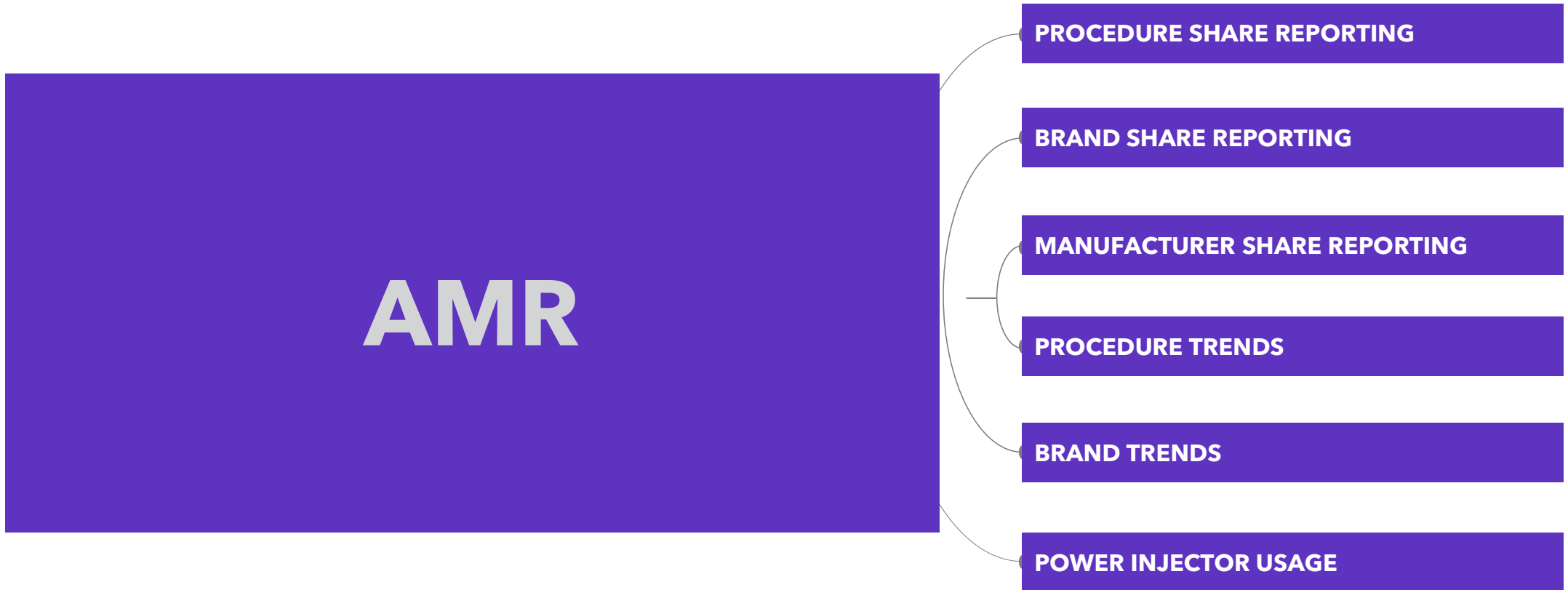




Clarivate | Medtech AMR Diagnostic Imaging






Prepared by Clarivate Medtech Team | 2025

MedTech - AMR



AMR Methodology

AMR methodology involves recruiting hospital personnel responsible for the management of medical equipment and procedures to participate by providing procedure volumes, product usage data, and patient demographic information on an ongoing basis.

Sample/ Survey design 	End users surveyed 	Data collected 	Analysis 	Data Reports 
<ul style="list-style-type: none">• Characterize universe• Review literature• Identify key respondents• Sample stratification• Design survey• Program survey	<ul style="list-style-type: none">• Imaging Lab Technicians• Nurses• Interventional Cardiologists• Interventional Radiologists• Radio pharmacists• Radiologists	<ul style="list-style-type: none">• Procedure volumes• Manufacturers/Brands• Contrast agents• Patient demographics• Reason for procedure• Referring Physicians• Hospital size• Performing facilities• Power injector usage	<ul style="list-style-type: none">• Survey data checks for consistency• Data verified with internal & external sources• Outliers isolated & verified with respondents	<ul style="list-style-type: none">• Customized reports• National Level data splits• Excel Reports• PDFs• PADDs Reports

AMR provides a granular view on procedures, products, manufacturers, reasons for procedure, and referring physician for six imaging modalities

140+

Unique Procedures

Vast coverage of 6 imaging modalities

- 40 X-ray, 16 CT, 19 MRI, 23 Cath Lab, 27 Nuclear Medicine & 25 Ultrasound procedures listed

100+

Unique Products

Broad coverage of brands

- 25+ Iodinated contrast medium brands covered for X-ray, CT & Cath Lab, 15+ Gadolinium based products for MRI
- 50+ unique brands/isotopes reported for nuclear medicine

50+

MANUFACTURERS

Full picture of all competitors in market

- 15+ Manufacturers covered for X-ray, CT & Cath Lab, and MRI
- 30+ Manufacturers reported for Nuclear Medicine

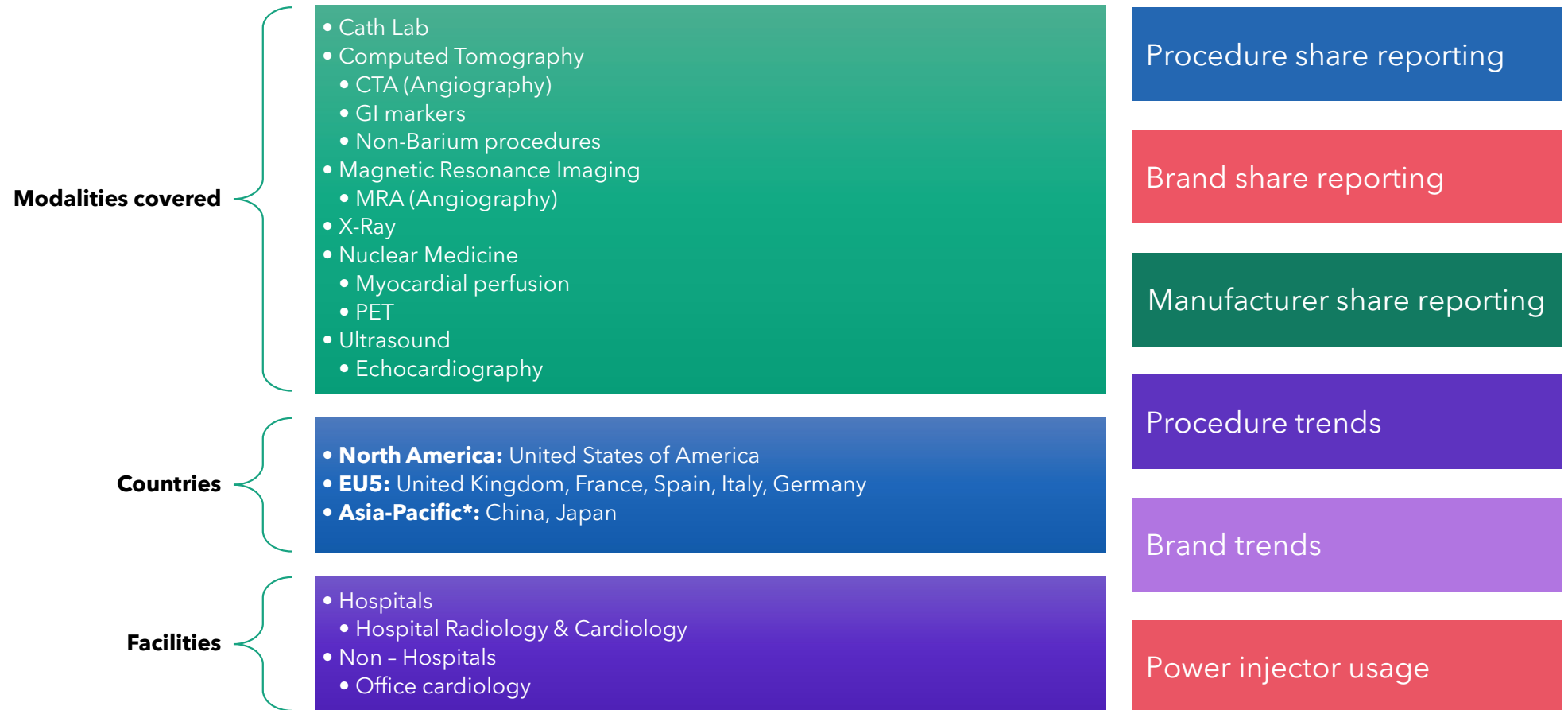
250+

Reasons and Physicians

Robust reasoning for an imaging procedure

- More than 227 unique reasons for scans reported
- Over 42 unique referring physicians listed

AMR Coverage



AMR Segmentation

Type of Procedure

- In-patient
- Out-patient

Procedure type

Gender

- Male
- Female

Gender

Age Segmentation

- <18
- 18-29, 30-49, 50-65
- 65-74, 75+

Age

Hospital Bed Size

- <200
- 200-399
- 400+

Hospital bed size

Volume Metrics

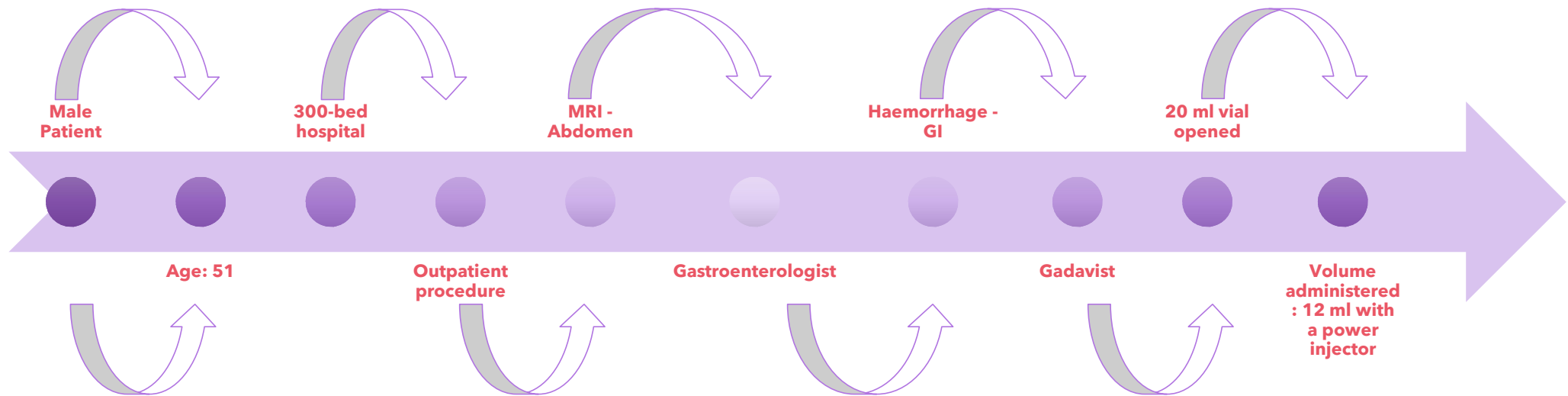
- Average volume of bottle opened
- Average volume administered for each procedure

Volume metrics

Usage of Power Injectors to administer Contrast medium

Power injector usage

Theoretical deduction of an MRI scan of a 51-year-old male patient using AMR data



- AMR data helps establish the *prescribing patterns, usage, and patient preference patterns* such as volume opened vs the volume administered, usage of power injectors and more
- In the above illustration, a journey of a 51-year-old male patient walking into a 300-bed hospital for an outpatient MRI-abdomen procedure prescribed by a Gastroenterologist due to Hemorrhage in GI. He was injected with 12 ml of Gadavist from Bayer using a power injector after a 20 ml vial was opened.

Patient Journey

Table 1
THE IMAGING MARKET GUIDE
July-December, 2023

USA
TOTAL MARKET
CONVENTIONAL X-RAY

PROJECTED CONTRAST PROCEDURES

TOTAL	Non-Hospital	Hospital	Hospital Bed Size			In vs. Out-Patient		HOCM vs. LOCM	
			<200	200-399	400+	IN	OUT	HOCM	LOCM
41,541	0.0%	100.0%	0.0%	100.0%	0.0%	25.0%	75.0%	0.0%	100.0%

CONTRAST PATIENT DEMOGRAPHICS

	#	%	Age (Years)					
			<18	18-29	30-49	50-64	65-74	75+
Male	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Female	41,541	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%

PRODUCT USAGE BY PROCEDURE

Marketer	Mammography		% Involving: Pressure Injector	Volume (mls)	
	#	%		Average Opened	Average Administered
ISOVUE	20,771	50.0%	100.0%	100.0	92.0
OMNIPAQUE	20,771	50.0%	100.0%	100.0	92.0
TOTAL OMNIPAQUE	20,771	50.0%	100.0%	100.0	92.0
TOTAL	41,541	100.0%	100.0%	100.0	92.0

Illustrative

Procedure type

Gender

Age

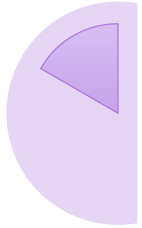
Hospital bed size

Volume metrics

Power injector usage

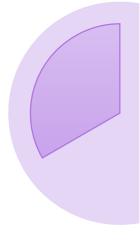
Products & Manufacturers - XR/CT/CL, MRI

XR/CT/CL



Conray
Cysto-Conray II
Cystografin
Gastrogratin / Gastrografine
Iomeron
Iopamiro / Iopamiron
Isovist
Isovue
Isovue-m
Micropaque
Niopam
Omnipaque / Accupaque
Optiject
Optiray
Peritrast
Plenigraf
Radioselectan
Solutrast
Telebrix
Telebrix Gastro

XR/CT/CL & MRI



Ultravist
Unilux
Urografin
Visipaque
Xenetix

MRI

Artirem
Claricyclic
Clariscan
Cyclolux
Dotagraf
Dotarem
Dotavision
Elucirem
Eovist/Primovist
Gadavist/Gadovist
Multihance
Omniscan
Pixxoscan
Prohance
Vueway

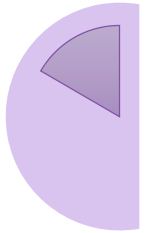
Manufacturers



Bayer HealthCare LLC
BE-Imaging GmbH
Bracco
Dr. Franz Köhler Chemie GmbH
GE Healthcare
Guerbet
Jenapharm GmbH & Co. KG
Juste Farma
ROVI SA
SANOCHEMIA Pharmazeutika GmbH

Products & Manufacturers -Nuclear Medicine - Myocardial perfusion - PET

NM Brands



AdreView
AN-MDP, Osteolite
AN-Sulfur Colloid
Axumin
Cardiogen-82
Cardiolite/Miraluma
Ceretec
Cerianna
Choletec
Choline C 11
CIS Pyro, Pyrolite
DaTscan
Detectnet
Drax Exametazime
F18-NaF
FDG F 18
Gallium Citrate Ga 67
Illuccix
Indium In 111 DTPA
Indium In 111 Oxyquinoline
Ioflupane I 123]
Jeanatope
Locametz

NM Brands



Megatope
Myoview
Netspot
OctreoScan
Pylarify
RUBY-FILL
SIR-Spheres Y-90 resin microspheres
Sodium Iodide I 123
Sodium Iodide I 131
TechneScan HDP
TechneScan MDP
TechneScan PYP
TechneScan MAA
TechneScan MAG3
TechneLite
Thallous Chloride TI 201
Ultratag RBC
Ultra-Techneknow V4
Vizamyl
Xeneisol Xe 133
Xenon Xe 133
Xofigo
Yttrium 90

Manufacturers



Advanced Accelerator Applications
(Novartis Company)
Bayer HealthCare LLC
Blue Earth Diagnostics (A Bracco
Company)
Boston Scientific
Bracco
Cardinal Health
Curium
GE Healthcare
International Isotopes, Inc.
IsoRx Inc.
Iso-Tex Diagnostics, Inc.
Jubilant Pharma
Lantheus
Life Molecular Imaging Ltd.
Mayo Clinic
Sirtex SIR-Spheres Pty Ltd.
Sun RadioPharma (Pharmalucence)
Telix Pharmaceuticals Limited

Use case - Procedure trends - Q3_2023_US - MRI - Hospital market

Procedure/year	Q1_2022	Q2_2022	Q3_2023	Q4_2022	Q1_2023	Q2_2023	Q3_2023	Q4_2023
MRI - Brain/Brain Stem	43,503	47,147	47,330	46,557	46,587	45,613	44,101	40,279
MRI - Spinal Canal & Contents	37,251	39,990	40,576	42,589	43,173	43,159	43,127	38,255
MRI - Upper Extremities, Joint	27,724	27,337	26,769	26,809	27,626	27,475	27,307	23,434
MRI - Lower Extremities, Joint	23,588	23,848	24,408	23,407	23,942	23,860	23,846	22,159
MRI - Abdomen (Complete)	21,247	22,619	24,309	22,859	23,583	23,510	23,285	18,434
MRI -Face/Orbit/Neck	14,013	14,438	14,370	14,798	14,849	14,595	14,374	14,302
MRI - Breast	11,570	10,784	11,573	10,062	10,236	10,080	10,084	7,221

Use case- Brand & Manufacturer share trend - US-MRI-Non-Hosp

Brand/Year	Q2_2021	Q4_2021	Q2_2022	Q4_2022	Q2_2023	Q4_2023	MNF/Year	Q2_2021	Q4_2021	Q2_2022	Q4_2022	Q2_2023	Q4_2023
EOVIST	0.31%	0.23%	1.44%	1.49%	1.40%	1.41%	Bayer	576,711	490,162	515,514	504,127	517,201	527,729
GADAVIST	47.38%	51.49%	43.95%	43.14%	42.69%	39.19%							
MAGNEVIST	2.59%	0.00%	0.00%	0.00%	0.00%	0.00%	Bracco	700,701	697,826	710,763	721,950	767,566	862,298
MULTIHANCE	17.35%	18.30%	18.55%	18.43%	18.73%	19.43%							
PROHANCE	13.79%	14.50%	13.05%	12.94%	12.76%	13.03%	GE Healthcare	72,839	158,035	104,244	107,288	99,773	140,116
VUEWAY	0.00%	0.00%	0.00%	0.00%	0.00%	0.52%							
CLARISCAN	1.60%	0.00%	2.05%	2.20%	2.00%	2.13%	Guerbet	743,729	702,975	694,427	709,615	697,475	650,092
OMNISCAN	0.00%	0.50%	2.13%	1.85%	1.73%	1.80%							
DOTAREM	16.98%	14.48%	18.81%	19.94%	20.69%	21.26%	Various	234,544	354,755	324,663	435,625	546,232	435,313