
RESULTS OF THE 2014 PRIMARY EXAMINATION IN SONOGRAPHY



January 2015

Purpose. This report summarizes performance of candidates on the ARRT primary examination in Sonography during 2014. The ARRT Sonography exam has been administered since 2000, and the primary pathway has been available for graduates of accredited educational programs since 2005.

Exams administered in 2014 were based on content specifications that went into effect in January 2013. These specifications are based on the most recent practice analysis study, completed in 2012. The 2013 update did not make major changes to the content covered by the exam, but the structure of the exam underwent a major revision. The most significant change was to split the procedures section into three content sections: C. Abdominal Procedures; D. Obstetrical and Gynecological Procedures; and, E. Superficial Structures and Other Sonographic Procedures. This change allowed for a section score to be calculated for each of these sections. The passing criteria for the exam was then changed to require a passing candidate to achieve a total scaled score of 75 or greater on the total exam, and in addition to achieve section scaled scores of 7.5 or greater in both sections C and D.

SONOGRAPHY EXAM CONTENT CATEGORIES

<u>SECTION</u>	<u># QUESTIONS</u>
A. Patient Care	29
B. Physical Principles of Ultrasound	115
C. Abdominal Procedures	76
D. Obstetrical and Gynecological Procedures	108
E. Superficial Structures and Other Sonographic Procedures	32

AIUM Recognition of ARRT Sonography Exam: Beginning January 1, 2013 The American Institute of Ultrasound in Medicine (AIUM) recognizes The American Registry of Radiologic Technologists' (ARRT) general sonography certification and registration as an accepted credential for sonographers in practices accredited by AIUM in abdominal/general, obstetrics and/or gynecologic ultrasound. Sonographers earning ARRT's general sonography certification and registration – R.T.(S)(ARRT) – satisfy AIUM practice accreditation standards. Additional information on AIUM recognition of the ARRT Sonography credential can be found at: <https://www.arrt.org/News/articles/2012-11-1-AIUM-Recognizes-ARRT-Sonography-Certification.aspx>

Pass Rate. As mentioned above, the new passing requirement instituted in 2013 includes achieving a total scaled score of 75 or greater, and section scaled scores of 7.5 or greater in sections C and D. The pass rate for 2014 was 82.7%, with 110 of 133 first-time candidates passing. Of the 23 first-timers that failed in 2014, 16 had a total scaled score of less than 75, the other seven failed because they did not achieve a section scaled score of 7.5 or greater in either section C or D.

Total Scores. Total exam raw scores ranged from 171 (47.5% correct) to 336 (93.3% correct). The mean raw score was 280.5 (77.9% correct) with a standard deviation of 33.8 (9.4%). Raw scores are converted to scaled scores ranging from 1 to 99, with 75 defined as a passing point. The mean scaled score was 83.0, with a standard deviation of 7.0.

An additional 17 candidates took the Sonography exam through the post-primary pathway, and 13 of them passed (76.5% pass rate). The mean scaled score of the post-primary Sonography candidates was 84.6. The summaries in this document do not include the candidates who took the exam via the post-primary pathway.

Section Scores. To evaluate how students performed in the various content areas, percent correct and scaled scores were computed for each section of the exam. The table below indicates how students performed in the five major content areas.

Percent Correct and Scaled Scores on Five Major Sections

Section	<u>Percent Correct</u>			<u>Scaled Scores</u>		
	Low	High	Mean	Low	High	Mean
A. Patient Care	41	100	77.2	5.6	9.9	8.3
B. Physical Principles	31	97	76.1	4.8	9.7	8.2
C. Abdominal Procedures	51	99	81.1	6.3	9.9	8.6
D. Obstetrics/Gynecological	44	96	78.7	5.8	9.7	8.4
E. Superficial/Other	41	97	75.0	5.5	9.7	8.1
TOTAL	48	93	77.9	60	94	83.0

School Performance. Fifteen schools had three or more first-time candidates in 2014. Mean scaled scores for these 15 schools ranged from 77.0 to 90.6. Pass rates for the schools ranged from 50% to 100%; six schools had 100% pass rates.

Program Director Reports. Educators may always produce summary reports for their program, at their convenience, at the ARRT website, ARRT.ORG under Educators/Program Director Site. Please note that in order for reports to be generated, the time frame of the summary must include at least three examinees.