Assessing the Risk to Continuity of Radiopharmacy Services

NHS England

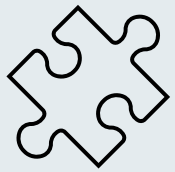
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With thanks to SPS QA, BNMS & UKRG

Why was this project undertaken?



- Supply disruption at University Hospitals Southampton exposed significant weaknesses in business continuity arrangements.

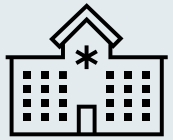


1. Limited national visibility of service provision and dependencies
2. Variation in business continuity arrangements
3. Increasing diagnostic demand



1. National Clinical Prioritisation Framework
2. National Radiopharmacy Service Map
3. Regional Contingency Plans
4. National Business Continuity Self-Assessment

What has the programme delivered?



National Clinical Prioritisation Framework



National Radiopharmacy Service Map



Regional Contingency Planning



National Business Continuity Self-Assessment

National Clinical Prioritisation Framework

Why

- COVID-19 and the 2024 Tc99m shortage demonstrated the need for a consistent national approach.

How

- Reviewed with UKRG, BNMS, regional chief pharmacists, radiopharmacy specialists, nuclear medicine clinicians, quality leads and provider organisations.

Current Position

- Nationally agreed and BNMS-endorsed framework supporting consistent prioritisation during supply disruption or reduced service capacity.

Supports equitable and transparent decision-making when demand exceeds available capacity.

Black	Red	Amber	Green
Very urgent Make best efforts to perform scan	**Urgent patient referrals** Prioritise new referrals, depending on tracer availability	**Discuss with clinician before cancelling / rebooking** Do not book new appointments but prioritise when tracer supply returns	**Rebook*** Communicate anticipated delays Do not book new appointments
GFR on urgent cancer pathway	**Lung perfusion (acute PE)**	**Lung VQ (follow up or CTEPH)**	**2 phase bones and non-oncology whole body bone (arthritis imaging)**
Intermittently unstable GI bleed with -ve CT/Angio	**Meckel's Diverticulum** **(GI bleeding)**	**DMSA for transplant donors**	**Thyroid Tc-99m/ I-123 (adults)**
Lung perfusion (contrast allergy, pregnancy or severe renal failure)	**MUGA Oncology (quantify cardiac output) if echo not available** **Consider rest gated myocardial perfusion scan.**	**MPS ischaemia imaging**	**GI Transit studies** **Gastric emptying/small bowel transit/colonic transit / proctogram)**
Urgent/pathway defining oncology bone scans	**Other oncology Bones**	**Parathyroid**	**CSF studies**
Sentinel Lymph Node biopsy (SNLB)	**99mTc-Tektrotyd or 111In Octreoscan (e.g. stage carcinoid tumour)**	**GFR (quantify kidney function)**	**Dacroscintigraphy**
Thyroid Tc-99m/ I-123 (paeds) (assess presence and function of thyroid in paediatric hypothyroidism); scan	**MAG3 for kidney transplant patients (post-transplant)**	**White cell (also consider FDG)**	**DMSA (quantify each kidneys contribution to kidney function and look for scars)**
	MPS pre-surgical imaging if alternatives not available	**I-123 MIBG for phaeochromocytoma**	**HIDA**
	I-123 MIBG for neuroblastoma	**Stable GI bleed**	**Lymphoscintigraphy**
	DMSA differential renal function prior to very urgent surgeries	**Tc-99m PSMA**	**Other MAG3 (not kidney transplant)**
		99mTc-DPD (cardiac amyloidosis)	**Platelets (assess platelets survival)**
		123I DaTSCAN when assessment is required to support a decision on initiating treatment.	**Red Cell Mass**
			Salivary scintigraphy
			123I DaTSCAN
			SeHCAT studies
			HMPAO Brain

*** During 99mTc supply shortages, non-technetium imaging studies should be performed to ensure continued use of gamma camera capacity.**

National Radiopharmacy Service Map

Why

- To improve national visibility of radiopharmacy services and understand service dependencies and resilience.

How

- National mapping exercise with all radiopharmacy supplier units, supported by the NHS Specialist Services.

Current Position

- First national digital map supporting resilience and future planning.

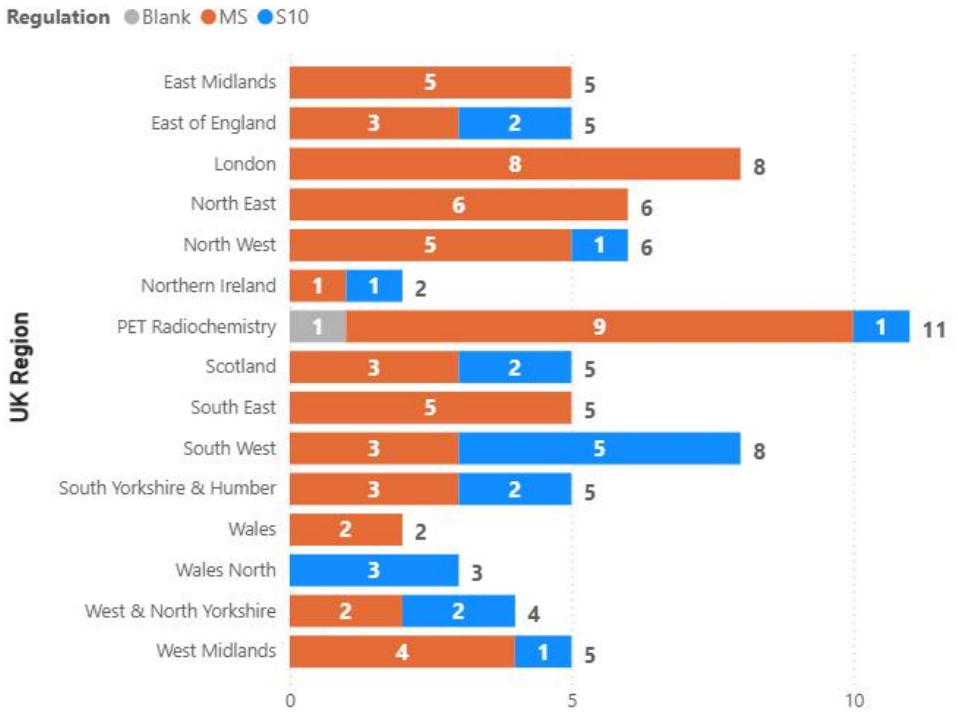
Radiopharmacy - Regulation

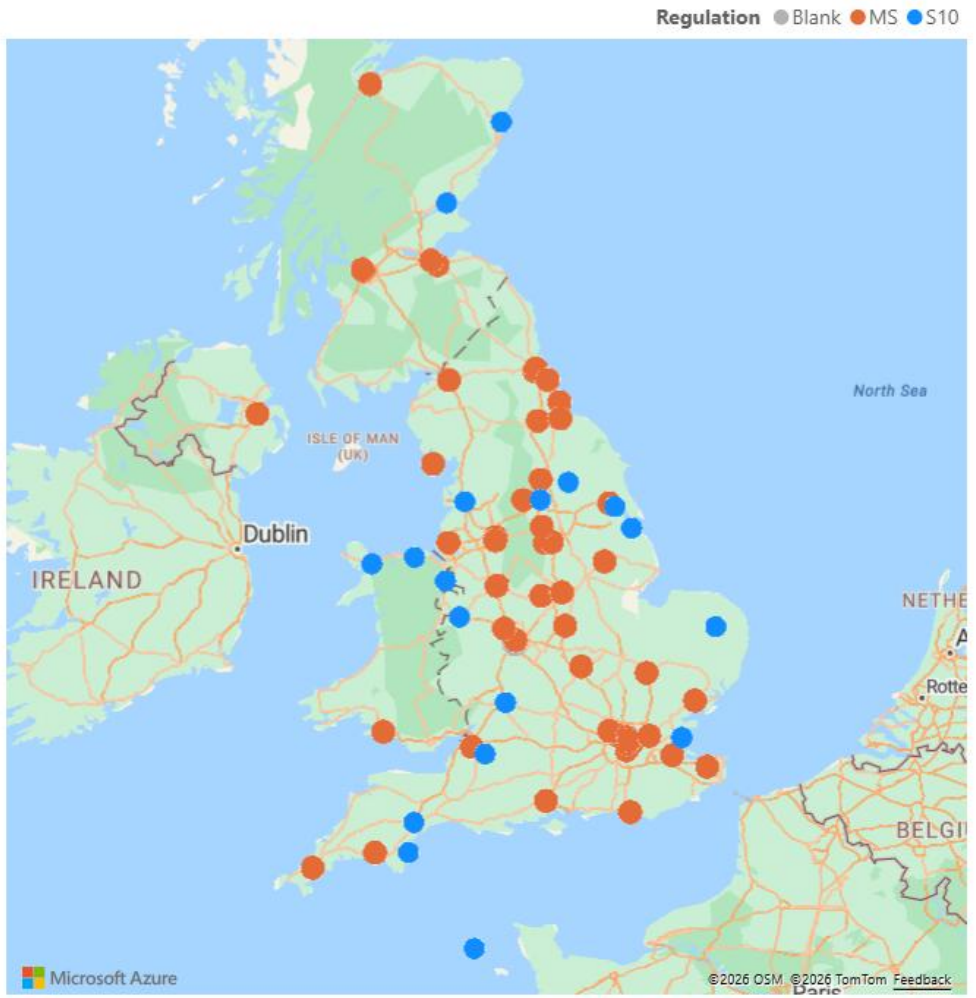
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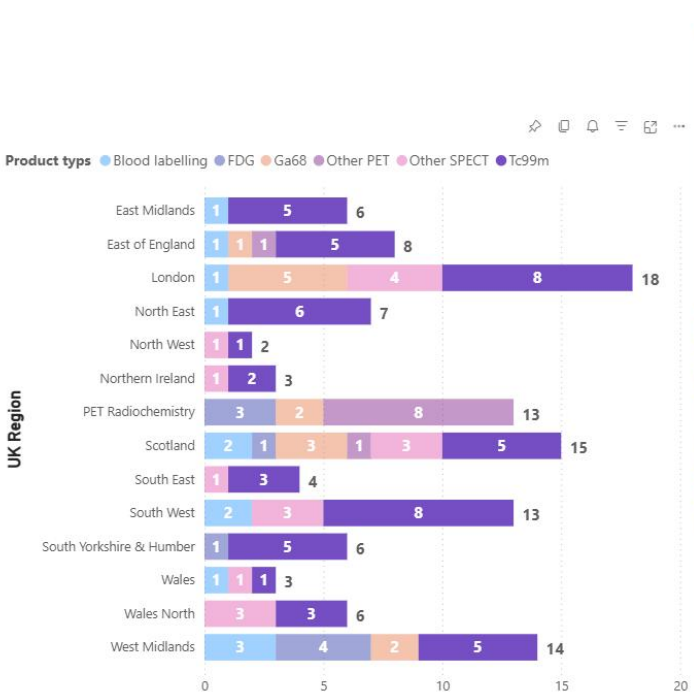
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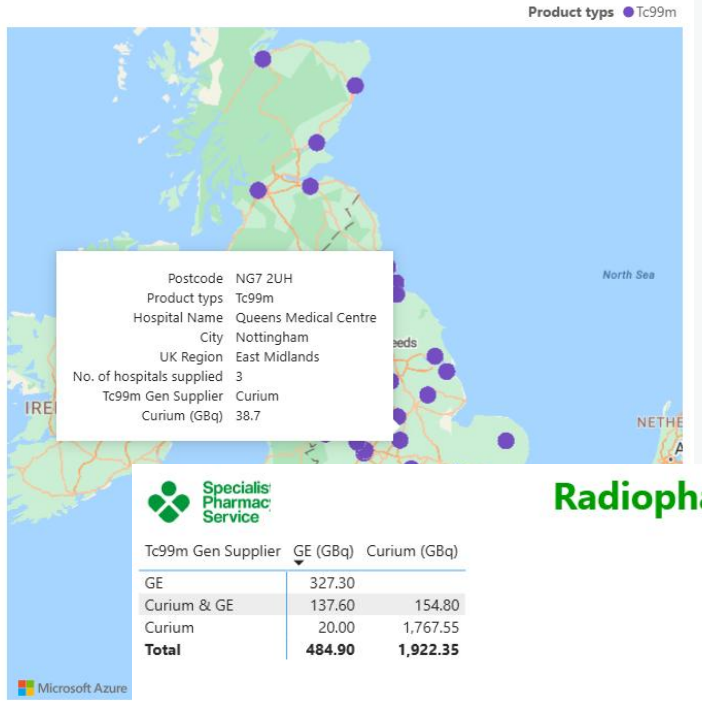
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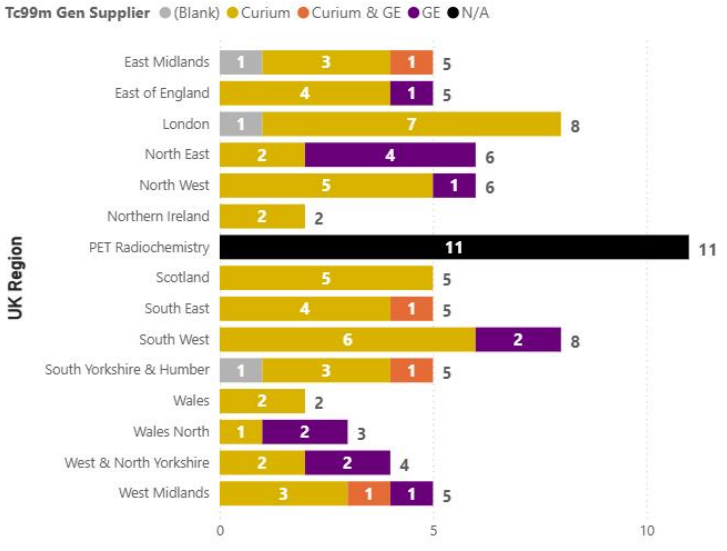
Radiopharmacy - Product type

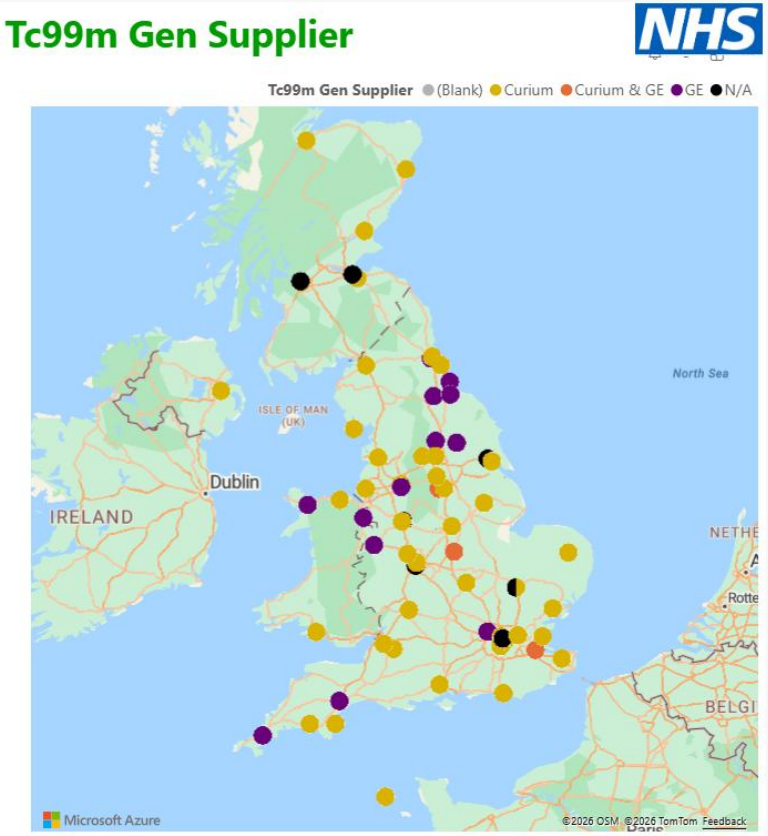




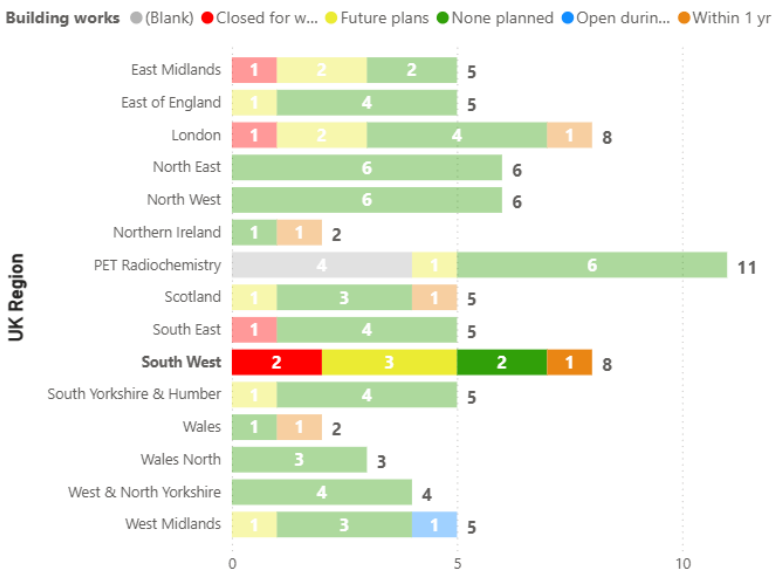
Radiopharmacy - Tc99m Gen Supplier

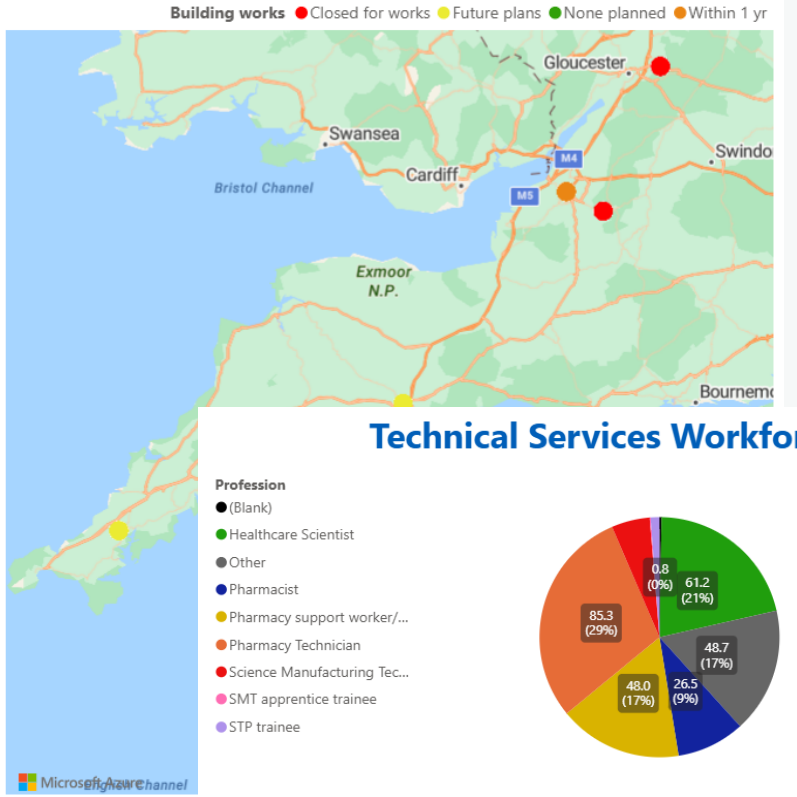
Tc99m Gen Supplier	GE (GBq)	Curium (GBq)
GE	327.30	
Curium & GE	137.60	154.80
Curium	20.00	1,767.55
Total	**484.90**	**1,922.35**



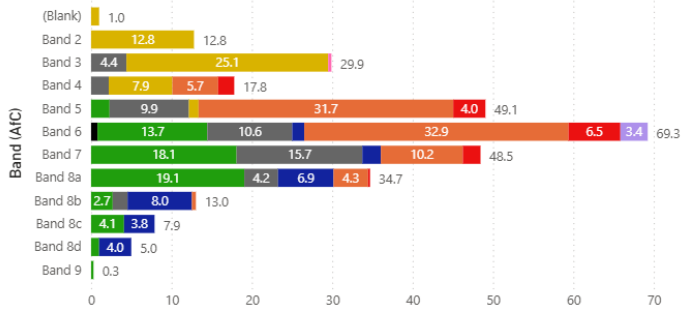


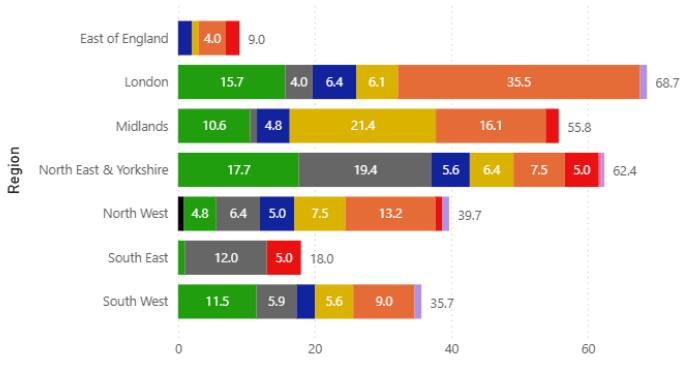
Radiopharmacy - Building works

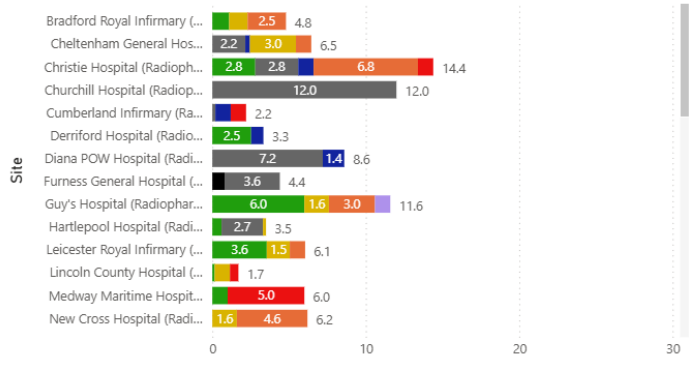




Technical Services Workforce (England) - Q1. Establishment (WTE)







Regional Contingency Planning

Why

- Strengthen regional resilience and improve coordination during service disruption.

How

- UKRG regional leads developed regional contingency plans with regional chief pharmacists, building on lessons from 2024 Tc99m shortage.

Current Position

- Draft plans have been developed with regional assurance procedures underway.

Improved visibility of service dependencies, escalation routes and mutual aid arrangements.

National Business Continuity Self-Assessment

Why

- Understand the maturity of BCP arrangements and better understand system wide resilience risk.

How

- National self-assessment across radiopharmacy supplier units and a dynamic risk assessment exercise undertaken in Southwest.

Current Position

- Provided the first national assessment of business continuity preparedness across England, highlighting variation in resilience maturity and opportunities for improvement.

Recommendations

- Support consideration of future governance and ownership arrangements for the national radiopharmacy map.
- Support consideration of assurance arrangements, including escalation of level 3 incidents to EQG or its successor, to ensure all radiopharmacy units maintain, review and routinely test robust business continuity plans.

Thank You

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