

National Radiology Data Registry

Executive Summary Report, Jan-Jun 2016

Sample Facility
(Facility ID: 999999)



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DIR Executive Summary Report from the American College of Radiology

We are pleased to release the Jan-Jun 2016 Dose Index Registry (DIR) Executive Summary report. This report also contains a preview of QCDR report of DIR Non-PQRS measures.

Criteria for inclusion in the report

For an exam to be included in the report, it had to meet the following criteria:

1. The age of the patient to which the exam was administered had to be 18 years or lower for the pediatric reports and over 18 years for adult reports.
2. The name of the exam had to be tagged using the DIR Exam Mapping Tool or, alternatively, the RPID name and number had to be submitted electronically as part of the DICOM header.
3. An Executive Summary Report is provided for exams which have at least 2,000 and 10,000 total records across all facilities for pediatric and adult reports respectively.
4. High Volume Boxplots are provided for the top 10 high volume exams in the DIR for adults and pediatrics for this reporting period.

The tables and charts in this report describe dose indices at the scan level. The three measures that we currently report are SSDE, CTDIvol and DLP. For the boxplots we calculate the CTDIvol and DLP per scan by determining the maximum value of the scans included in the exam. For example, for a CT Abdomen and Pelvis With and Without IV Contrast, if the scan for the 'Without' phase of the exam had a CTDIvol of 30 mGy and the scan for the 'With' phase had a CTDIvol of 25 mGy, then the CTDIvol per Scan would be 30 mGy. In cases where multiple scans were given for the same body region when fewer scans were required, the CTDIvol per Scan will underestimate the total CTDIvol. Timing runs or monitoring scans are excluded before identifying the scan with the highest dose index.

Components of the Report

Adult Executive Summary Table - The Adult Executive Summary provides a quick overview of your facility's data for the most common adult CT exams and a comparison to the overall DIR values. For each of the three dose indices (CTDIvol per scan, DLP per scan and SSDE per scan) your facility values are compared to the DIR values.

Adult High Volume Boxplots - Shows a snapshot of your facility's performance in the DIR top 10 high volume adult CT exams. There are 3 sets of boxplots, one for each dose index, representing the DIR values for an exam. Your facility median is depicted by a red line. Absence of red line means your facility did not perform that exam. The key of the numbered exams are given on the right hand side. SSDE only has values for body exams.

Pediatric Executive Summary Tables - The Pediatric Executive Summary provides a quick overview of your facility's data for the most common pediatric CT exams and a comparison to the overall DIR values by age groups. For each of the dose indices (CTDIvol per scan, DLP per scan and SSDE per scan) your facility values are compared to the DIR values for the corresponding age group.

Pediatric High Volume Boxplots - Shows a snapshot of your facility's performance in the DIR top 10 high volume pediatrics CT exams by age groups. There are 3 sets of boxplots, one for each dose index, representing the DIR values for a particular exam for each age group. Your facility median is depicted by a red line. Absence of a red line means your facility did not perform that exam. The key of the numbered exams are given on the right hand side. SSDE only has values for body exams.

2016 Year-To-Date QCDR Preview Report - Please refer to the QCDR page of this report.

Phantom Size

The value of the dose index that you report for each exam is relative to a particular phantom size. To make accurate comparisons, we standardize the values to a certain phantom size. For all head exams, we standardize to a 16cm phantom. For all body exams, we standardize to a 32cm phantom. The relationship of the two phantoms is $CTDI_{32} \times 2.3 = CTDI_{16}$.

For more information on DIR data processing refer to Bhargavan-Chatfield M, Morin RL. The ACR Computed Tomography Dose Index Registry: the 5 million examination update. J Am Coll Radiol. 2013 Dec;10(12):980-3. doi: 10.1016/j.jacr.2013.08.030.

<http://www.acr.org/~media/ACR/Documents/PDF/QualitySafety/NRDR/DIR/DIR%205%20Million%20Examinations%20Update.pdf>.

Important Note

The dose indices reported can be affected by a number of issues that are not necessarily related to a non-optimal protocol. Before modifying any protocol, please consult your medical physicist. Issues that may affect the dose indices include but are not limited to the following:

1. Protocols/orderables that are mapped to a given RPID, may not actually belong to the assigned RPID (e.g., a protocol mapped to a CT HEAD BRN WO IVCON might actually be a perfusion study).
2. If the phantom size is not recorded/transmitted, it is assumed that all body exams use a 32cm phantom and all head exams use a 16cm phantom, which may not be the case. This could affect $CTDI_{vol}$ in either direction (head exams could appear to be $\frac{1}{2}$ of the true value; body exams could appear to be twice the true value).
3. If your facility sends data from a Toshiba scanner please note **an update to TRIAD is available that processes Toshiba data correctly. If you have not upgraded your software yet, please contact us for a link to the software.**

Fundamentals of Radiation Dose

CT Dose Index (CTDIvol) approximates the average radiation dose to a cross section of the phantom. Dose Length Product (DLP), based on CTDIvol factors in the length of the scan.

Radiation Units in Computed Tomography

Term	Description	Unit
CT Dose Index (CTDIvol)	Radiation energy absorbed per unit mass; for CT, determined for a standard phantom and not a patient	gray (Gy) or milligray (mGy)
Dose Length Product (DLP)	Absorbed dose multiplied by the length of exposure; for CT, determined for a standard phantom and not a patient	milligray-cm (mGy-cm)
Size Specific Dose Estimate	A patient dose estimate which takes into consideration corrections based on the size of the patient	milligray (mGy)

In modern CT scanners, CTDIvol and/or DLP are reported for each CT scan. Although these parameters are tagged to individual patient exams, they do not represent the patient's dose but rather the radiation dose to one of two standard phantoms. CTDIvol is primarily used as a quality assurance tool to compare the dose from techniques using the same size phantom and to compare CT scanner output from different manufacturers' equipment. It has been used to modify technical parameters in an attempt to lower radiation dose in general.

More recently, the American Association of Physicists in Medicine (AAPM) developed a new CT parameter, the size-specific dose estimate (SSDE) to more accurately estimate average cross-sectional dose to an individual patient by factoring in the size of the patient. This value is determined by applying a conversion factor, based on cross-sectional dimensions of the patient, to the CTDIvol.

For more information about SSDE please refer to <http://www.aapm.org/pubs/reports/default.asp#tg204>. Several online educational programs on this topic are available that offer free continuing education. See the Image Wisely Radiation Safety Case® on CT Dose and Size-Specific Dose Estimate (SSDE) (<https://shop.acr.org/Default.aspx?TabID=55&ProductId=12363982>) and Child-sizing CT Dose: Optimizing Patient Care through Quality Improvement (<https://shop.acr.org/Default.aspx?TabID=55&ProductId=88190170>).

Executive Summary Jan-Jun 2016 -Adult

RPID Shortname	CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT ABDOMEN	691	(17/20/25)	(11/15/21)	691	(750/950/1218)	(489/716/1025)	2	(11/12/12)	(9/13/17)
CT ABDOMEN PELVIS	23	(10/11/16)	(9/13/19)	23	(449/539/785)	(448/679/980)	No Data	No Data	(10/13/18)
CT ABDOMEN PELVIS KIDNEY WO IVCON	8438	(9/14/19)	(8/13/19)	8438	(446/711/999)	(393/609/919)	148	(9/11/15)	(8/11/15)
CT ABDOMEN PELVIS KIDNEY WO THEN W IVCON	41	(10/13/18)	(10/14/20)	41	(279/461/634)	(443/661/984)	32	(10/13/17)	(9/12/17)
CT ABDOMEN PELVIS UROGRAPHY WO THEN W IVCON	280	(10/16/20)	(9/13/19)	280	(459/720/970)	(419/622/907)	136	(14/17/20)	(9/12/17)
CT ABDOMEN PELVIS W IVCON	30329	(9/14/19)	(8/12/18)	30306	(449/685/989)	(391/610/927)	5937	(12/15/20)	(9/12/17)
CT ABDOMEN PELVIS WO IVCON	18219	(9/13/18)	(8/13/18)	18212	(453/686/953)	(401/625/947)	2742	(10/14/20)	(9/12/17)
CT ABDOMEN PELVIS WO THEN W IVCON	2887	(10/16/22)	(9/14/20)	2887	(508/788/1114)	(423/657/968)	255	(13/19/22)	(9/13/18)
CT ABDOMEN W IVCON	1075	(7/9/12)	(8/12/18)	1075	(344/473/613)	(292/452/669)	70	(12/15/21)	(9/13/18)
CT ABDOMEN WO IVCON	486	(9/14/19)	(9/14/19)	486	(422/600/863)	(300/502/761)	61	(12/15/23)	(9/13/18)
CT ABDOMEN WO THEN W IVCON	147	(9/14/23)	(9/14/20)	147	(297/546/758)	(276/457/677)	58	(10/15/24)	(10/14/20)
CT C SPINE W IVCON	11	(19/32/34)	(14/19/26)	11	(429/555/579)	(259/395/549)	NA	NA	NA
CT C SPINE WO IVCON	9129	(13/19/25)	(15/20/30)	9126	(270/397/551)	(296/433/653)	NA	NA	NA
CT CHEST	361	(9/12/16)	(6/10/16)	361	(305/397/506)	(210/362/577)	27	(6/7/8)	(6/9/13)
CT CHEST ABDOMEN PELVIS	295	(9/14/18)	(8/12/18)	294	(584/829/1114)	(475/694/1049)	No Data	No Data	(8/11/17)
CT CHEST ABDOMEN PELVIS W IVCON	3240	(10/16/21)	(9/13/19)	3237	(605/903/1242)	(493/768/1129)	625	(13/15/18)	(9/13/19)

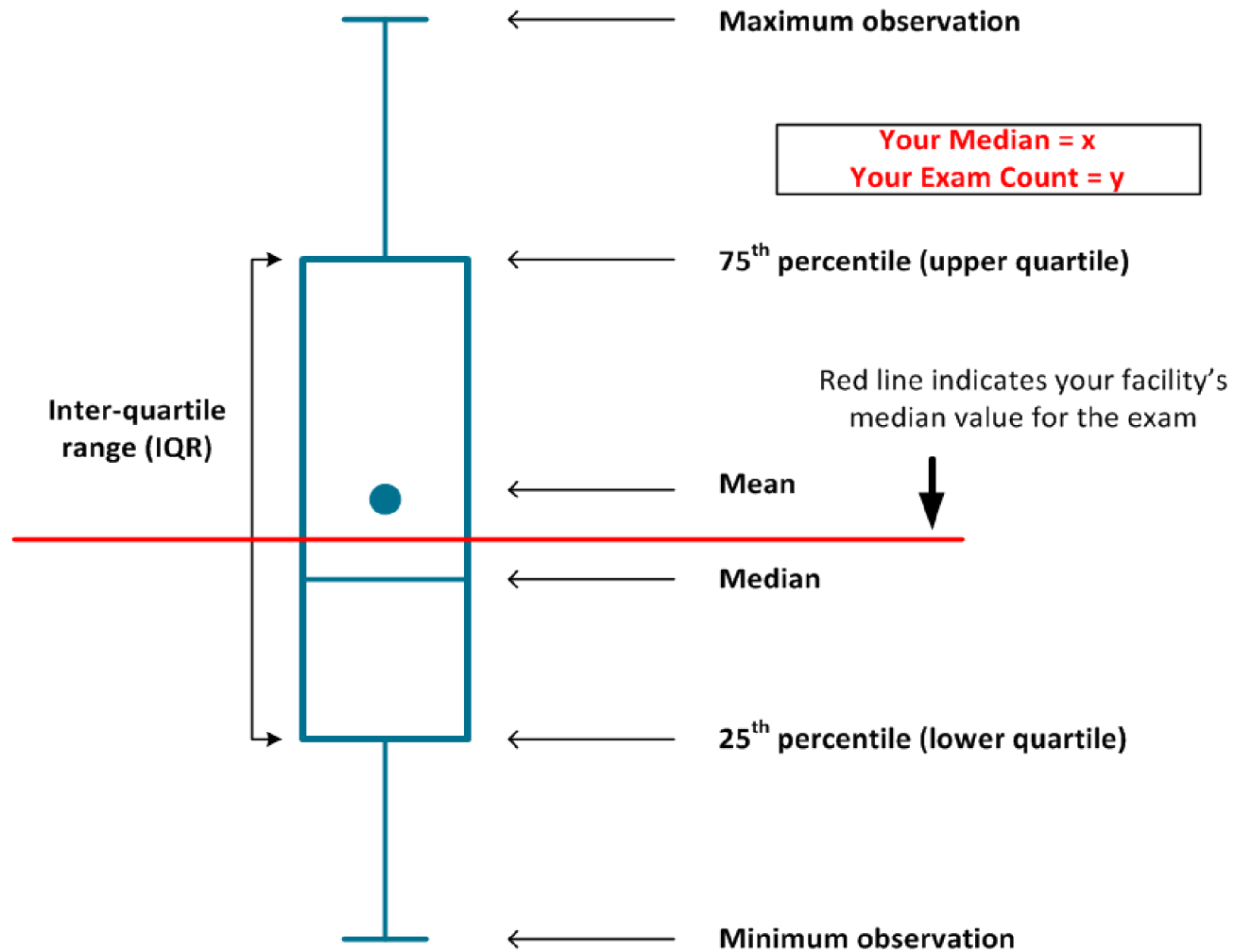
Executive Summary Jan-Jun 2016 -Adult

RPID Shortname	CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT CHEST ABDOMEN PELVIS WO IVCON	252	(11/15/19)	(8/13/18)	250	(661/948/1259)	(515/796/1189)	130	(13/15/19)	(8/11/16)
CT CHEST ABDOMEN W IVCON	97	(9/13/20)	(7/11/17)	96	(449/708/990)	(368/560/874)	25	(12/14/20)	(9/13/18)
CT CHEST ANGIO	229	(8/13/19)	(9/13/20)	229	(321/453/666)	(298/460/678)	No Data	No Data	(8/13/18)
CT CHEST ANGIO W IVCON	888	(10/16/22)	(9/14/20)	888	(322/478/629)	(282/456/678)	121	(10/14/16)	(9/14/19)
CT CHEST ANGIO WO THEN W IVCON	2364	(15/22/29)	(10/15/23)	2364	(505/727/915)	(334/529/855)	2072	(19/25/29)	(9/15/24)
CT CHEST HEART	324	(7/9/9)	(5/7/9)	324	(90/117/144)	(75/105/144)	79	(5/5/6)	(6/7/10)
CT CHEST HEART WO IVCON	454	(5/5/6)	(5/6/9)	454	(64/87/114)	(76/107/145)	149	(5/5/6)	(5/7/10)
CT CHEST HIGH RESOLUTION WO IVCON	269	(8/12/17)	(6/9/14)	268	(252/395/589)	(167/296/475)	21	(8/9/10)	(6/9/14)
CT CHEST LOW DOSE WO IVCON	180	(2/3/3)	(2/2/4)	180	(76/95/116)	(58/83/122)	8	(2/3/3)	(2/2/3)
CT CHEST LUNG BIOPSY GUIDANCE	188	(9/13/37)	(8/15/40)	188	(138/246/863)	(229/466/904)	No Data	No Data	(9/15/53)
CT CHEST PULMONARY ARTERIES ANGIO W IVCON	205	(12/18/21)	(8/12/16)	205	(452/628/757)	(243/369/555)	204	(15/19/21)	(7/10/15)
CT CHEST PULMONARY ARTERIES W IVCON	9889	(12/16/21)	(8/13/19)	9888	(379/517/727)	(260/419/616)	141	(5/8/20)	(8/12/18)
CT CHEST W IVCON	4790	(8/11/16)	(7/11/16)	4785	(268/399/575)	(246/404/628)	668	(8/10/13)	(7/10/15)
CT CHEST WO IVCON	8649	(7/10/15)	(6/9/14)	8633	(231/366/537)	(192/314/499)	2069	(7/11/15)	(6/9/13)
CT FACE MAXILLOFACIAL WO IVCON	468	(11/17/39)	(13/22/36)	468	(172/305/659)	(252/461/703)	NA	NA	NA
CT FACE PARANASAL SINUSES WO IVCON	919	(26/37/55)	(9/19/31)	919	(453/687/992)	(127/297/584)	NA	NA	NA
CT HEAD	2429	(56/56/59)	(45/54/61)	2429	(839/857/958)	(656/843/975)	NA	NA	NA

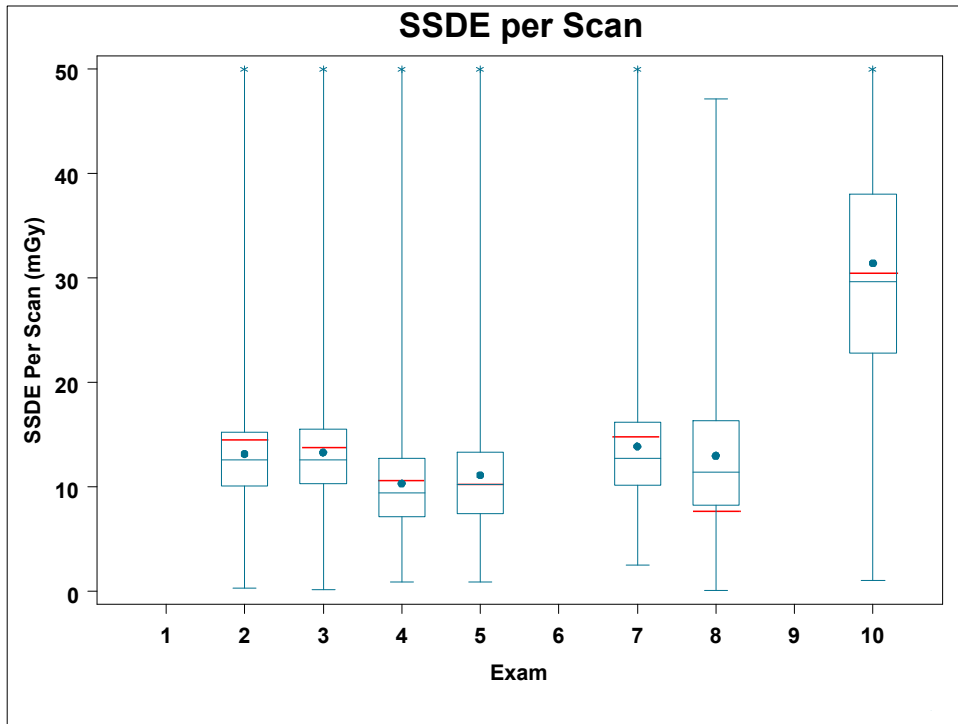
Executive Summary Jan-Jun 2016 -Adult

RPID Shortname	CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT HEAD ANGIO W IVCON	38	(21/37/46)	(24/40/53)	38	(424/745/1549)	(632/927/1315)	NA	NA	NA
CT HEAD ANGIO WO THEN W IVCON	380	(45/54/67)	(40/51/60)	380	(737/1020/1434)	(809/1079/1393)	NA	NA	NA
CT HEAD BRAIN WO IVCON	57811	(45/51/57)	(42/50/58)	57785	(677/798/921)	(669/828/993)	NA	NA	NA
CT HEAD BRAIN WO THEN W IVCON	174	(52/56/59)	(43/52/61)	174	(534/832/946)	(653/851/1032)	NA	NA	NA
CT HEAD C SPINE	2909	(50/55/61)	(47/55/63)	2909	(849/992/1306)	(856/1017/1302)	NA	NA	NA
CT HEAD FACIAL BONES	307	(26/34/40)	(22/37/50)	306	(482/628/791)	(401/650/912)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	699	(20/32/54)	(17/29/44)	699	(366/624/922)	(306/547/808)	NA	NA	NA
CT HEAD NECK ANGIO	617	(37/50/61)	(30/46/54)	617	(954/1330/1922)	(888/1166/1521)	NA	NA	NA
CT HEAD PARANASAL SINUSES WO IVCON	624	(18/24/35)	(10/17/28)	622	(264/413/646)	(153/250/451)	NA	NA	NA
CT L SPINE WO IVCON	4247	(18/27/35)	(16/25/35)	4239	(536/781/1058)	(458/699/1019)	683	(22/30/37)	(20/29/40)
CT LE WO IVCON	321	(7/12/18)	(7/12/18)	321	(169/321/560)	(187/335/613)	NA	NA	NA
CT NECK ANGIO W IVCON	124	(10/16/33)	(13/18/26)	124	(360/476/643)	(391/573/851)	NA	NA	NA
CT NECK W IVCON	1305	(11/15/17)	(11/15/20)	1304	(315/413/505)	(288/421/587)	NA	NA	NA
CT PELVIS W IVCON	291	(10/16/22)	(9/14/20)	291	(336/546/759)	(295/465/702)	58	(12/16/24)	(10/14/19)
CT PELVIS WO IVCON	771	(13/20/30)	(10/16/24)	771	(401/617/947)	(311/498/752)	151	(15/21/33)	(11/16/24)
CT T SPINE WO IVCON	1101	(16/24/32)	(14/21/30)	1101	(519/860/1170)	(506/788/1158)	184	(21/30/35)	(16/24/34)

Box-and-whiskers Plot



Your Facility's Performance on the 10 High Volume DIR Exams (Adult)

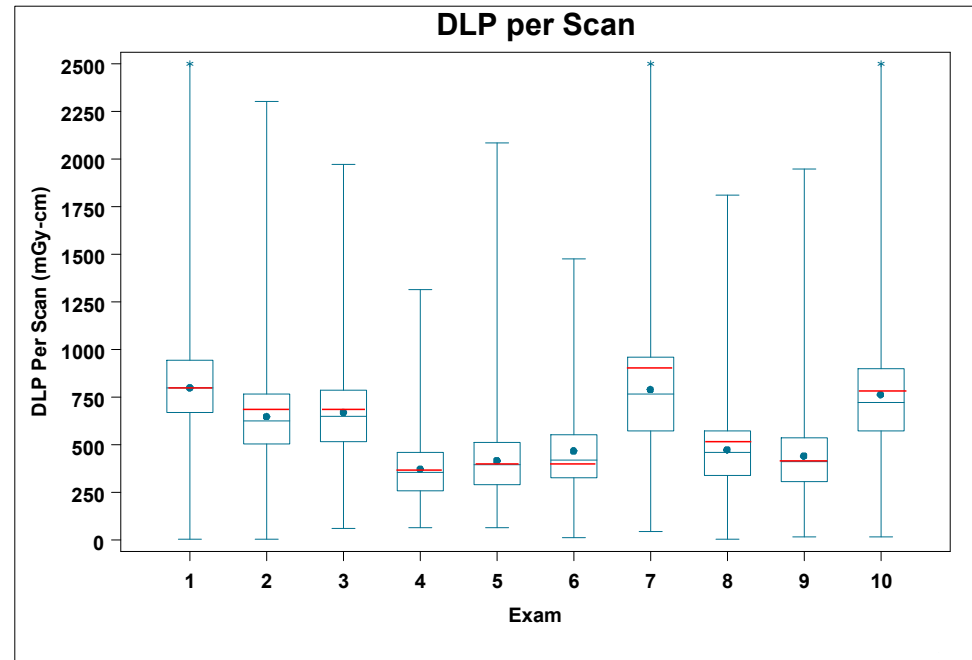
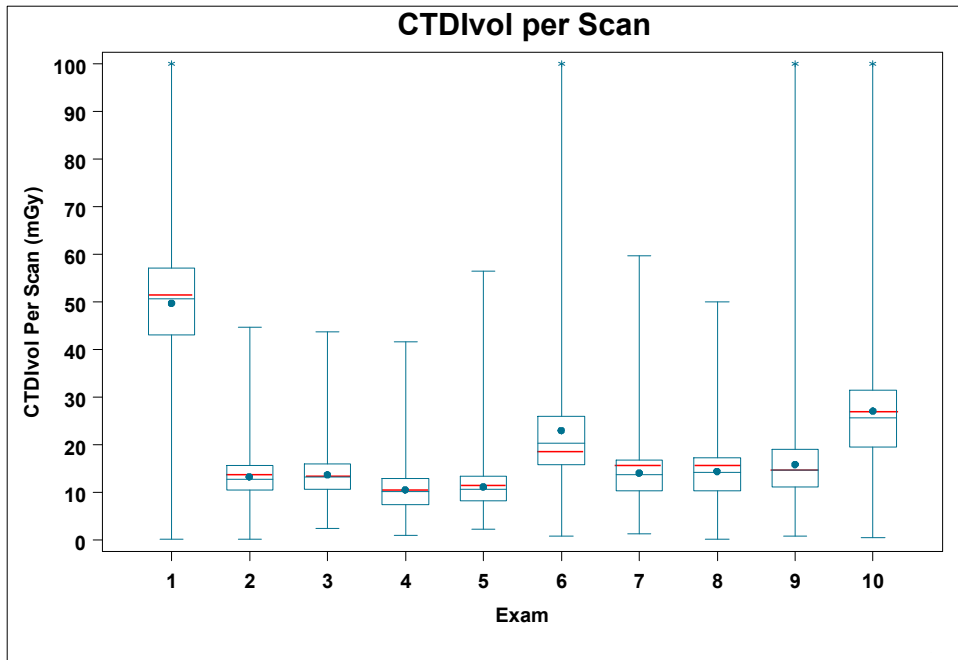


— : Your Facility Median

Exam Key

- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT ABDOMEN PELVIS WO IVCON
- 4 = CT CHEST WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT C SPINE WO IVCON
- 7 = CT CHEST ABDOMEN PELVIS W IV
- 8 = CT CHEST PULMONARY ARTERIES
- 9 = CT NECK W IVCON
- 10 = CT L SPINE WO IVCON

* Extreme outliers were excluded for optimal presentation.



Executive Summary Jan-Jun 2016 -Pediatric

		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT ABDOMEN PELVIS	0-2	49	(30/30/30)	(2/5/30)	49	(182/183/184)	(62/128/184)	No Data	No Data	(4/4/5)
CT ABDOMEN PELVIS	3-6	34	(2/4/10)	(2/3/4)	34	(78/144/184)	(67/95/141)	1	(6/6/6)	(3/5/6)
CT ABDOMEN PELVIS	7-10	96	(2/3/5)	(3/4/6)	96	(86/140/199)	(102/150/231)	1	(7/7/7)	(4/6/8)
CT ABDOMEN PELVIS	11-14	82	(4/5/6)	(4/6/10)	82	(145/208/284)	(175/272/432)	1	(6/6/6)	(6/8/10)
CT ABDOMEN PELVIS	15-18	62	(5/6/8)	(6/9/13)	62	(243/284/386)	(276/438/665)	No Data	No Data	(7/9/13)
CT ABDOMEN PELVIS W IVCON	0-2	14	(2/5/15)	(2/2/3)	14	(74/221/918)	(48/69/102)	1	(2/2/2)	(3/4/5)
CT ABDOMEN PELVIS W IVCON	3-6	43	(2/3/4)	(2/3/4)	43	(55/88/138)	(62/90/129)	17	(3/4/5)	(3/4/5)
CT ABDOMEN PELVIS W IVCON	7-10	104	(2/4/6)	(3/4/5)	104	(99/171/262)	(101/151/229)	40	(4/5/8)	(4/5/7)
CT ABDOMEN PELVIS W IVCON	11-14	171	(5/6/10)	(4/6/9)	171	(197/313/478)	(183/272/406)	45	(8/9/11)	(5/7/10)
CT ABDOMEN PELVIS W IVCON	15-18	585	(6/9/14)	(6/8/12)	585	(303/439/675)	(259/377/589)	125	(8/12/14)	(7/9/12)
CT ABDOMEN PELVIS WO IVCON	0-2	11	(3/11/14)	(2/2/5)	11	(59/426/737)	(57/82/126)	No Data	No Data	(4/4/4)
CT ABDOMEN PELVIS WO IVCON	3-6	19	(2/3/8)	(2/3/4)	19	(71/99/348)	(64/98/146)	2	(2/3/4)	(3/4/5)

Executive Summary Jan-Jun 2016 -Pediatric

		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT ABDOMEN PELVIS WO IVCON	7-10	18	(3/4/7)	(3/4/6)	18	(73/142/281)	(105/161/236)	2	(4/4/5)	(4/5/7)
CT ABDOMEN PELVIS WO IVCON	11-14	43	(5/7/12)	(4/6/9)	43	(247/322/612)	(174/275/413)	2	(6/7/9)	(4/7/10)
CT ABDOMEN PELVIS WO IVCON	15-18	175	(6/8/12)	(6/8/12)	174	(297/399/624)	(254/388/614)	21	(6/9/12)	(6/9/12)
CT C SPINE WO IVCON	0-2	37	(11/18/25)	(2/5/14)	37	(268/374/542)	(34/80/288)	NA	NA	NA
CT C SPINE WO IVCON	3-6	22	(6/8/12)	(3/5/11)	22	(85/133/228)	(43/85/199)	NA	NA	NA
CT C SPINE WO IVCON	7-10	7	(11/12/16)	(4/7/13)	7	(194/205/291)	(69/129/235)	NA	NA	NA
CT C SPINE WO IVCON	11-14	37	(10/12/16)	(7/13/21)	37	(161/233/296)	(135/260/428)	NA	NA	NA
CT C SPINE WO IVCON	15-18	175	(11/15/22)	(12/18/27)	175	(231/326/460)	(252/393/593)	NA	NA	NA
CT CHEST ABDOMEN PELVIS W IVCON	0-2	68	(8/12/16)	(2/2/8)	68	(515/709/951)	(59/82/368)	No Data	No Data	(3/4/4)
CT CHEST ABDOMEN PELVIS W IVCON	3-6	12	(2/5/14)	(2/2/4)	12	(88/195/977)	(70/95/154)	5	(3/3/3)	(3/4/5)
CT CHEST ABDOMEN PELVIS W IVCON	7-10	No Data	No Data	(2/3/5)	No Data	No Data	(97/156/241)	No Data	No Data	(3/4/6)

Executive Summary Jan-Jun 2016 -Pediatric

		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT CHEST ABDOMEN PELVIS W IVCON	11-14	8	(7/15/16)	(4/5/9)	8	(370/725/1182)	(195/293/461)	3	(6/15/26)	(4/6/9)
CT CHEST ABDOMEN PELVIS W IVCON	15-18	28	(7/12/14)	(6/8/13)	28	(383/631/855)	(335/535/831)	3	(8/10/19)	(6/9/14)
CT CHEST W IVCON	0-2	8	(2/3/10)	(1/2/3)	8	(58/108/426)	(26/41/75)	1	(0/0/0)	(2/3/4)
CT CHEST W IVCON	3-6	6	(1/2/4)	(1/2/3)	6	(30/37/89)	(30/49/80)	4	(2/3/3)	(2/3/4)
CT CHEST W IVCON	7-10	3	(2/3/3)	(2/2/4)	3	(41/86/87)	(44/69/123)	3	(4/5/5)	(2/3/4)
CT CHEST W IVCON	11-14	11	(3/5/6)	(3/4/7)	11	(84/101/205)	(81/145/264)	7	(4/5/9)	(3/5/7)
CT CHEST W IVCON	15-18	27	(5/7/13)	(4/7/11)	27	(180/222/430)	(151/262/473)	7	(7/9/15)	(4/7/10)
CT CHEST WO IVCON	0-2	5	(2/3/7)	(1/1/2)	5	(34/37/47)	(19/26/41)	1	(8/8/8)	(2/2/3)
CT CHEST WO IVCON	3-6	3	(1/2/4)	(1/2/3)	3	(29/69/121)	(25/36/60)	No Data	No Data	(2/3/4)
CT CHEST WO IVCON	7-10	6	(1/2/5)	(2/2/4)	6	(36/60/136)	(38/60/100)	2	(2/3/3)	(2/3/5)
CT CHEST WO IVCON	11-14	11	(3/4/10)	(2/4/5)	11	(82/119/368)	(68/107/178)	8	(4/6/14)	(3/4/6)
CT CHEST WO IVCON	15-18	32	(4/5/9)	(3/5/8)	32	(133/189/345)	(113/174/268)	10	(6/8/11)	(4/5/8)
CT HEAD	0-2	1	(60/60/60)	(17/24/49)	1	(240/240/240)	(232/295/413)	NA	NA	NA
CT HEAD	3-6	1	(60/60/60)	(20/32/56)	1	(240/240/240)	(262/295/403)	NA	NA	NA

Executive Summary Jan-Jun 2016 -Pediatric

		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT HEAD	7-10	No Data	No Data	(20/30/33)	No Data	No Data	(253/414/576)	NA	NA	NA
CT HEAD	11-14	4	(50/56/61)	(29/35/51)	4	(741/781/888)	(277/556/874)	NA	NA	NA
CT HEAD	15-18	21	(53/56/56)	(37/52/61)	21	(802/839/901)	(414/688/942)	NA	NA	NA
CT HEAD BRAIN WO IVCON	0-2	407	(19/25/43)	(16/22/29)	407	(253/337/529)	(228/333/464)	NA	NA	NA
CT HEAD BRAIN WO IVCON	3-6	370	(21/26/31)	(16/23/29)	369	(262/353/466)	(249/362/497)	NA	NA	NA
CT HEAD BRAIN WO IVCON	7-10	341	(23/29/36)	(21/27/36)	341	(304/430/520)	(318/452/596)	NA	NA	NA
CT HEAD BRAIN WO IVCON	11-14	500	(26/35/46)	(26/34/45)	500	(403/535/720)	(428/582/754)	NA	NA	NA
CT HEAD BRAIN WO IVCON	15-18	1021	(36/47/55)	(33/44/55)	1020	(537/695/832)	(544/720/920)	NA	NA	NA
CT HEAD FACIAL BONES	0-2	2	(19/29/39)	(9/14/24)	2	(354/595/836)	(120/216/425)	NA	NA	NA
CT HEAD FACIAL BONES	3-6	4	(16/22/28)	(7/11/18)	4	(279/383/449)	(104/189/308)	NA	NA	NA
CT HEAD FACIAL BONES	7-10	4	(14/20/24)	(8/14/25)	4	(238/333/362)	(118/225/403)	NA	NA	NA
CT HEAD FACIAL BONES	11-14	7	(14/19/30)	(9/16/29)	7	(436/475/751)	(162/277/528)	NA	NA	NA

Executive Summary Jan-Jun 2016 -Pediatric

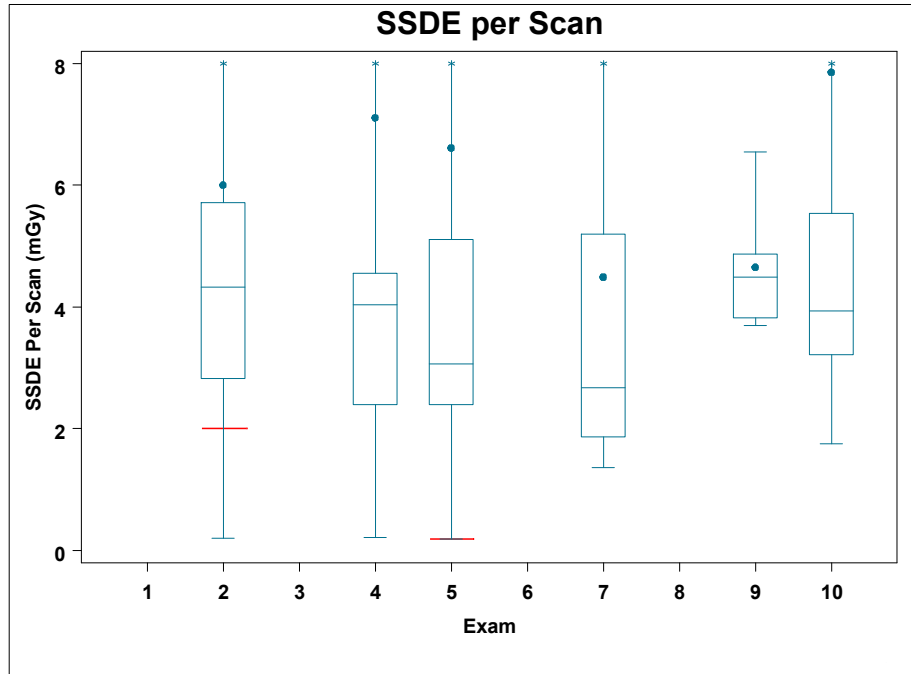
		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT HEAD FACIAL BONES	15-18	18	(23/32/36)	(14/25/41)	18	(411/583/730)	(245/478/785)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	0-2	2	(7/31/54)	(8/15/30)	2	(130/594/1058)	(105/238/425)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	3-6	5	(8/14/21)	(8/13/25)	5	(127/234/418)	(110/208/419)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	7-10	14	(18/21/34)	(9/15/30)	14	(228/377/447)	(131/247/451)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	11-14	11	(21/50/84)	(11/19/31)	11	(476/859/1391)	(183/327/575)	NA	NA	NA
CT HEAD MAXILLOFACIAL WO IVCON	15-18	30	(19/28/53)	(15/23/39)	30	(392/532/882)	(247/462/714)	NA	NA	NA
CT HEAD PARANASAL SINUSES WO IVCON	0-2	7	(42/45/47)	(5/9/18)	7	(856/970/1119)	(59/94/250)	NA	NA	NA
CT HEAD PARANASAL SINUSES WO IVCON	3-6	9	(4/4/5)	(3/7/12)	9	(51/63/77)	(45/82/165)	NA	NA	NA

Executive Summary Jan-Jun 2016 -Pediatric

		CTDIvol Per Scan			DLP Per Scan			SSDE Per Scan		
		Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites	Your Facility (999999)		All DIR Sites
ShortName Report	Age Group	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)	N	(25th-Med-75th)	(25th-Med-75th)
CT HEAD PARANASAL SINUSES WO IVCON	7-10	8	(4/5/15)	(5/9/15)	8	(81/102/193)	(71/123/234)	NA	NA	NA
CT HEAD PARANASAL SINUSES WO IVCON	11-14	13	(5/5/9)	(5/10/19)	13	(94/116/163)	(83/151/310)	NA	NA	NA
CT HEAD PARANASAL SINUSES WO IVCON	15-18	22	(5/18/26)	(8/13/22)	22	(107/268/431)	(116/199/379)	NA	NA	NA
CT NECK W IVCON	0-2	2	(2/9/16)	(2/3/5)	2	(41/153/264)	(40/61/99)	NA	NA	NA
CT NECK W IVCON	3-6	12	(2/3/10)	(3/4/6)	12	(49/67/147)	(47/78/116)	NA	NA	NA
CT NECK W IVCON	7-10	16	(3/6/11)	(3/5/7)	15	(67/123/244)	(69/111/170)	NA	NA	NA
CT NECK W IVCON	11-14	13	(5/6/8)	(5/7/12)	13	(117/174/238)	(119/196/316)	NA	NA	NA
CT NECK W IVCON	15-18	38	(10/12/15)	(7/11/15)	38	(242/322/429)	(188/300/443)	NA	NA	NA

Your Facility's Performance on the 10 High Volume DIR Exams (Pediatric)

Age group 0-2

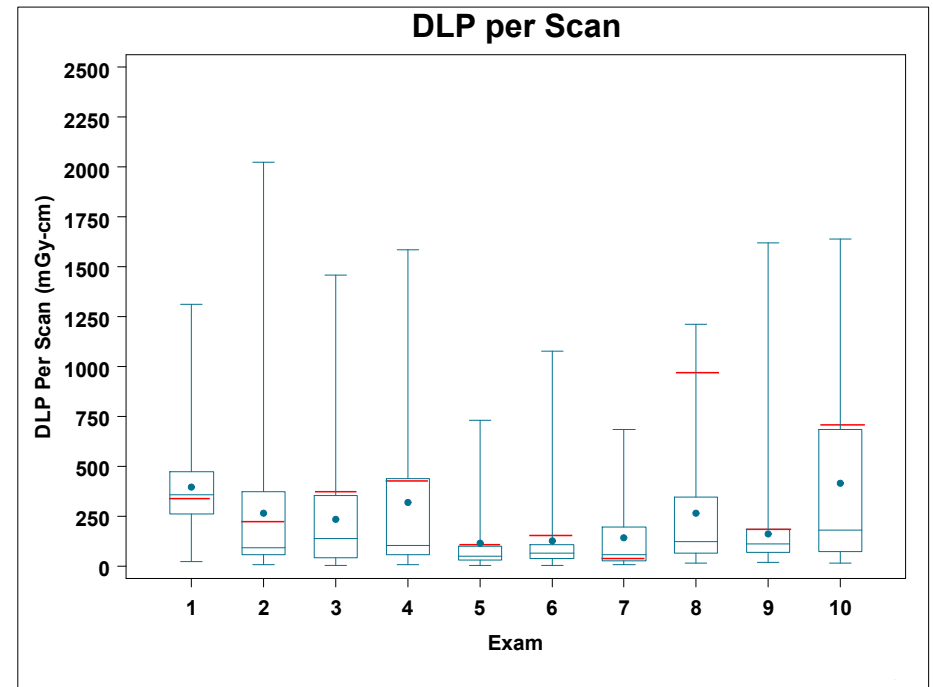
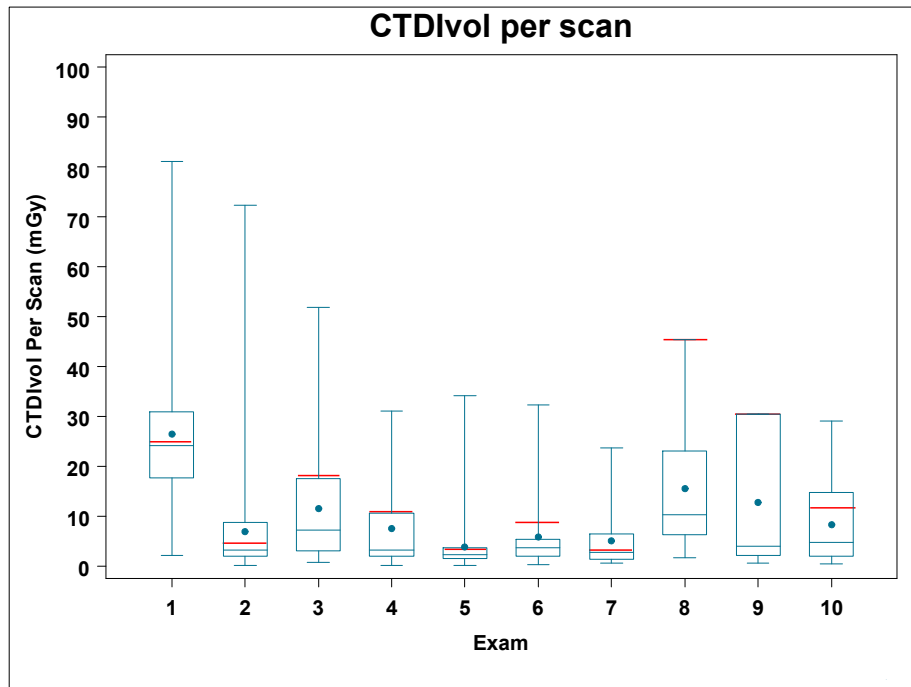


— : Your Facility Median

Exam Key

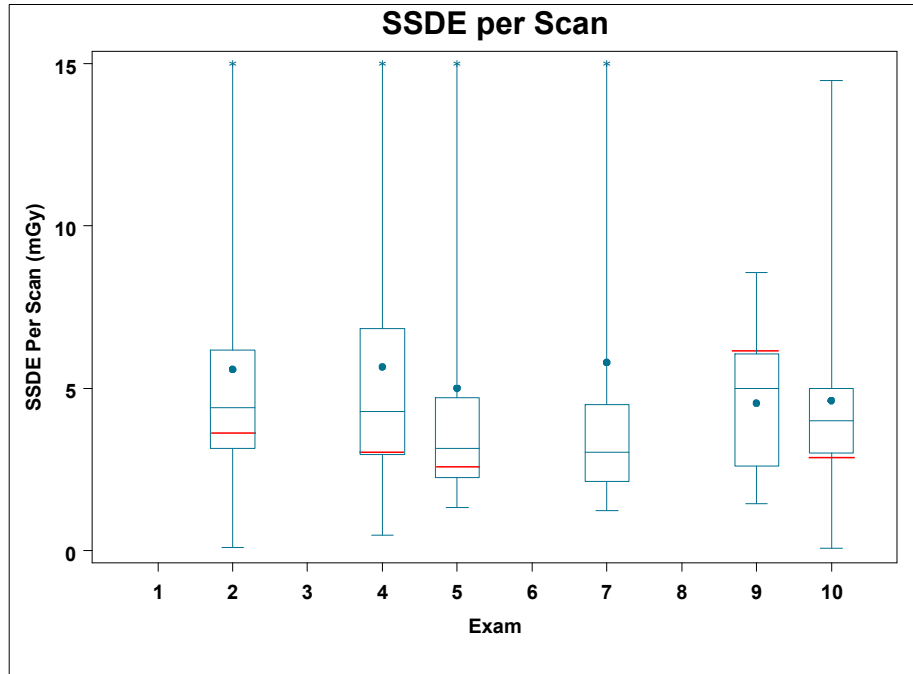
- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT C SPINE WO IVCON
- 4 = CT ABDOMEN PELVIS WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT NECK W IVCON
- 7 = CT CHEST WO IVCON
- 8 = CT HEAD PARANASAL SINUSES WO
- 9 = CT ABDOMEN PELVIS
- 10 = CT CHEST ABDOMEN PELVIS W IV

**Extreme outliers were excluded for optimal presentation.*



Your Facility's Performance on the 10 High Volume DIR Exams (Pediatric)

Age group 3-6

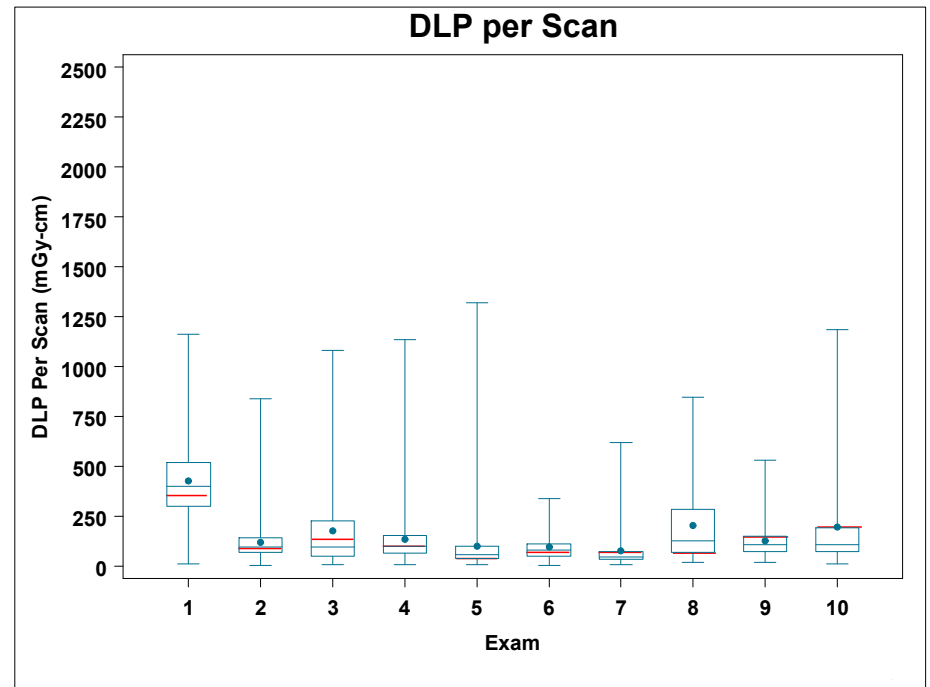
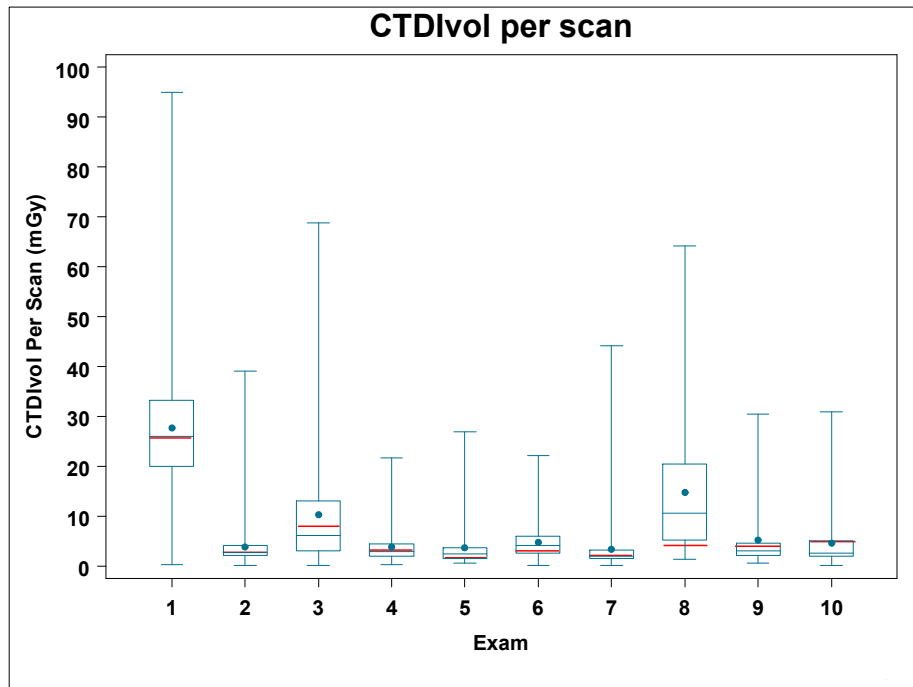


— : Your Facility Median

Exam Key

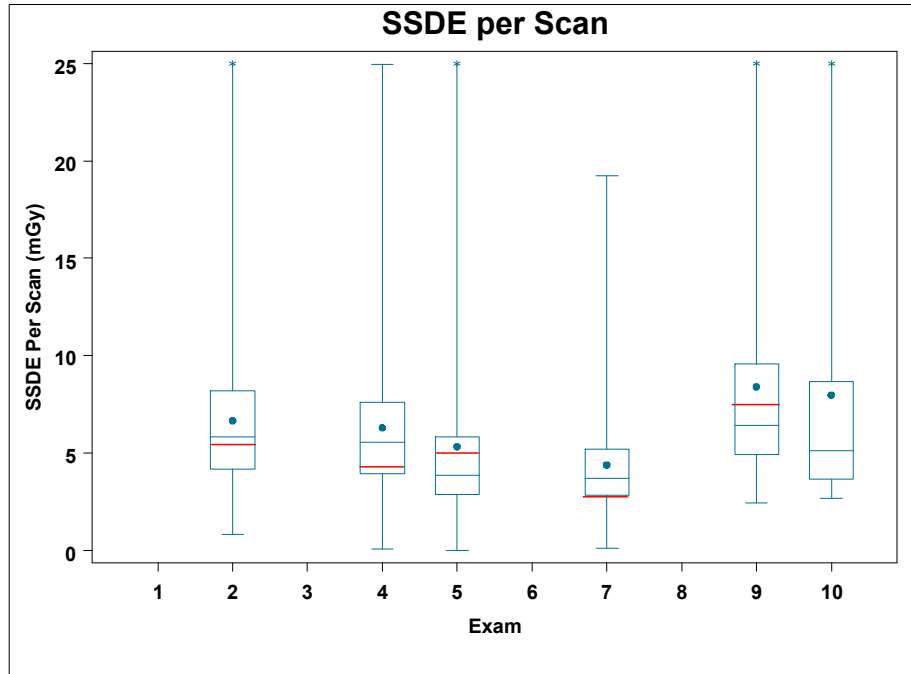
- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT C SPINE WO IVCON
- 4 = CT ABDOMEN PELVIS WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT NECK W IVCON
- 7 = CT CHEST WO IVCON
- 8 = CT HEAD PARANASAL SINUSES WO
- 9 = CT ABDOMEN PELVIS
- 10 = CT CHEST ABDOMEN PELVIS W IV

**Extreme outliers were excluded for optimal presentation.*



Your Facility's Performance on the 10 High Volume DIR Exams (Pediatric)

Age group 7-10

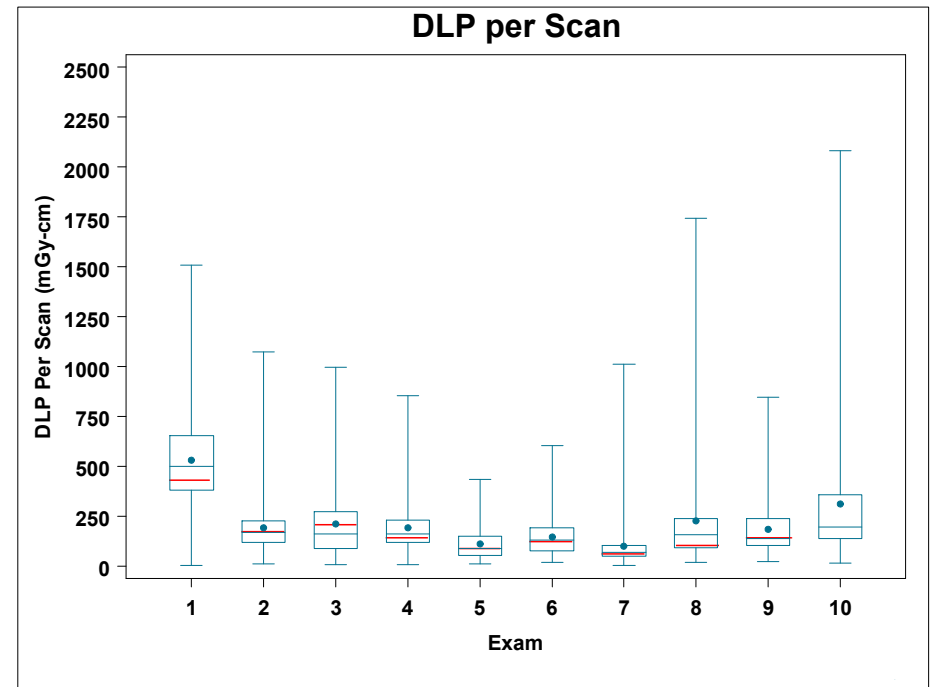
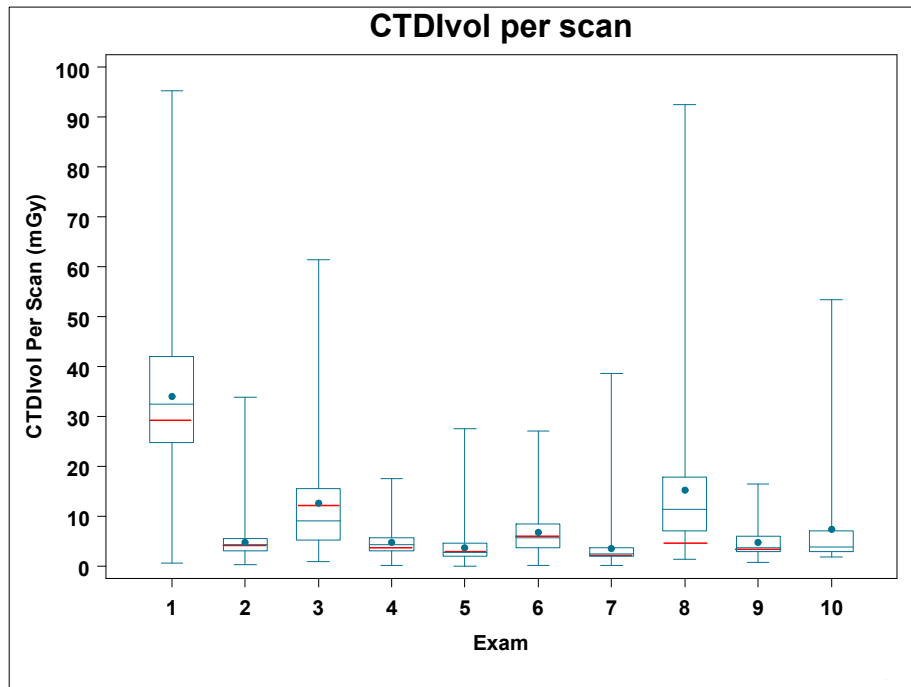


— : Your Facility Median

Exam Key

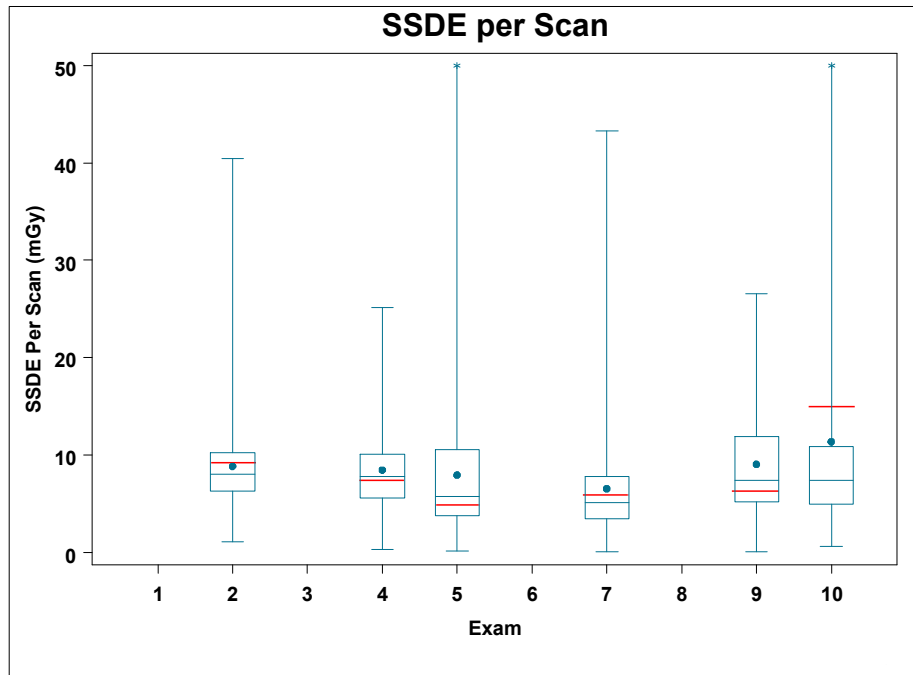
- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT C SPINE WO IVCON
- 4 = CT ABDOMEN PELVIS WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT NECK W IVCON
- 7 = CT CHEST WO IVCON
- 8 = CT HEAD PARANASAL SINUSES WO
- 9 = CT ABDOMEN PELVIS
- 10 = CT CHEST ABDOMEN PELVIS W IV

*Extreme outliers were excluded for optimal presentation.



Your Facility's Performance on the 10 High Volume DIR Exams (Pediatric)

Age group 11-14

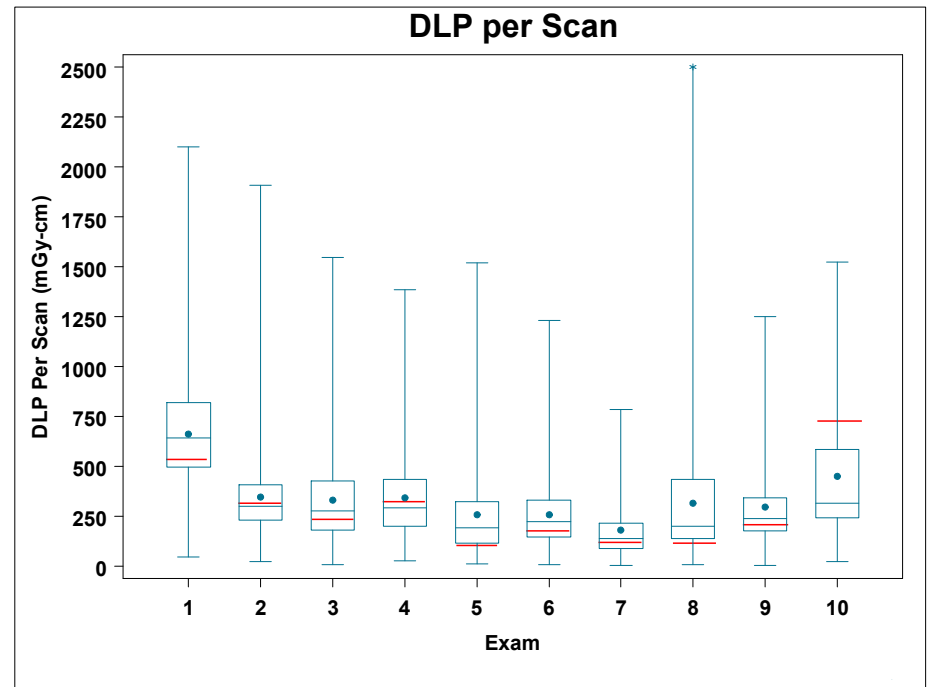
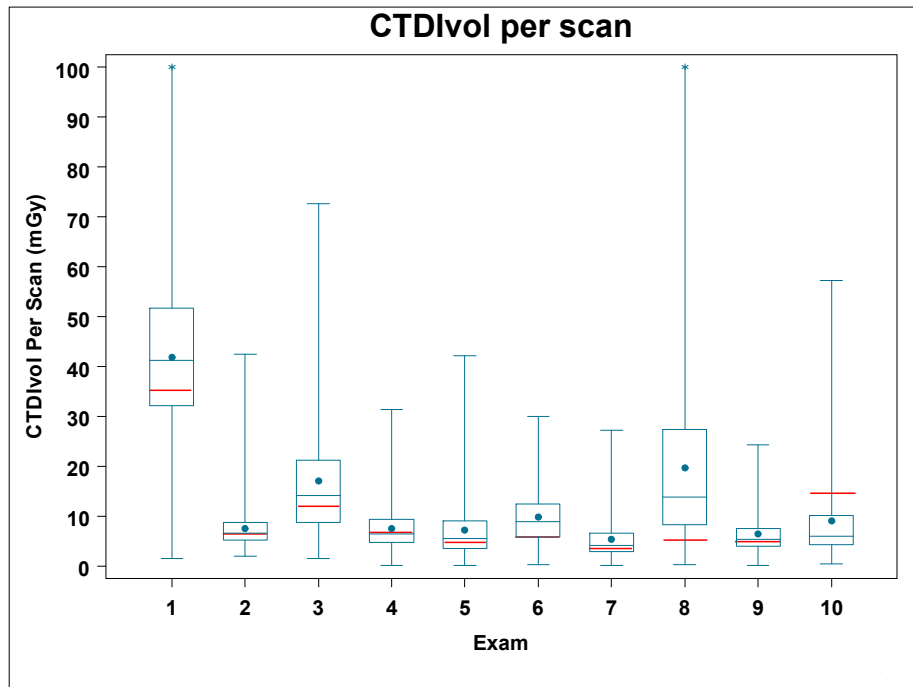


— : Your Facility Median

Exam Key

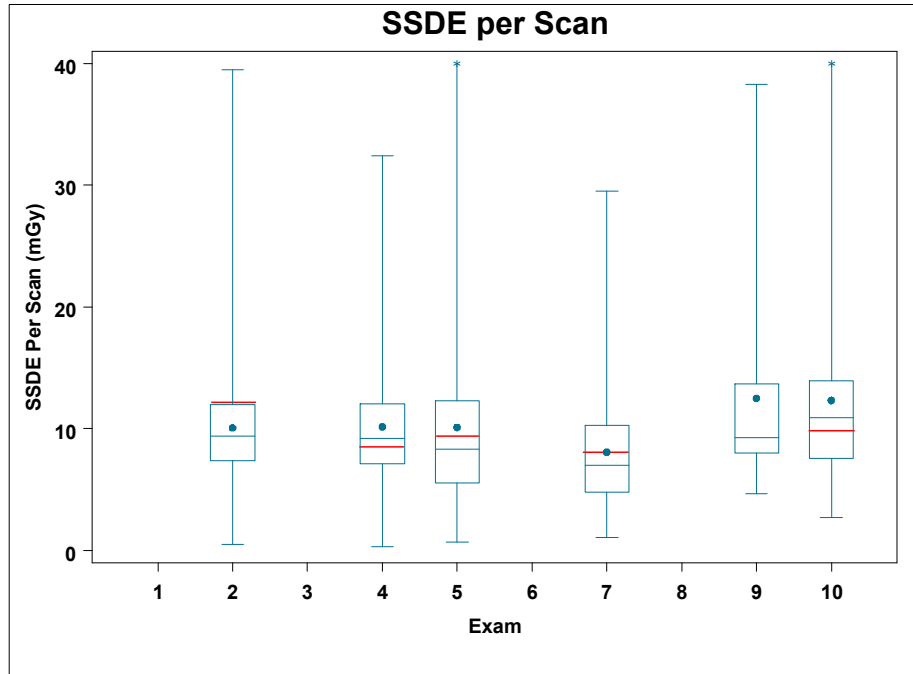
- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT C SPINE WO IVCON
- 4 = CT ABDOMEN PELVIS WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT NECK W IVCON
- 7 = CT CHEST WO IVCON
- 8 = CT HEAD PARANASAL SINUSES WO
- 9 = CT ABDOMEN PELVIS
- 10 = CT CHEST ABDOMEN PELVIS W IV

**Extreme outliers were excluded for optimal presentation.*



Your Facility's Performance on the 10 High Volume DIR Exams (Pediatric)

Age group 15-18

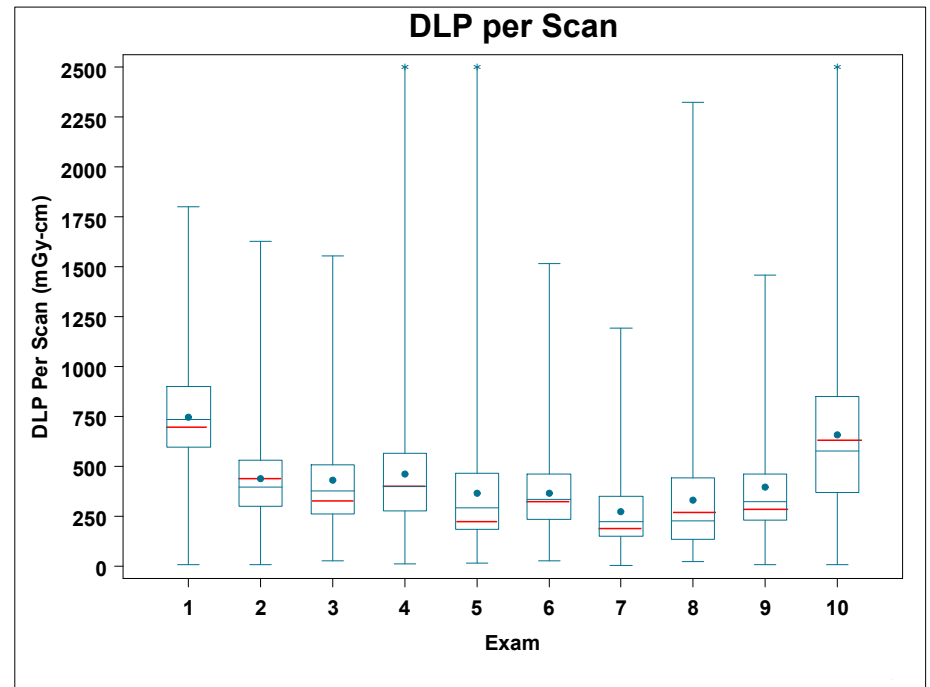
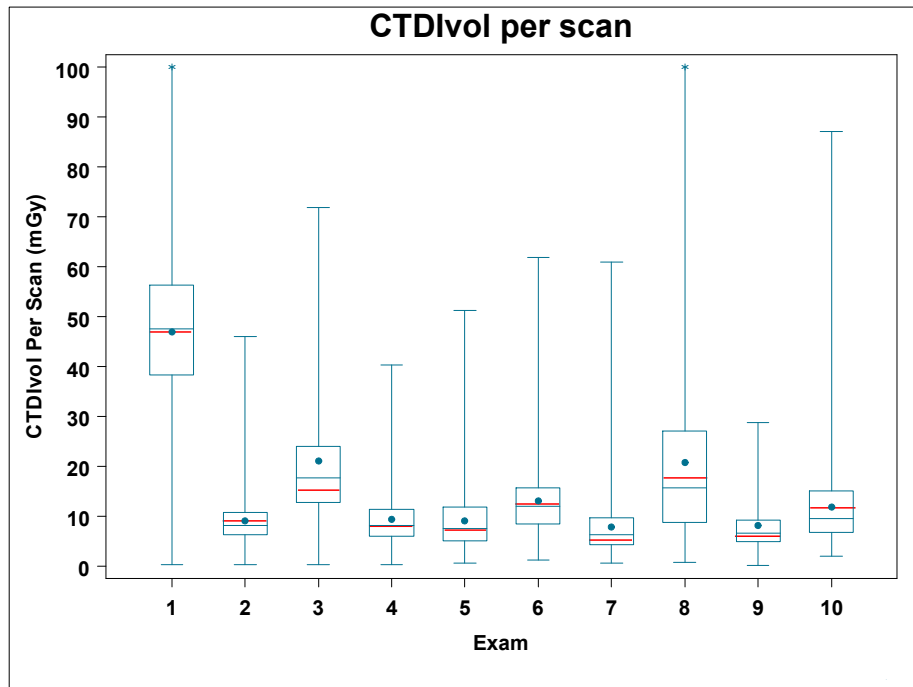


— : Your Facility Median

Exam Key

- 1 = CT HEAD BRAIN WO IVCON
- 2 = CT ABDOMEN PELVIS W IVCON
- 3 = CT C SPINE WO IVCON
- 4 = CT ABDOMEN PELVIS WO IVCON
- 5 = CT CHEST W IVCON
- 6 = CT NECK W IVCON
- 7 = CT CHEST WO IVCON
- 8 = CT HEAD PARANASAL SINUSES WO
- 9 = CT ABDOMEN PELVIS
- 10 = CT CHEST ABDOMEN PELVIS W IV

**Extreme outliers were excluded for optimal presentation.*



Using Your DIR Data for Physician Quality Reporting System (PQRS) Participation

In 2015, the NRDR was approved by CMS as a Qualified Clinical Data Registry (QCDR); a new reporting mechanism that eligible professionals can use to satisfy requirements for the PQRS program.

Unlike the traditional qualified 'reporting' registries, a QCDR offers 'non-PQRS' registry measures in addition to PQRS measures. For more information, please visit the NRDR QCDR web-site

<http://www.acr.org/Quality-Safety/National-Radiology-Data-Registry/Qualified-Clinical-Data-Registry>

Data are collected and aggregated automatically as part of your NRDR participation. Non-PQRS measures specific to the registry that are included in the QCDR are shown in your quarterly registry reports. Upon authorization, review and approval by the physician, QCDR measure data will be submitted to the CMS on the physician's behalf in March following the end of the reporting year.

In the DIR QCDR report, the table shows the values for your facility as compared to the mean and standard deviation (SD) across DIR facilities for the selected 6 non-PQRS measures (ACRad 9 through ACRad 14) from the DIR. This table also includes the number of total exams submitted by your facility (# Submitted to DIR), counts by reason why an exam record may be invalid for the calculation of the measure for submission to CMS (# Invalid) and exams that qualified for submission to the CMS at the end of the reporting year (#Valid Exams Submitted).

If your physician group chooses to use any of these measures for PQRS these facility-level values will be reported for all the physicians who interpret CTs at this location. Please review these numbers to make sure that they describe your practice accurately and that exam volumes reported here are similar to exam volumes in your PACS or other sources.

2016Q1Q2 QCDR Preview Report : Facility 999999

QCDR Measure	Your Facility (999999) Measures (2016 Year-To-Date)			Aggregate across DIR Facilities (2016 Year-To-Date)			
	Submitted to DIR ¹	#Invalid ²	#Valid Exams Submitted	Performance Measure Median	Performance Measure Rate	Performance Measure Mean	Performance Measure Standard Deviation
CT HEAD BRAIN WO IVCON DLP (ACRad 9)	60386	202	60184	854.5	.	857.2	276.7
CT CHEST WO IVCON SSDE (ACRad 10)	8803	6741	2062	11.0	.	10.7	7.0
CT CHEST WO IVCON DLP (ACRad 11)	8803	39	8764	390.2	.	375.6	180.1
CT ABDOMEN PELVIS W IVCON SSDE (ACRad 12)	31235	25095	6140	14.8	.	16.9	11.1
CT ABDOMEN PELVIS W IVCON DLP (ACRad 13)	31235	94	31141	794.4	.	761.4	345.8
CT EXAMS SUBMITTED (ACRad 14)†	208290	1186	207104	.	99.4	99.4	1.9

¹Includes all exams submitted to the DIR, including invalid exams for Jan-Jun 2016

²For ACRad 9, ACRad 11, ACRad 13, and ACRad 14 exams are invalid if they have missing values for CTDIvol or DLP. For ACRad 10 and ACRad 12 exams are invalid if they have missing CTDIvol or missing localizers.

†This measure assumes that 100% of exams from your facility were sent to the DIR. If that is not the case, this measure will be adjusted before submission. All dose indices were calculated for exam total (per exam) values for total number of exams submitted (adult and pediatric).

Value modifier payments are based on your facility's performance relative to registry average and SD. Negative adjustments may apply if your values are 1 SD above registry mean, and positive adjustments may apply if your values are 1 SD below registry mean.

Interactive Standardized Dose Index Report

Summary Comparison

Exam Search	Scatter Plot Over Time	Box Plot by Scanner	Box Plot by RPID/Study Description	Summary Comparison
-------------	------------------------	---------------------	------------------------------------	--------------------

Facility: 100853:Public DIR Facility
Data Type: CTDIvol Max across scans
RPID Display: 50
Age Group: Adult Pediatric
From: [Set As Today] **To:** Default Today
 To select more than one Scanner/RPID/Exam Type, Hold down the Control key and click on the desired exams.
 RPID Order by: Short Name **[Large]**
 All
 CT (RPID88)
 CT ABD PELVIS KIDNEY CALC (RPID390)
 CT ABD PELVIS W IVCON (RPID145)
 CT CHST (RPID246)

RPID count: 2 **Excel**

Age Group	N	25th%ile	Median	75th%ile
CT ABD PELVIS W IVCON (RPID145)				
Over 18	3	12.64	12.99	15.40
All DIR Sites	377821	8.5	12.69	18.77
Metropolitan (> 100,000)	217390	8.71	12.72	18.81
Division: South Atlantic	79796	9	12.96	18.84
Freestanding imaging center	29523	9	12.53	17.74
CT CHST (RPID246)				
Over 18	5	5.33	10.49	28.15
All DIR Sites	26113	6.15	9.86	16.13
Metropolitan (> 100,000)	20036	5.95	9.37	16.12
Division: South Atlantic	4483	7.6	11.4	17.89
Freestanding imaging center	5705	4.48	6.47	9.83

Search

The Standardized DIR report enables you to visualize the distribution of your exams in almost real-time. It incorporates localizers with the CTDIvol received from the facility and removes timing runs and bolus tracking. For more detailed information refer to <http://www.acr.org/~media/ACR/Documents/PDF/QualitySafety/NRDR/DIR/Standardized%20DIR%20Report%20User%20Guide.pdf>

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