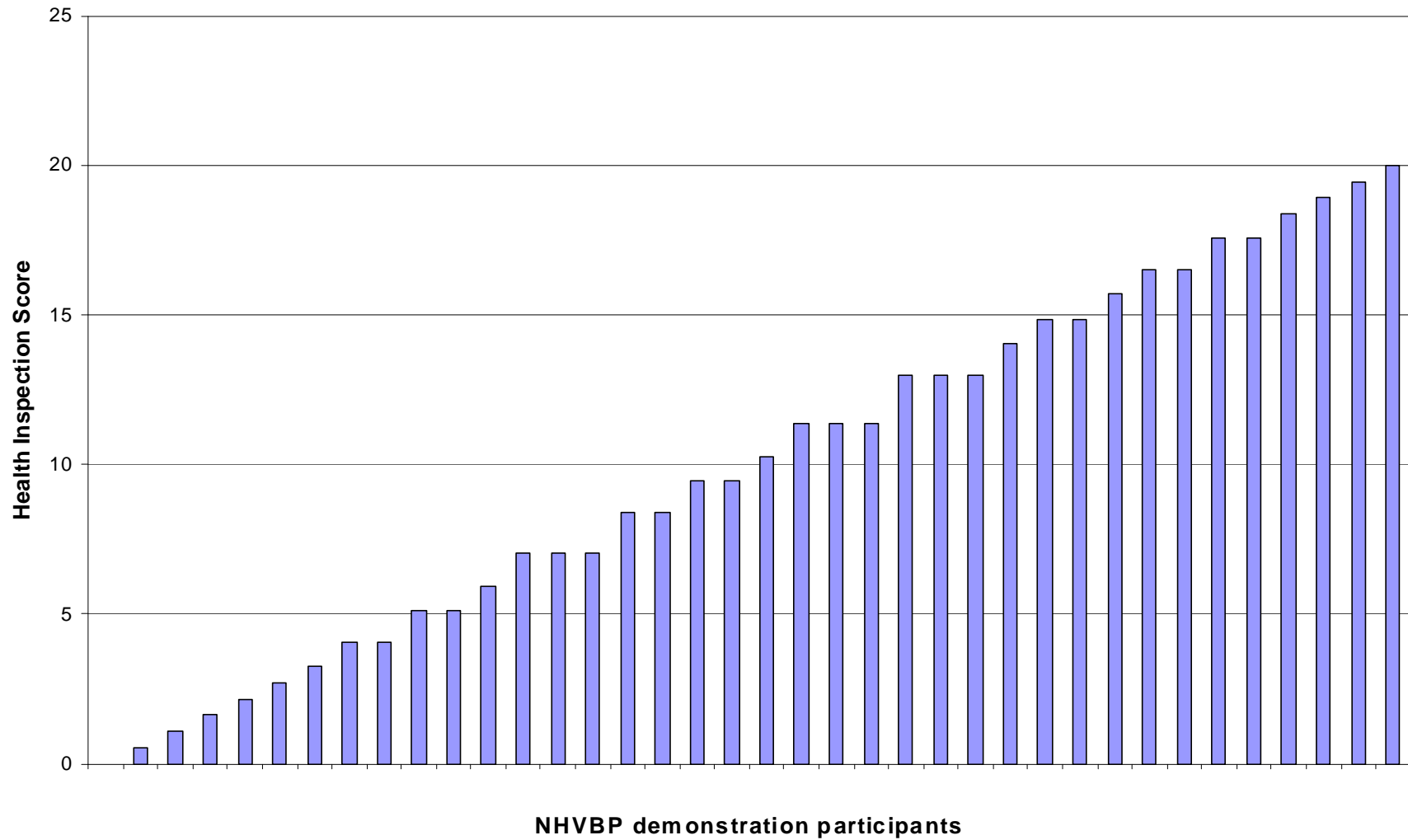
Change from Baseline to Year 1 in State Survey Inspection Results: Arizona

	Mean		Median	
	Baseline	Year 1	Baseline	Year 1
Total weight	71.84	83.32	48	58
Weight from standard deficiencies	54.05	65.37	36	54
Weight from complaint deficiencies	17.79	16.21	4	0
Weight from revisits	0.00	1.74	0	0
Total deficiencies	11.82	12.13	9.5	10.5
Deficiencies from standard surveys	8.66	10.13	7	9.5
Deficiencies from complaint surveys	3.16	2.00	1	0
Any substandard deficiency	0.08	0.13	0	0

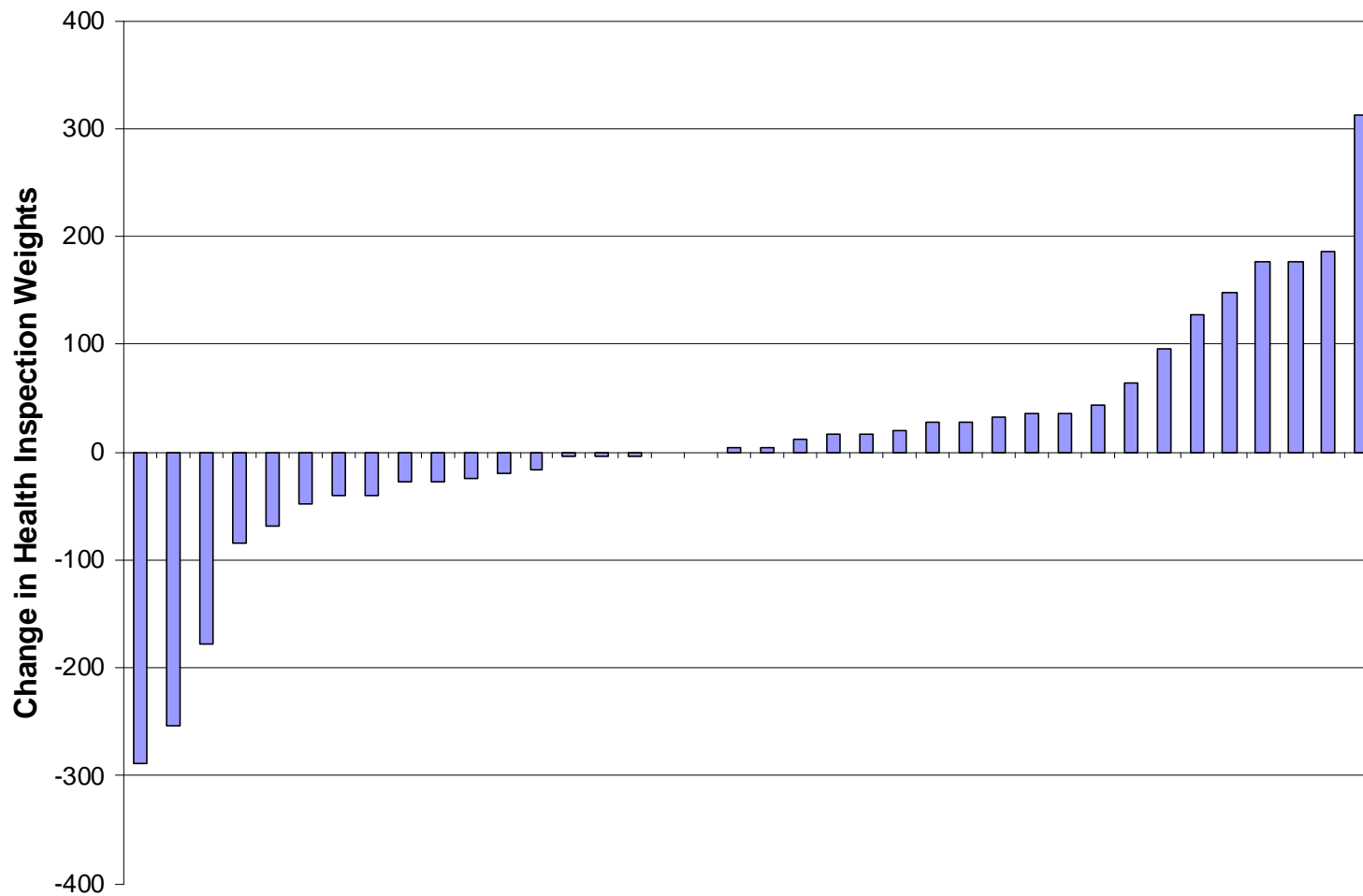
Arizona: Distribution of Year 1 Survey Weight



Arizona: Year 1 Scores for State Survey Inspections



Change from Baseline to Year 1 in Survey Weight— Provider Distribution: Arizona



NHVBP demonstration participants

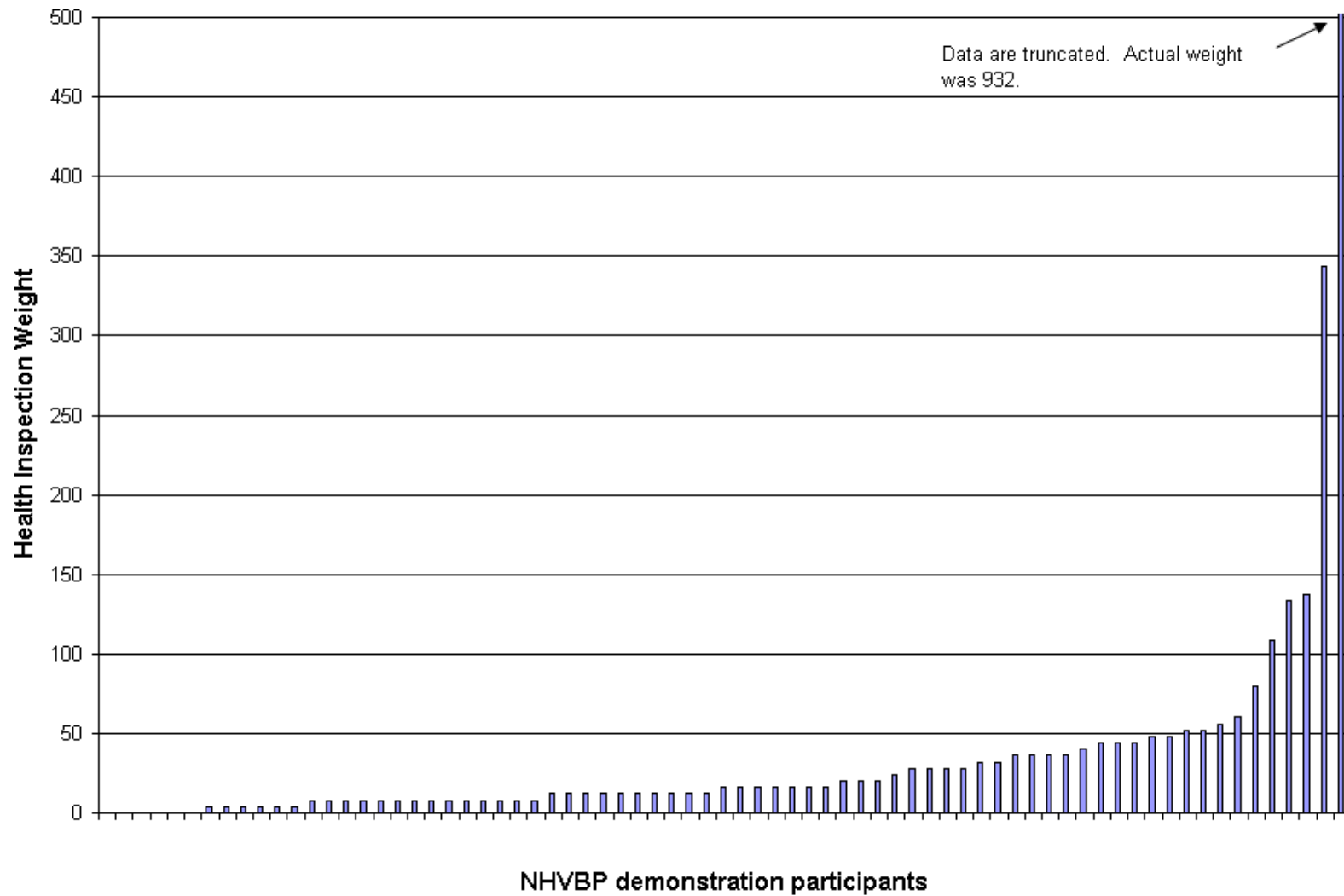
Year 1 Performance on State Survey Inspections: New York

	Mean	Std. Dev	25th Pctl	Median	75th Pctl
Total weight	41.01	115.42	8	16	36
Weight from standard deficiencies	22.44	32.62	8	12	32
Weight from complaint deficiencies	17.00	107.02	0	0	4
Weight from revisits	1.58	13.46	0	0	0
Total number of deficiencies	4.00	3.62	2	3	6
Deficiencies from standard surveys	3.32	2.97	1	2	5
Deficiencies from complaint surveys	0.68	1.68	0	0	1
Any substandard deficiency	0.05	0.23	0	0	0

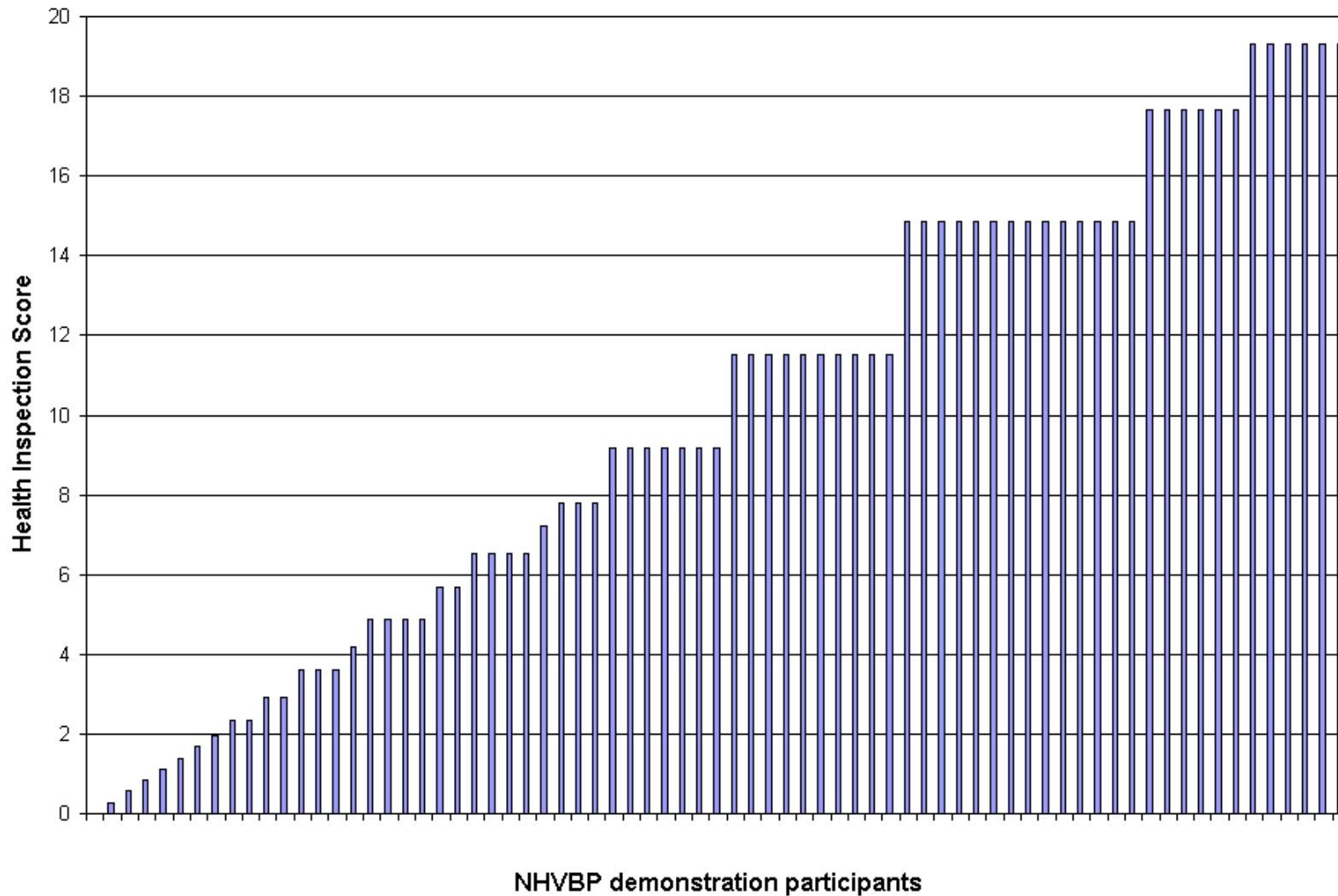
Change from Baseline to Year 1 in State Survey Inspection Results: New York

	Mean		Median	
	Baseline	Year 1	Baseline	Year 1
Total weight	19.79	41.01	16	16
Weight from standard deficiencies	17.23	22.44	12	12
Weight from complaint deficiencies	2.56	17.00	0	0
Weight from revisits	0.00	1.58	0	0
Total number of deficiencies	3.42	4.00	3	3
Deficiencies from standard surveys	3.09	3.32	2.5	2
Deficiencies from complaint surveys	0.33	0.68	0	0
Any substandard deficiency	0.00	0.05	0	0

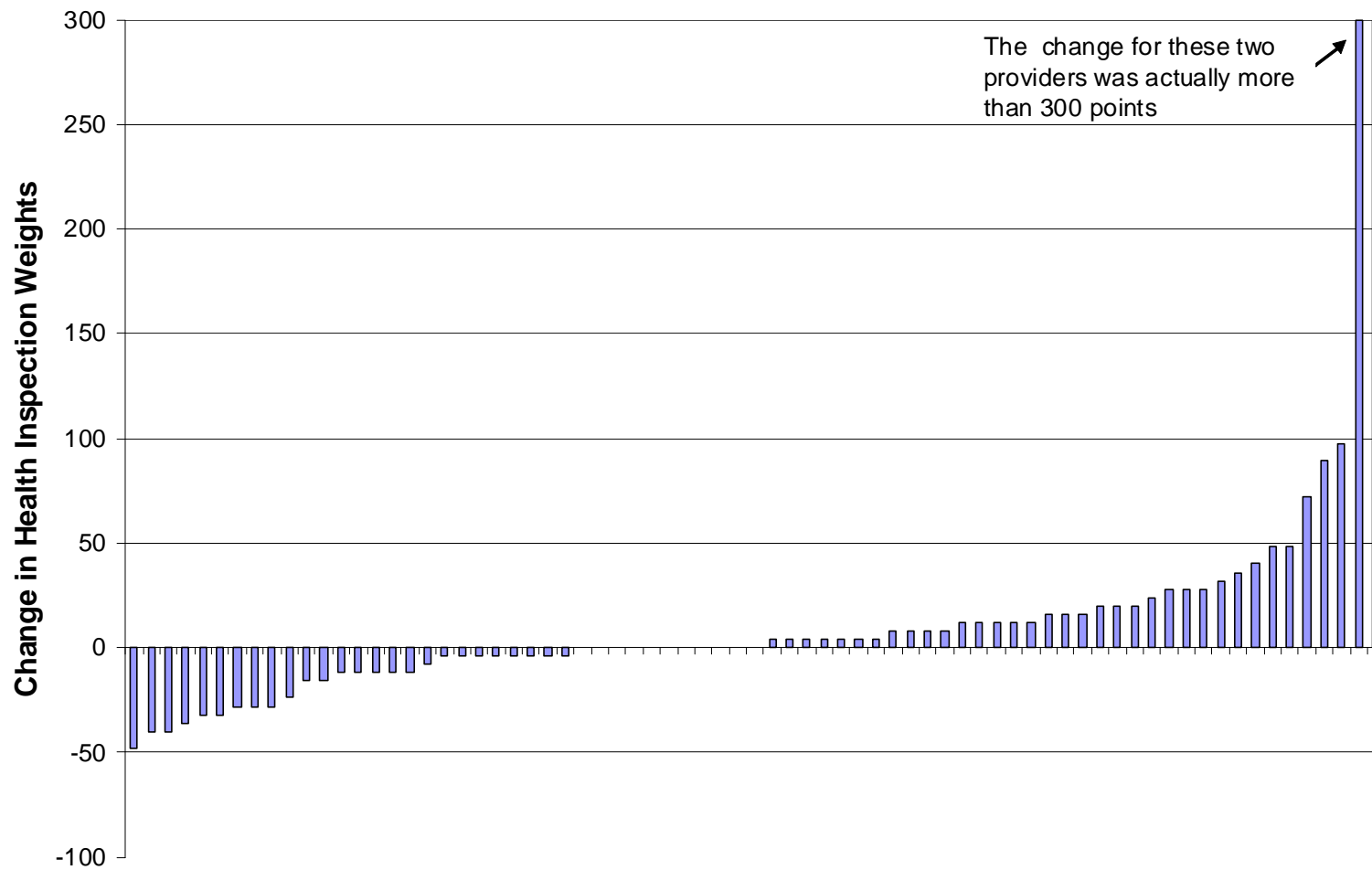
New York: Distribution of Year 1 Survey Weight



New York: Year 1 Scores for State Survey Inspections



Change from Baseline to Year 1 in Survey Weight— Provider Distribution: New York



NHVBP demonstration participants

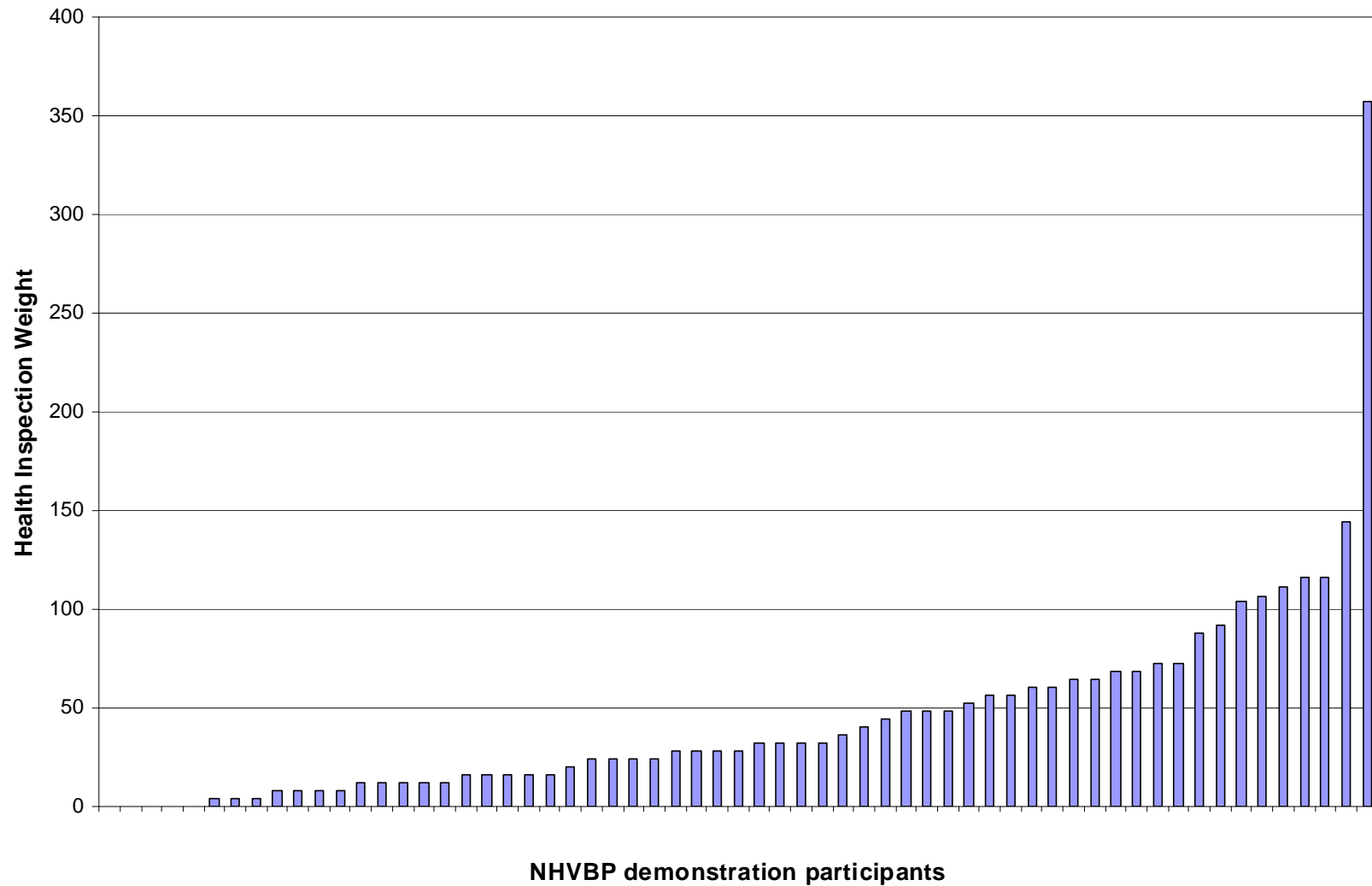
Year 1 Performance on State Survey Inspections: Wisconsin

	Mean	Std. Dev	25th Pctl	Median	75th Pctl
Total weight	44.75	53.46	12	28	60
Weight from standard deficiencies	31.79	27.80	12	28	48
Weight from complaint deficiencies	12.18	46.75	0	0	8
Weight from revisits	0.79	6.15	0	0	0
Total number of deficiencies	6.28	4.69	3	6	9
Deficiencies from standard surveys	5.00	3.80	2	5	7
Deficiencies from complaint surveys	1.28	2.23	0	0	2
Any substandard deficiency	0.05	0.22	0	0	0

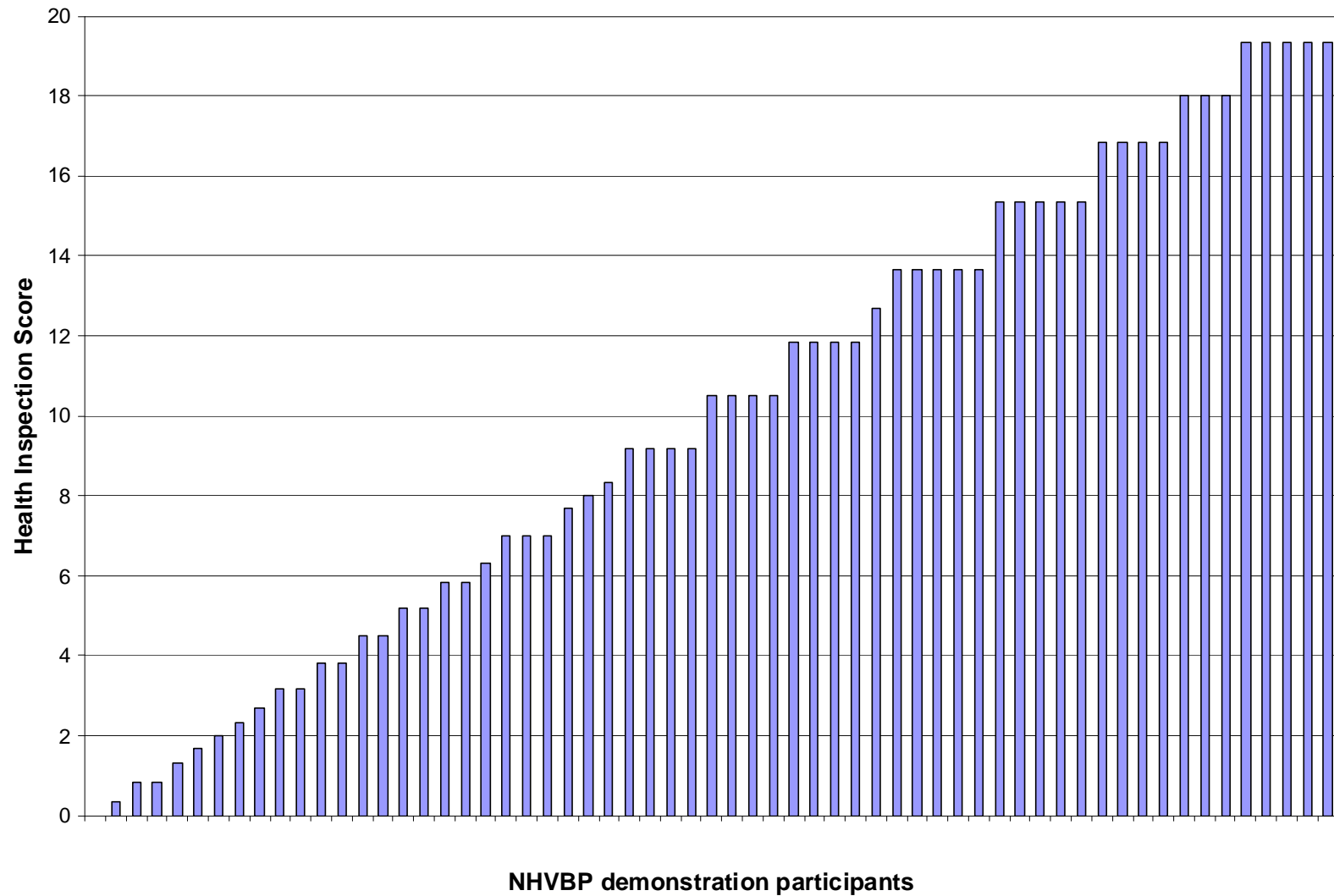
Change from Baseline to Year 1 in State Survey Inspection Results: Wisconsin

	Mean		Median	
	Baseline	Year 1	Baseline	Year 1
Total weight	49.21	44.75	32	28
Weight from standard deficiencies	32.84	31.79	20	28
Weight from complaint deficiencies	14.74	12.18	0	0
Weight from revisits	1.64	0.79	0	0
Total number of deficiencies	5.23	6.28	4	6
Deficiencies from standard surveys	4.15	5.00	4	5
Deficiencies from complaint surveys	1.08	1.28	0	0
Any substandard deficiency	0.10	0.05	0	0

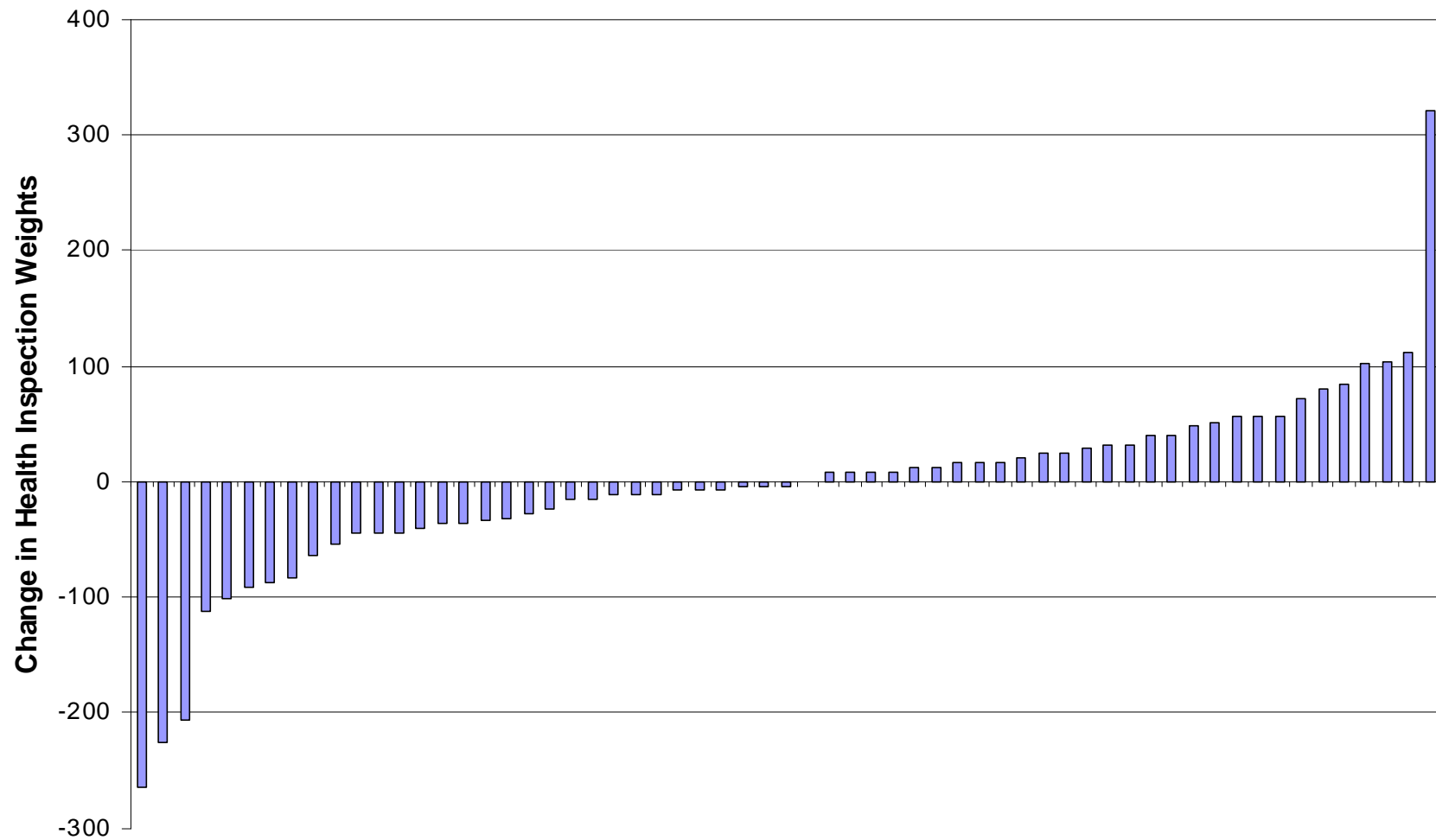
Wisconsin: Distribution of Baseline Survey Weight



Wisconsin: Year 1 Scores for State Survey Inspections



Change from Baseline to Year 1 in Survey Weight— Provider Distribution: Wisconsin



NHVBP demonstration participants

Conclusions

- MDS analyses:
 - In Year 1, there was slight improvement for most MDS measures compared to the baseline, although these changes were not generally statistically significant (exceptions were ADL decline and failure to improve bladder incontinence).
 - Changes may be due to NHVBP or other factors.
- Survey deficiencies
 - Year 1 Survey deficiency performance was somewhat better in Wisconsin and somewhat worse in Arizona and New York than the baseline performance
 - There are lots of factors that affect change in deficiency citation patterns over time
 - Use of relative scoring allows distribution of points in a state to remain constant over time.

Questions/Discussion

Abt

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