

The risk-adjusted rate is the estimate of how a hospital would perform on an indicator for an average case mix of patients, rather than its own case mix. This rate can be found in the provider-level reports from the Windows or SAS QI programs. See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).

The confidence interval of the risk-adjusted rate is identified in the SAS output as the lower CL (lower confidence limit) and upper CL (upper confidence limit). When creating provider-level reports using the Windows QI software, the user must specify that the confidence levels be included in the report.

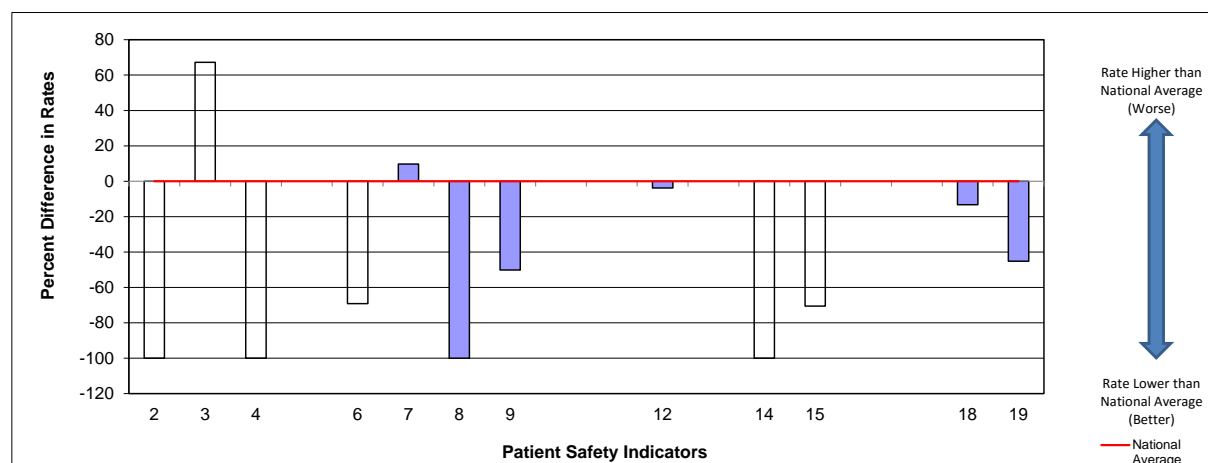
The national average is the rate used here as a comparison point. You may choose your State's rate, the national rate, or any other rate that you may wish to use as a comparison. See Tool B5 for more information about comparators. Please note that AHRQ does not currently provide national averages using ICD-10 data.

***Note: Risk-adjusted rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of risk-adjusted and smoothed rates.**

Enter your data here.					These calculate automatically.				
Indicator	Risk-Adjusted Rate	Risk-Adjusted (Lower Confidence Interval Bound)	Risk-Adjusted (Upper Confidence Interval Bound)	National Average	Percent Difference in Rates	Percent Difference in Rates (Lower Bound)	Percent Difference in Rates (Upper Bound)	Chart Label	How does your hospital compare to national average?
PSI 02 Death in low-mortality DRGs	0	0	0.000717	0.265	-100	0	0.27056604	PSI 02	Statistically Lower
PSI 03 Pressure ulcer	0.042752	0.03529	0.050213	0.025572	67.182856	29.1803535	29.176443	PSI 03	Statistically Higher
PSI 04 Death among surgical inpatients	0	0	0.094956	124.996	-100	0	0.07596723	PSI 04	Statistically Lower
PSI 05 Retained surgical item or unretrieved device fragment count				0.000086					
PSI 06 Iatrogenic pneumothorax	0.000187	0	0.000769	0.484	-99.961364	0.03863636	0.12024793	PSI 06	Statistically Lower
PSI 07 Central venous catheter-related bloodstream infections	0.002408	0.00139	0.003477	0.752	-99.679787	0.13537234	0.14215426	PSI 07	Statistically Lower
PSI 08 Postoperative hip fracture	0	0	0.001185	0.172	-100	0	0.68895349	PSI 08	Statistically Lower
PSI 09 Perioperative hemorrhage or hematoma	0.001197	0	0.004631	2.553	-99.953114	0.04688602	0.13450842	PSI 09	Statistically Lower
PSI 10 Postoperative physiologic and metabolic derangements				1.59					
PSI 11 Postoperative respiratory failure				10.74					
PSI 12 Perioperative pulmonary embolism or deep vein thrombosis	0.010752	0.009533	0.022906	8.138	-99.867879	0.01497911	0.14934873	PSI 12	Statistically Lower
PSI 13 Postoperative sepsis				17.433					
PSI 14 Postoperative wound dehiscence	0	0	0.007122	1.833	-100	0	0.38854337	PSI 14	Statistically Lower
PSI 15 Accidental puncture or laceration	0.001349	0	0.003125	2.598	-99.948075	0.05192456	0.06836028	PSI 15	Statistically Lower
PSI 16 Transfusion reaction				0.000004					
PSI 17 Birth trauma - injury to neonate				2.188					
PSI 18 Obstetric trauma - vaginal with instrument	0.139241	0.062898	0.215583	133.928	-99.896033	0.05700302	0.05700227	PSI 18	Statistically Lower
PSI 19 Obstetric trauma - vaginal without instrument	0.019846	0.013427	0.0262639	21.782	-99.908888	0.02946929	0.02946424	PSI 19	Statistically Lower

Note: Rates provided are per 1,000 cases.

Your Hospital's Performance Relative to National Average



The risk-adjusted rate is the estimate of how a hospital would perform on an indicator for an average case mix of patients, rather than its own case mix. This rate can be found in the provider-level reports from the Windows or SAS QI programs. See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).

The confidence interval of the risk-adjusted rate is identified in the SAS output as the lower CL (lower confidence limit) and upper CL (upper confidence limit). When creating provider-level reports using the Windows QI software, the user must specify that the confidence levels be included in the report.

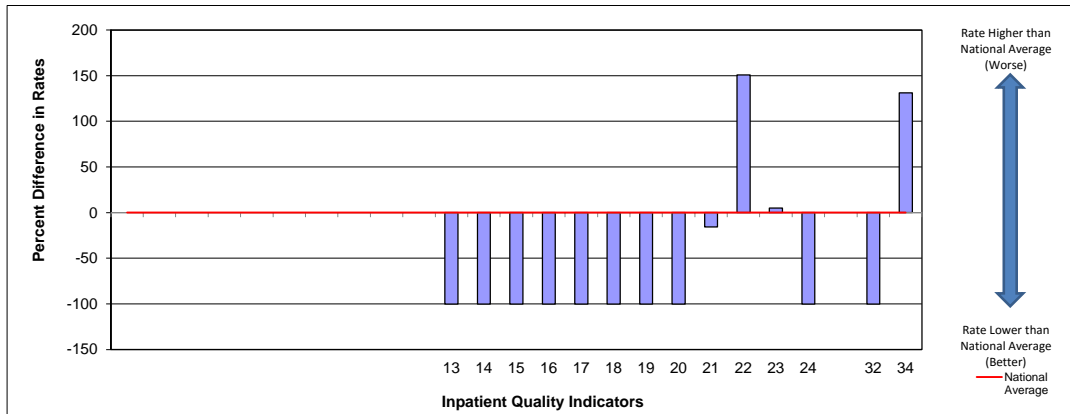
The national average is the rate used here as a comparison point. You may choose your State's rate, the national rate, or any other rate that you may wish to use as a comparison. See Tool B5 for more information about comparators. Please note that AHRQ does not currently provide national averages using ICD-10 data.

***Note: Risk-adjusted rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of risk-adjusted and smoothed rates.**

		Enter your data here.				These calculate automatically.				
		Risk-Adjusted Rate	Risk-Adjusted (Lower Confidence Interval Bound)	Risk-Adjusted (Upper Confidence Interval Bound)	National Average	Percent Difference in Rates	Percent Difference in Rates (Lower Bound)	Percent Difference in Rates (Upper Bound)	Chart Label	How does your hospital compare to the national average on this indicator?
IQI 01	Esophageal resection volume									
IQI 02	Pancreatic resection volume									
IQI 04	Abdominal aortic aneurysm (AAA) repair volume									
IQI 05	Coronary artery bypass graft (CABG) volume				0.224827					
IQI 06	Percutaneous coronary intervention (PCI) volume				0.661808					
IQI 07	Carotid endarterectomy mortality									
IQI 08	Esophageal resection mortality				46.756					
IQI 09	Pancreatic resection mortality				38.215					
IQI 11	Abdominal aortic aneurysm (AAA) repair mortality				40.321					
IQI 12	Coronary artery bypass graft (CABG) mortality				25.9					
IQI 13	Craniotomy mortality	0	0	0.217772	51.103	-100	0	0.42614328	IQI 13	Significantly Lower
IQI 14	Hip replacement mortality	0	0	0.0148536	1.098	-100	0	1.35278689	IQI 14	Significantly Lower
IQI 15	Acute myocardial infarction (AMI) mortality	0	0	0.0611616	58.783	-100	0	0.10404641	IQI 15	Significantly Lower
IQI 16	Heart failure mortality	0	0	0.0173928	31.98	-100	0	0.05438649	IQI 16	Significantly Lower
IQI 17	Acute stroke mortality	0	0	0.0601213	83.392	-100	0	0.07209481	IQI 17	Significantly Lower
IQI 18	Gastrointestinal (GI) hemorrhage mortality	0	0	0.0312235	22.413	-100	0	0.13930978	IQI 18	Significantly Lower
IQI 19	Hip fracture mortality	0	0	0.0637962	26.921	-100	0	0.2369756	IQI 19	Significantly Lower
IQI 20	Pneumonia mortality	0	0	0.0313046	38.107	-100	0	0.08214921	IQI 20	Significantly Lower
IQI 21	Cesarean delivery rate	0.238506	0.2209536	0.2561676	300.974	-99.920755	0.00583187	0.00586815	IQI 21	Significantly Lower
IQI 22	Vaginal birth after C-section (VBAC) rate, uncomplicated	0.2464589	0.2015022	0.2914156	96.143	-99.743654	0.04676024	0.04676024	IQI 22	Significantly Lower
IQI 23	Laparoscopic cholecystectomy rate	0.8493151	0.7672489	0.9313812	857.874	-99.900998	0.00956623	0.00956622	IQI 23	Significantly Lower
IQI 24	Incidental appendectomy rate among elderly	0	0	0	9.555	-100	0	0	IQI 24	Significantly Lower
IQI 25	Bilateral cardiac catheterization rate				13.697					
IQI 32	AMI mortality without transfer	0	0	0.0674293	61.276	-100	0	0.11004194	IQI 32	Significantly Lower
IQI 34	VBAC, all	0.2237443	0.1847144	0.2627742	95.456	-99.765605	0.04088784	0.04088784	IQI 34	Significantly Lower

Note: Rates provided are per 1,000 cases.

Your Hospital's Performance Relative to National Average



The risk-adjusted rate is the estimate of how a hospital would perform on an indicator for an average case mix of patients, rather than its own case mix. This rate can be found in the provider-level reports from the Windows or SAS QI programs. See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).

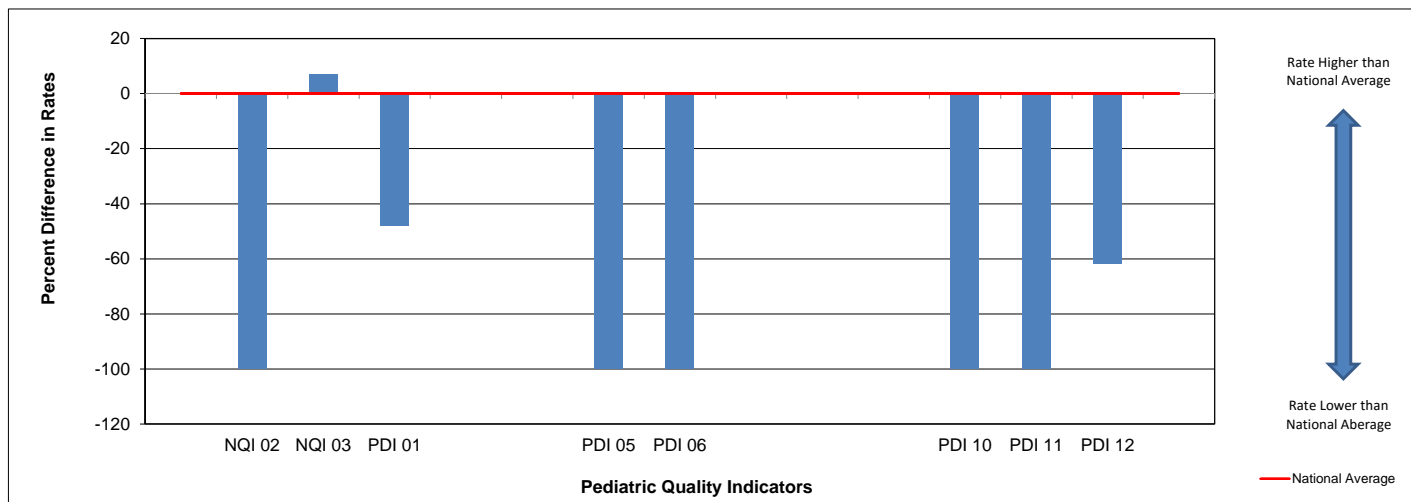
The confidence interval of the risk adjusted rate is identified in the SAS output as the lower CL (lower confidence limit) and upper CL (upper confidence limit). When creating provider-level reports using the Windows QI software, the user must specify that the confidence levels be included in the report.

The national average is the rate used here as a comparison point. You may choose your State's rate, the national rate, or any other rate that you may wish to use as a comparison. See Tool B5 for more information about comparators. Please note that AHRQ does not currently provide national averages using ICD-10 data.

***Note: Risk-adjusted rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of risk-adjusted and smoothed rates.**

		Enter your data here.				These calculate automatically.				
	Indicator	Risk-Adjusted Rate	Risk-Adjusted (Lower Confidence Interval Bound)	Risk-Adjusted (Upper Confidence Interval Bound)	National Average	Percent Difference in Rates	Percent Difference in Rates (Lower Bound)	Percent Difference in Rates (Upper Bound)	Chart Label	How does your hospital compare to the national average?
NQI 01	Neonatal Iatrogenic Pneumothorax Rate									
NQI 02	Neonatal Mortality Rate	0	0	0.00052261	0.00247	-100	-100	-78.8417	NQI 02	Statistically Lower
NQI 03	Neonatal Blood Stream Infection Rate	0.0403736	0.0262083	0.054539	0.03773	7.00662603	-30.537238	44.5507554	NQI 03	No Statistically Significant Difference
PDI 01	Accidental Puncture or Laceration Rate	0.0002971	0	0.0010748	0.00057	-47.877193	-100	88.5614035	PDI 01	No Statistically Significant Difference
PDI 02	Pressure Ulcer Rate									
PDI 03	Retained Surgical Item or Unretrieved Device									
PDI 05	Iatrogenic Pneumothorax Rate	0	0	0.0004096	0.00015	-100	-100	173.066667	PDI 05	No Statistically Significant Difference
PDI 06	RACHS-1 Pediatric Heart Surgery Mortality Rate	0	0	0.176267	0.04091	-100	-100	330.865314	PDI 06	No Statistically Significant Difference
PDI 07	RACHS-1 Pediatric Heart Surgery Volume									
PDI 08	Perioperative Hemorrhage or Hematoma Rate				0.00248					
PDI 09	Postoperative Respiratory Failure Rate				0.01132					
PDI 10	Postoperative Sepsis Rate	0	0	0.0432385	0.01989	-100	-100	117.388135	PDI 10	No Statistically Significant Difference
PDI 11	Postoperative Wound Dehiscence Rate	0	0	0.0075716	0.00097	-100	-100	680.57732	PDI 11	No Statistically Significant Difference
PDI 12	Central Venous Catheter-Related Blood Stream Infection Rate	0.0003802	0	0.0010654	0.001	-61.98	-100	6.54	PDI 12	No Statistically Significant Difference
PDI 13	Transfusion Reaction Count									

Your Hospital's Performance Relative to National average

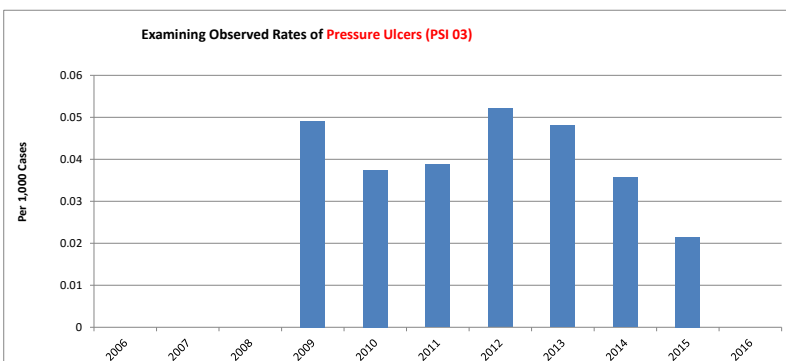


Enter Your Data Here		
Year	Observed Rate	Observed Count
2006		
2007		
2008		
2009	0.0491368	49
2010	0.0374269	37
2011	0.0387779	38
2012	0.0521654	52
2013	0.0480234	48
2014	0.0356778	35
2015	0.0214566	21
2016		

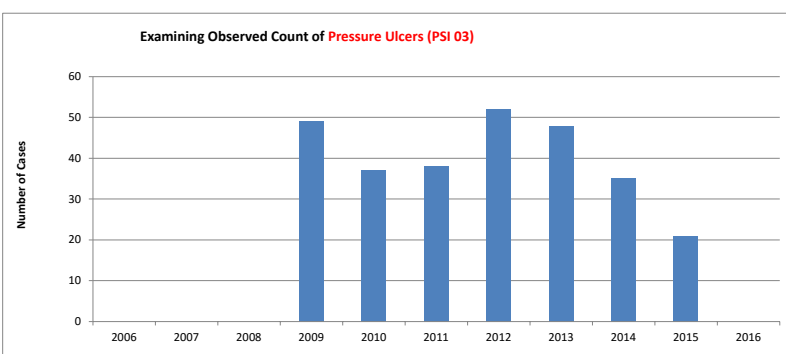
***Note:** Use caution comparing rates before and after 2014. Rates before the 4th quarter of 2014 are calculated using ICD-9; rates calculated during the 4th quarter of 2014 and later use ICD-10. The rates should be similar but may not yield a perfect comparison between years.

The **observed rate** is the actual rate at which events measured by the indicator occurred in your hospital. This can be acquired from the SAS output, or the Windows QI output from the Quick Report. If another organization provides these data for you, you may also obtain it from them.

See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).



Directions: Add your data into the yellow cells beside the relevant year. Remove the "Pressure Ulcers" part of the title and revise it to reflect your PSI or IQI of interest.

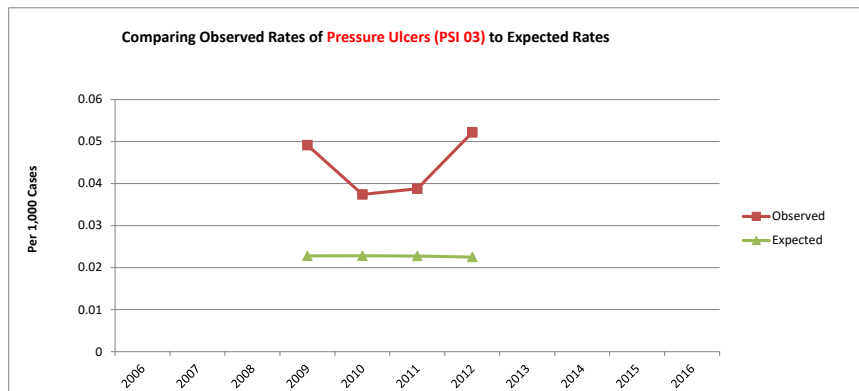


Enter Your Data Here		
Year	Observed	Expected
2006		
2007		
2008		
2009	0.0491368	0.0228119
2010	0.0374269	0.02283
2011	0.0387779	0.0227609
2012	0.0521654	0.02251
2013		
2014		
2015		
2016		

***Note:** Expected rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of expected rates.

The **observed rate** is the actual rate at which events measured by the indicator occurred in your hospital. This can be acquired from the SAS output, or the Windows QI output from the Quick Report. If another organization provides these data for you, you may also obtain it from them.

The **expected rate** is the rate a hospital would have if it had average performance on a QI, as calculated in a reference population but accounting for the hospital's actual case mix. This can be acquired from the SAS output or the Windows QI output from the Provider Report. See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).



Directions: Add your data into the yellow cells beside the relevant year. Remove the "Pressure Ulcers" part of the title and revise it to reflect your PSI or IQI of interest.

Enter Your Data Here				
Year	Risk-Adjusted Rate	Risk-Adjusted (Lower Confidence Interval Bound)	Risk-Adjusted (Upper Confidence Interval Bound)	Smoothed
2006				
2007				
2008				
2009	0.0397357	0.0311275	0.0483439	0.0368993
2010	0.0302422	0.0221701	0.0383142	0.0288377
2011	0.031429	0.023324	0.039534	0.0298721
2012	0.042752	0.03529	0.050213	0.040235
2013				
2014				
2015				
2016				

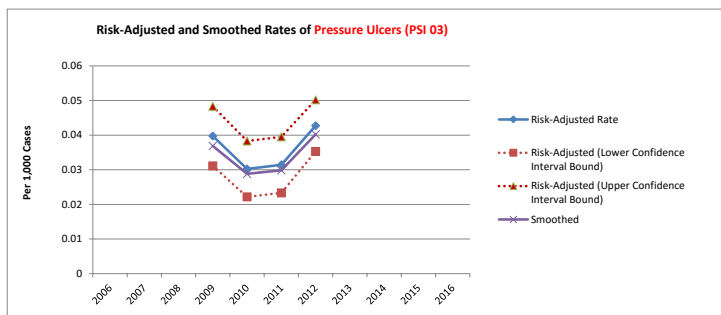
*Note: Risk-adjusted and smoothed rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of risk-adjusted and smoothed rates.

The **risk-adjusted** rate is the estimate of how a hospital would perform on an indicator for an average case mix of patients, rather than its own case mix. This rate can be found in the provider-level reports from the Windows or SAS QI programs.

The **confidence interval of the risk-adjusted rate** is identified in the SAS output as the lower CL (lower confidence limit) and upper CL (upper confidence limit). When creating provider-level reports using the Windows QI software, the user must specify that the confidence levels be included in the report.

The **smoothed rate** is a weighted average of the hospital's risk-adjusted rate and the reference population rate, where the weight reflects the reliability of the hospital's risk-adjusted rate. This can be found in the SAS output or the Windows QI Provider Report.

See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates).



Directions: Add your data into the yellow cells beside the relevant year. Remove the "Pressure Ulcers" part of the title and revise it to reflect your PSI or IQI of interest.

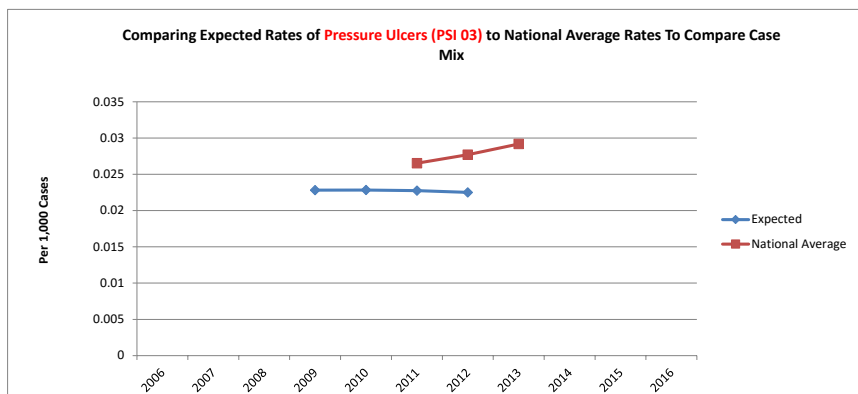
The **expected rate** is the rate a hospital would have if it had average performance on a QI, as calculated in a reference population but accounting for the hospital's actual case mix. This can be acquired from the SAS output or the Windows QI output from the Provider Report.

The **national average** is the rate used here as a comparison point. You may choose your State's rate, the national rate, or any other rate that you may wish to use as a comparison.

See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates; B5 explains how to use comparators).

Enter Your Data Here		
Year	Expected	National Average
2006		
2007		
2008		
2009	0.0228119	
2010	0.02283	
2011	0.0227609	0.02653
2012	0.02251	0.02771
2013		0.02918
2014		
2015		
2016		

***Note:** Expected rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of expected rates.



Directions: Add your data into the yellow cells beside the relevant year. Remove the "Pressure Ulcers" part of the title and revise it to reflect your PSI or IQL of interest.

Enter Your Data Here				
Year	Risk-Adjusted Rate	Risk-Adjusted (Lower Confidence Interval Bound)	Risk-Adjusted (Upper Confidence Interval Bound)	National Average
2006				
2007				
2008				
2009	0.0397357	0.0311275	0.0483439	
2010	0.0302422	0.0221701	0.0383142	
2011	0.031429	0.023324	0.039534	0.02653
2012	0.042752	0.03529	0.050213	0.02771
2013				0.02918
2014				
2015				
2016				

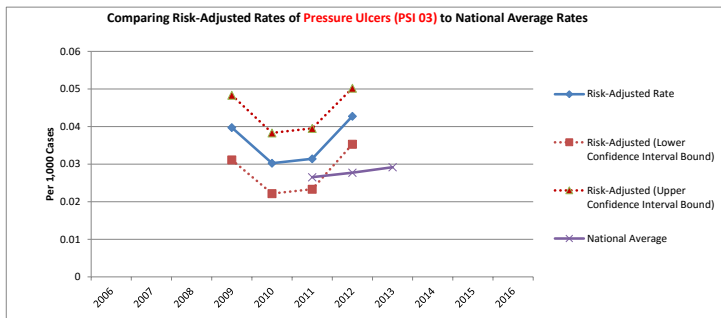
***Note:** Risk-adjusted rates are not available in the most up-to-date version of the ICD-10 software. Future versions of the QI software will allow for risk adjustment and calculation of risk-adjusted rates.

The **risk-adjusted** rate is the estimate of how a hospital would perform on an indicator for an average case mix of patients, rather than its own case mix. This rate can be found in the provider-level reports from the Windows or SAS QI programs.

The **confidence interval of the risk-adjusted rate** is identified in the SAS output as the lower CL (lower confidence limit) and upper CL (upper confidence limit). When creating provider-level reports using the Windows QI software, the user must specify that the confidence levels be included in the report.

The **national average** is the rate used here as a comparison point. You may choose your State's rate, the national rate, or any other rate that you may wish to use as a comparison.

See the other B tools for more information (B1 explains what the rates mean; B2a and B2b show how to use the software with your data and obtain these rates; B5 explains how to use comparators).



Directions: Add your data into the yellow cells beside the relevant year. Remove the "Pressure Ulcers" part of the title and revise it to reflect your PSI or IQR of interest.