Life Science Hub

NHS

Midlands Cancer Alliances Life Science Hub

Overview

NHS-Industry joint working to accelerate improvement and innovation in cancer care.

Our Mandate

Steer and Deliver
Steer and deliver a joint NHS-Industry programme that improves cancer outcomes across participating Cancer Alliances.

Prioritise
Prioritise high-value challenges; match the best partners; mobilise safely and quickly.

Ensure
Ensure alignment with national strategy, robust evaluation, measurable benefits, and spread proven practice.

Vision:

Together, we drive innovation in cancer care – enabling collaboration between the NHS and industry to turn bold ideas into real-world impact for patients and communities.

Our Purpose:

- **Focus innovation where it matters most** - improving outcomes for our population and transforming how cancer care is delivered.
- **Unlock collaborative investment** to accelerate projects with the power to spread and succeed across the system.
- **Show tangible results** through measurable improvements in quality, value, outcomes, and experience.
- **Embed innovation at scale**, harnessing the collective strength of commissioning, improvement, and transformation partners.
- **Create a learning culture without barriers** - a safe space to test, learn, and share what works, inspiring others to join the journey.

Through innovation, collaboration, and partnership - we are shaping the future of cancer care in the Midlands and beyond.

Life Science Hub: Strategic Focus Areas

The Life Science Hub is strategically positioned to drive transformation across the NHS through two complementary pathways: scaling proven initiatives and piloting innovative projects. This dual approach ensures both immediate impact and future readiness.

Expanding & Scaling Transformation

Rapidly scale proven initiatives across locations

- Industry collaboration projects with demonstrated benefits
- Swift acceleration of NHS improvement programmes
- Leverage existing transformation capabilities

Proof of Value Projects

Collect evidence before broader implementation

- Launch new pilot initiatives
- Gather robust evidence and insights
- Validate approach before scaling

By combining the rapid deployment of validated solutions with careful piloting of new approaches, the Life Science Hub creates a sustainable model for continuous improvement and innovation across the healthcare system.

The Role of Collaboration with Industry - joint and collaborative working projects

Money & Investment

Collaboration means NHS plus industry both bring something valuable to the table.

Responsibility & Purpose

NHS remains responsible for patient care; industry supports but does not replace NHS duties and obligations.

Rules & Scope

We follow NHS guidance for working with industry partners ensuring openness, fairness, and patient safety.

Project Duration

Time-limited projects with clear start and finish

These projects are ‘added value ‘– aligning and complementing core responsibilities or functions

What are the Collaborative Benefits?

NHS Provides

NHS provides time and clinical expertise access

- Collaboration adds capacity and smart tools efficiently
- Speeds up existing NHS priorities and objectives
- Tests new tech and spreads successful innovations

Industry Adds

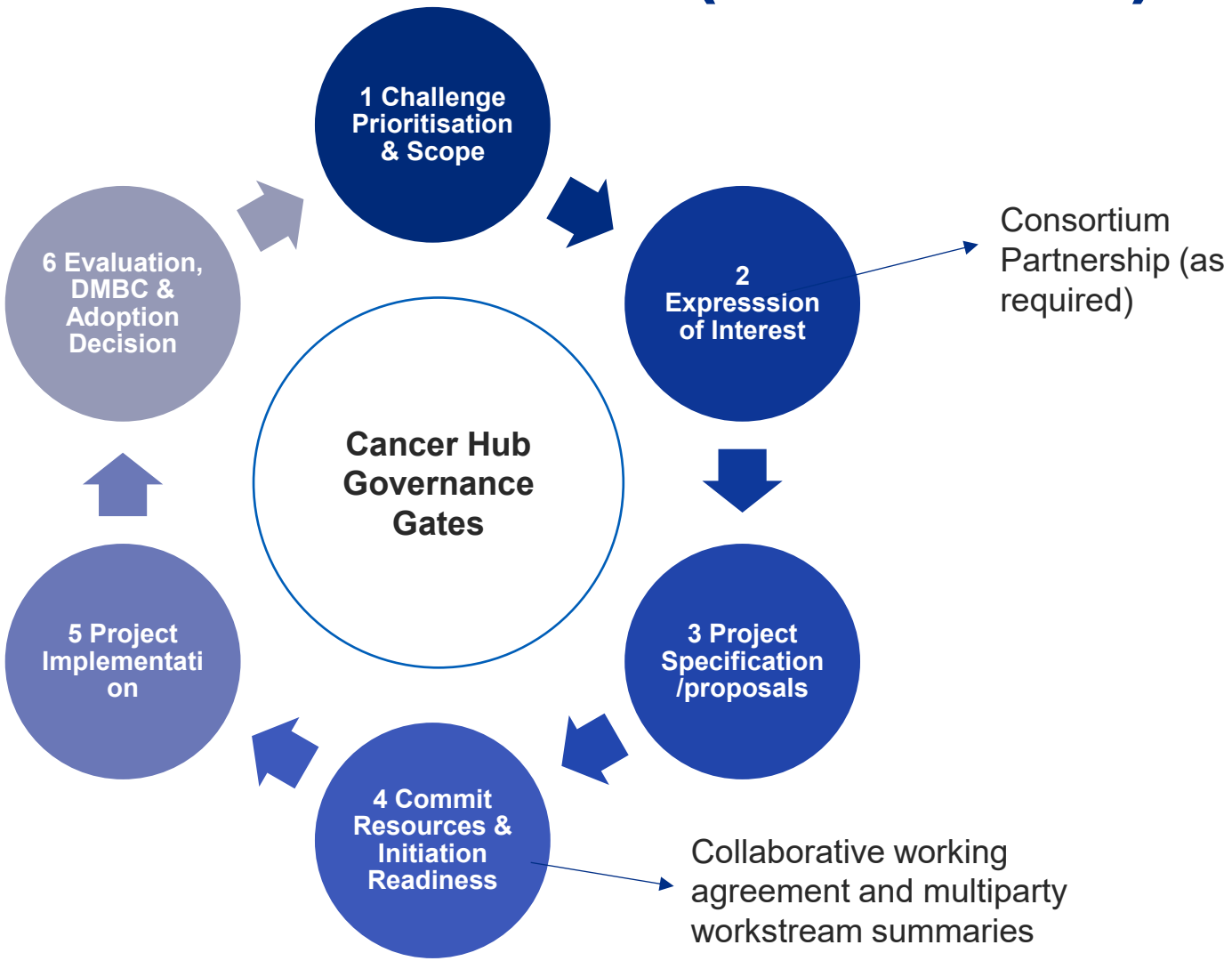
Industry adds tools, technology, and specialized skills

- Often tests new approaches and best practices
- Both parties share knowledge and learnings effectively
- Scale and spread successful innovations across NHS

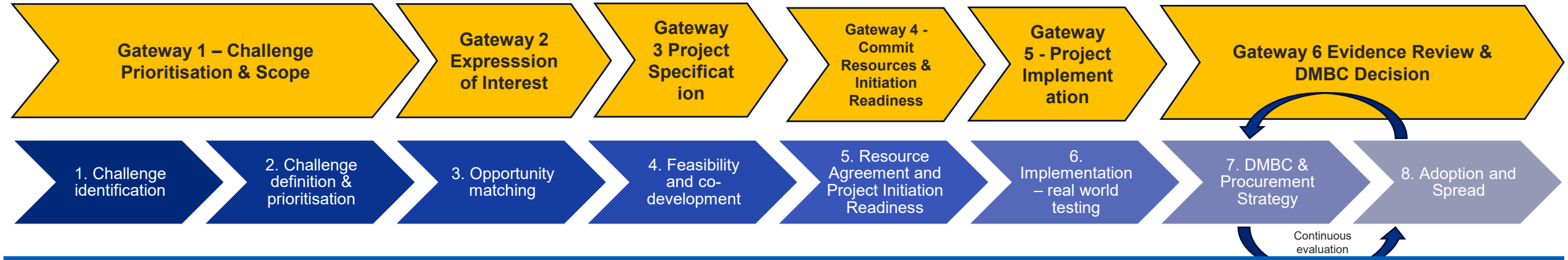
Context & Purpose

- The Midlands Cancer Alliance Life Sciences Partnership Hub is bringing together **NHS and industry innovators** to tackle pressing cancer care challenges.
- **Project Innovation Partners** will engage with this collaborative network on specific projects that deliver tangible improvements in cancer pathways.
- The purpose of this role is to leverage your companies **above brand support for transformation and impact, and opportunity to test and build evidence for spread of med and health tech interventions**
- By aligning projects with alliance priorities, Project Partners can directly contribute to earlier diagnosis, faster treatment, and better patient outcomes.
- This is about **working collaboratively together for a population and across a pathway**

Operating Model Overview (Six Gates)



Standard Operating Procedure



High-level challenges are proposed by Cancer Alliances, clinical teams, or industry partners. These are often based on unmet needs, service pressures, or opportunities for innovation in cancer care.

Define the challenge into an innovation-ready problem statement and specification. This includes scope, context, and desired outcomes. Challenges are prioritised based on urgency, potential impact, and alignment with strategic goals.

This stage connects the challenges with potential solutions and partners.

Expressions of Interest (EoIs) are reviewed by the Project Board against agreed criteria.

This stage ensures alignment between the problem and the best supporting capabilities.

The industry partner/s and clinical teams assess and refine the proposed solutions collaboratively to scope and specify the projects through agreeing project specification/proposal s and ensuring applicable partner selection.

Agreeing project mobilisation documents including; resourcing, project plans, governance, roles and responsibilities etc. Costs & funding identified; delivery plan and milestones set *Budget/resources committed*

Innovations/ opportunities are deployed in real world settings. This phase tests usability, integration, and early outcomes in live environments.

Evidence Gate confirms pilot outcomes meet pre-agreed thresholds and the case proceeds to DMBC [Decision Making Business Case]. *DMBC Gate approves the 5-Case DMBC and procurement strategy; funding is authorised and the route to market (PSR/PA23), contract model, budget and timelines are confirmed.*

Procurement is executed and awards made; mobilisation enables scaling to additional sites in line with the Go-to-Scale plan. Benefits are tracked against the Benefits Realisation Plan with continuous evaluation and learning to sustain and optimise delivery.

Challenges & Opportunity Areas

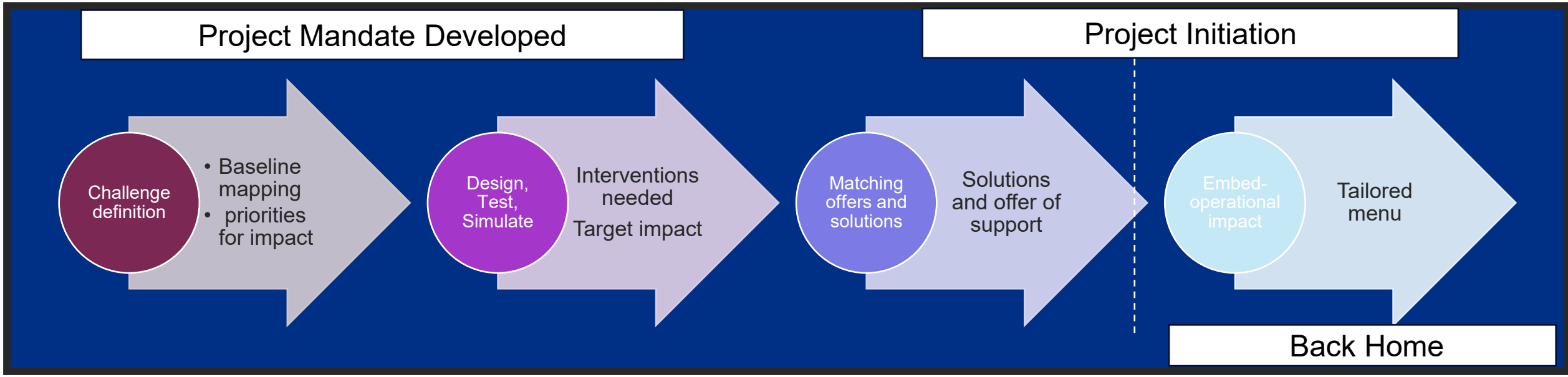
Key challenge areas in Midlands cancer services present opportunities for innovation:

Early Diagnosis & Screening:	Despite progress, thousands face delays in diagnosis (28-Day FDS compliance ~76% regionally). Innovations in imaging, biomarker tests, and AI-driven decision support could help find cancers sooner and reduce diagnostic backlogs.
Pathway Delays:	Only ~64% of patients start treatment within 62 days of urgent referral, indicating pathway bottlenecks. Projects that optimize referral workflows, triage, and scheduling (or introduce **rapid treatment models**) can help meet the 62-day standard.
Multidisciplinary Team Efficiency:	Efficient MDT processes are vital for timely treatment decisions. There is need for digital platforms or AI that streamline MDT case review, enabling coordinated care planning and reduced waiting times.
Capacity & Workforce Constraints:	Workforce shortages and limited capacity impact cancer care. Innovative solutions like decision-support tools, automation, and training programs can extend the reach of the existing workforce.
Patient Experience & Equitable Access:	Projects that support patients (e.g. remote monitoring, tailored information, community outreach) can improve experience and ensure **equity** in outcomes across diverse populations. *Each Project Partner will address at least one of these challenge areas, aligning with the alliance's strategic ambition to improve pathways and **close performance gaps**.*

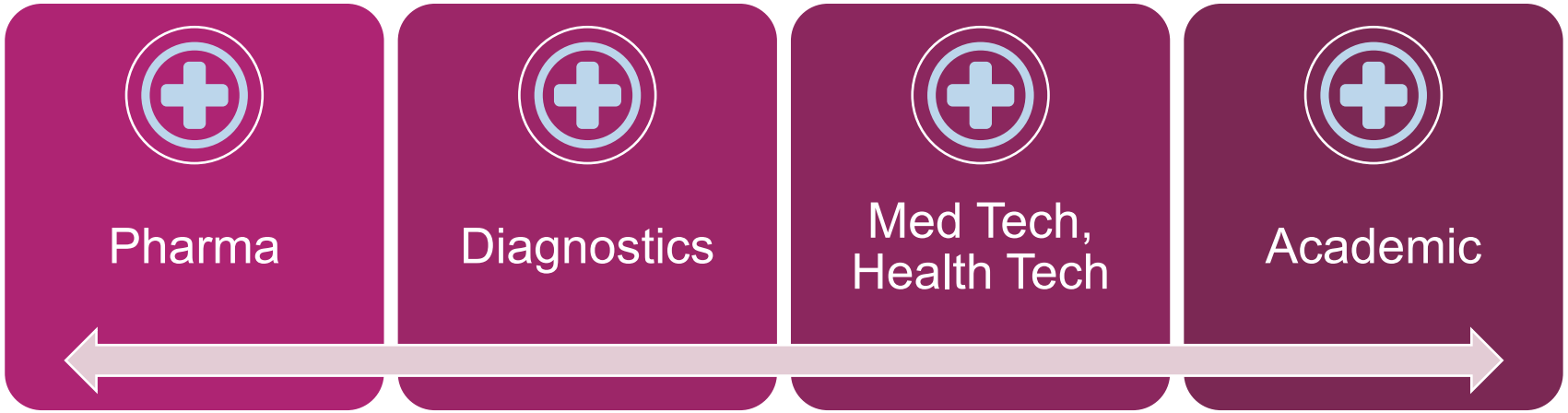
Challenge Table

Category	Referral & Pathway Management	Diagnostic & Treatment	Follow-up
Core challenges	• Referral delays/2WW variability; limited slots • Fragmented coordination/communication & manual hand-offs • Digital fragmentation/poor integration across sites/systems • Late-stage presentation in some pathways; uneven referral processes	• Diagnostic bottlenecks (imaging, endoscopy, histopathology, molecular profiling) • Treatment capacity pressure (SACT day units/pharmacy release; theatres/surgical lists) • Pathology/imaging turnaround delays • MDT friction when results are late/incomplete	• Fragmented survivorship & monitoring • Inconsistent PSFU/PIFU use • Limited remote monitoring capability • Rehabilitation capacity gaps • Variable adherence to follow-up guidelines in some tumour groups
Capabilities	• Single visit/rapid diagnostic models; streamlined pre-op; faster MDT turnaround • Standardised referral/triage/escalation criteria • Shared digital tools and better data flow for referrals, images, pathology and MDT packs • Support for earlier detection/screening pathways where applicable	• Capacity/flow optimisation for imaging/endoscopy/pathology (prioritisation, pooling, backfill) • Improve SACT throughput (day-unit scheduling, pharmacy cut-offs, regimen optimisation) • MDT efficiency (standard datasets, auto-compiled packs, decision-ready lists) • Proactive tracking of long waits/breach risks	• Scale PSFU/PIFU with clear criteria • Remote monitoring/virtual review where appropriate • Integrate patient-reported outcomes (PROs) • Standard rehabilitation pathways with defined escalation to specialist review
Fast starts	• Protect 2WW capacity with digital triage & slot protection • Pre-MDT data completeness checks • Consider on-call diagnostics/biomarker workflows to speed decisions	• Slot pooling & demand smoothing across centres • Agree pathology/imaging turnaround expectations aligned to MDT dates	• Implement PSFU/PIFU operating rules and basic utilisation views • Prioritise lightweight remote monitoring for selected cohorts
Measures of success	• 2WW utilisation • Median time to MDT • Reduced hand-offs	• Diagnostic turnaround (pathology, imaging, endoscopy) • SACT chair utilisation/pharmacy release • Theatre list fill • Time from decision-to-treat	• PSFU/PIFU criteria adherence • Remote monitoring coverage • PRO completion where used • Fewer repeat attendances; improved experience
Enablers	• Clinical governance for pathway change • Data-sharing agreements • Practical digital integration of referral/triage tools	• Standard datasets and connectivity across diagnostics/MDT • Protected ops time for optimization	• Workforce upskilling for virtual follow-up • Remote monitoring capability integrated with existing systems

Collaborative Innovation



Pooled capabilities, resources and know-how under single approach



Transformation support

Discovery	Care models, and pathway best practice against existing practice
	Pathway KPI reporting and variation
	Process improvement identification, implementation planning
Design	Decision tools- Intervention, impact , demand and capacity, performance, workforce, performance, finance
Deliver	Workforce capacity, capabilities and new role deployment, MDT working
	Digital tools, to enhance operational efficiency and flow
	Clinical Operational Policies

Register of Cancer Collaborative Industry Projects

•To support the Life Science Hub in obtaining a comprehensive picture of past and active collaboration projects with industry we are asking you to detail these by using the following link below to capture this information

•Please feel free to share with the cancer leads in ICBs and Trusts, to ensure these programmes are also captured

• This information will support a deep dive into sharing the findings from these projects and ensuring there is benefit across the wider footprint

• If you can please aim to complete this request as soon as possible

REGISTER OF CANCER COLLABORATIVE INDUSTRY PROJECTS (Past & Active) – Fill in form