



History of the National Health Insurance Cost for Radiological Examinations and Value of the Radiological Report Fee

영상의학과 보험수가 역사와 판독료의 가치

ORCID iD

Choong Wook Lee

https://

orcid.org/0000-0001-8776-2603

Choong Wook Lee, MD*

Department of Radiology and the Research Institute of Radiology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea

J Korean Soc Radiol 2020;81(5):1038-1052

https://doi.org/10.3348/jksr.2020.0123

The author discovered some errors in Tables 1, 4, 5, 6 and Supplementary Tables 4, 5, 6. The corrected table appears below.

Table 1. The First Standard of Medical Costs and Guidelines for the Medical Fee Estimation Established in 1977

Category Code	No. of Article	Category Content	Category Code	Examination	Score
A	5	Basic medical treatment	C-1	Fluoroscopy reading	
B	107	Examination		a. Without contrast media	85
C	11	X-ray reading & examination		b. With contrast media	113
D	3	Medication & prescription	C-2	General reading	
E	14	Injection		a. Examinations of Category 'C-3 (a)' or 'C-5 (a), (c) or (d)'	62
F	9	Anesthesia		b. Examinations of Category 'C-4' or 'C-5 (c)'	91
G	13	Physical therapy		c. Others	34
H	11	Neuropsychiatric therapy	C-3	Simple radiography	
I	590	Treatment & surgery		a. Head, Thorax, Spine or Pelvis	73
Total (9)	763			b. Phalanx & Carpal/Tarsal bones	51
				c. Others	62
			C-4	Special radiography	
				a. Tomography (1ea)	298
			C-5	Radiography using contrast media	
				a. Digestive system	142
				b. Heart or Vascular system (1ea)	1249
				c. Myelography	340
				d. Others	170

Adapted from Ministry of Health and Social Affairs. Notice No. 16 (3).

Table 4. The Global RVUs (Sum of the Technical and Professional RVUs) and the Converted Price of Major Radiology Examinations Informed in 2000

Examination	RVUs	Converted Price (KRW)
Simple radiography		
Head, chest, abdomen, spine	70.22	3890
Upper gastrointestinal series	496.75	27520
CT		
Head	1188.96	65870
Chest	1583.12	87700
Abdomen	1595.43	88390
Spine	1583.69	87740

*Add 10% of the RVU for the examinations using contrast media

*Add 30% of the RVU for the phase 2 dynamic CT, phase 3 dynamic CT, 3-dimension CT, CT arthrography, cine CT and CT cisternography

Adapted from Ministry of Health and Welfare. Notice No. 2000-67 (12).

KRW = Korean won, RVU = relative value unit

Table 5. Changes in RVUs of Major Radiology Examinations After the First Edition (2013) and the Second Edition (2020) of Relative Value Scales

Examination	RVUs		
	2007	2013	2020
Simple radiography			
Chest	70.22	79.67	75.53
Abdomen	70.22	54.23	48.69
Upper gastrointestinal series	496.75	484.55	451.25
CT			
Brain (without contrast media)	1188.96	916.93	773.87
Chest (with contrast media)	1741.43	1466.55	1379.27
Abdomen & pelvis (with contrast media)	1754.97	1413.27	1379.27
Spine (without contrast media)	1583.69	1201.34	1004.22
MRI: basic			
Knee joint (general, without contrast media)	3773.79	2819.05	2513.43
Lumbosacral spine (general, without contrast)	3430.72	2627.86	2385.25
MRI: special			
Diffusion	2401.50	1787.98	1678.22
Angiography			
Superior mesenteric arteriography	1429.57	4058.68	4043.01

Adapted from Health Insurance Review & Assessment Service. The Benefit Package of National Health Insurance 2007, 2013, 2020 (19, 20, 22).

RVUs = relative value units

Table 6. RVUs of the Major Ultrasonography Examinations in January 2020

Examinations	RVUs	Converted Price (KRW)
Neck ultrasonography: thyroid, parathyroid	769.83	58661
Breast-axilla ultrasonography	1037.52	79059
Abdominal ultrasonography		
Liver·GB·bile duct·spleen·pancreas		
1) General	1021.64	77849
2) Detailed	1517.17	115608
Appendix	932.49	71056
Male genital ultrasonography		
Prostate·seminal esicle (transrectum)	963.88	73447

Adapted from Health Insurance Review & Assessment Service. The Benefit Package of National Health Insurance 2020 (22).

GB = gallbladder, KRW = Korean won, RVUs = relative value units

Supplementary Table 4. 주요 영상의학검사의 촬영료와 판독료가 통합된 상대가치점수와 환산수가(2000. 12.)

검사명	상대가치점수	환산수가 (원)
단순영상촬영		
두부, 흉부, 복부, 경추	70.22	3890
위장조영	496.75	27520
전산화단층촬영		
두부	1188.96	65870
흉부	1583.12	87700
복부	1595.43	88390
경추	1583.69	87740

*조영제 주입 후 촬영, 판독한 경우에는 소정점수의 10%를 가산한다

*이중시기 CT, 삼중시기 CT, 삼차원 CT, CT 혈관조영, 관절 관 또는 강내조영 촬영, Cine CT, 뇌조 CT를 실시한 경우에는 소정점수의 30%를 가산한다

Adapted from Ministry of Health and Welfare. Notice No. 2000-67 (12).

Supplementary Table 5. 1차 상대가치 개정(2013년)과 2차 상대가치 개정(2020년)에 따른 주요 영상의학검사의 상대가치점수 변화

검사명	상대가치점수		
	2007년	2013년	2020년
단순영상촬영			
흉부	70.22	79.67	75.53
복부	70.22	54.23	48.69
위장조영	496.75	484.55	451.25
전산화단층촬영			
두부(조영제를 사용하지 않는 경우)	1188.96	916.93	773.87
흉부(조영제를 사용하는 경우)	1741.43	1466.55	1379.27
복부(조영제를 사용하는 경우)	1754.97	1413.27	1379.27
척추(조영제를 사용하지 않는 경우)	1583.69	1201.34	1004.22
자기공명영상: 기본검사			
슬관절(일반)	3773.79	2819.05	2513.43
요천추(일반)	3430.72	2627.86	2385.25
자기공명영상: 특수검사			
확산	2401.50	1787.98	1678.22
혈관조영촬영			
상장간막동맥	1429.57	4058.68	4043.01

Adapted from Health Insurance Review & Assessment Service. The Benefit Package of National Health Insurance 2007, 2013, 2020 (19, 20, 22).

Supplementary Table 6. 주요 초음파 검사의 상대가치점수(2020년 1월 기준)

검사명	상대가치점수	환산수가 (원)
경부 초음파: 감상선, 부갑상선	769.83	58661
유방·액와부 초음파	1037.52	79059
복부 초음파		
간·담낭·담관·비장·췌장		
1) 일반	1021.64	77849
2) 정밀	1517.17	115608
총수	932.49	71056
남성생식기 초음파		
전립선·정낭(경직장 검사)	963.88	73447

Adapted from Health Insurance Review & Assessment Service. The Benefit Package of National Health Insurance 2020 (22).