

KeRNEl

Kent
Research
Network for
Education and
Learning

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- What is the impact of the diagnostic element of the ED pathway?
- Can improvements in the prioritisation of blood tests help deliver better performance against the 4 hour target?

**Operational:
Diagnostics
efficiency**

- Hypothesis: from which GPs can we observe unnecessary ED attendances and what interventions can we design to reduce this?

**Planning:
GP referral
patterns**

- What will the effect of the new UTC's be on patient flow within the acute hospital sites?

**Strategic:
UTC impact**

Hypothesis: that some women, following birth, do not return to their normal weight quickly because of embarrassment about incontinence and general malaise about increased weight.

**Research:
Maternity**

1

- Over the last 7 years Kent has developed a leading reputation for the creation of linked data for the purposes of planning and research. This is known as the Kent Integrated Dataset (KID).

2

- The KID has been used extensively for local and national research. For example NHSE have used it to calibrate their national funding model, meaning that £28 billion of spend has been calculated using the direct input of the KID. The KID was central to the submission of the Long Term Plan (LTP) response for Kent & Medway.

3

- Significant progress has been made working with Optum to develop further the capability around the use of linked data.

4

- The plan now, using the data feeds which informed the KID as one of its foundations, is to create the KeRNEL and expand its breadth and depth in the use of more clinical datasets and across more NHS and partner organisations.

Drivers

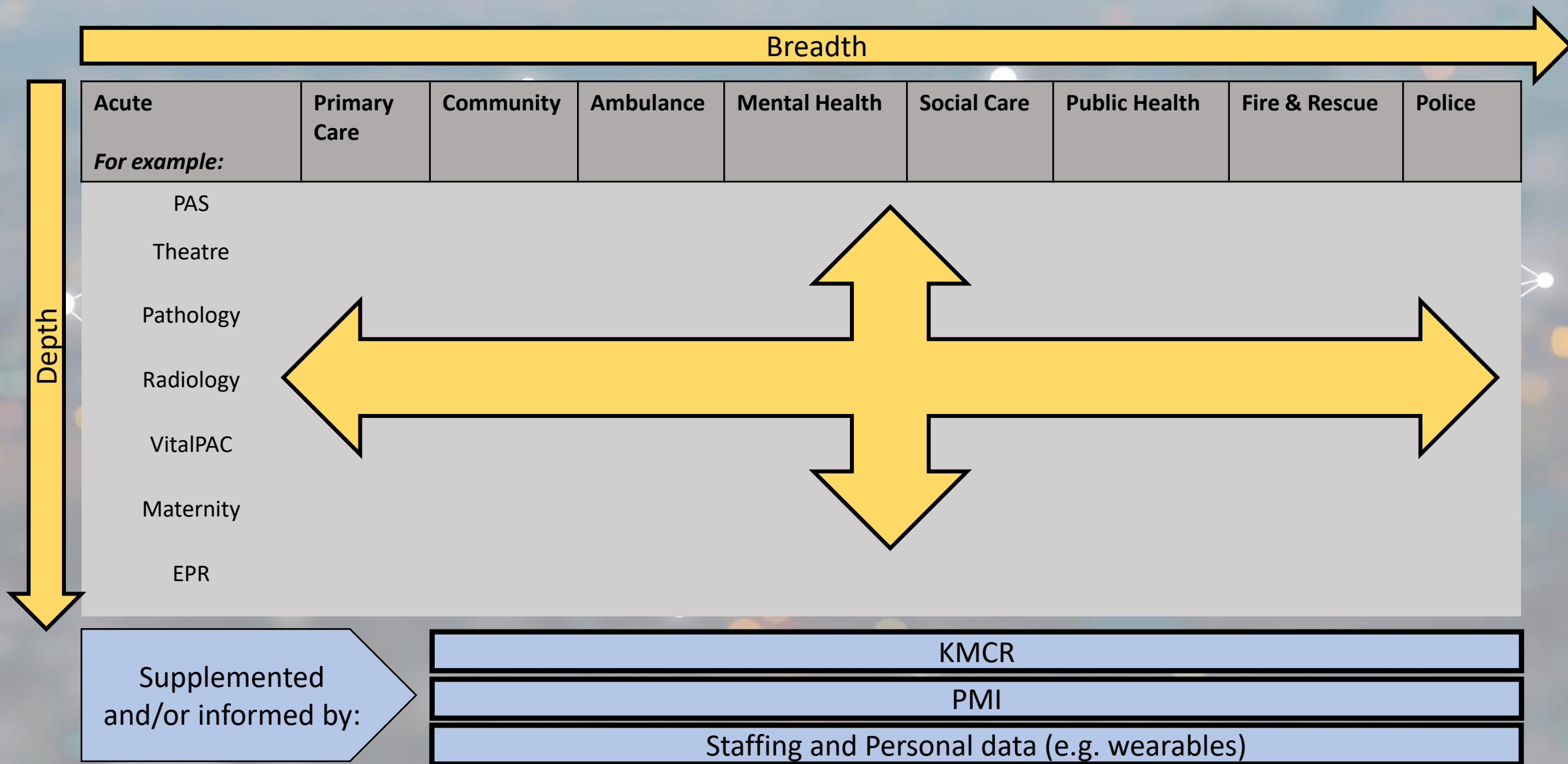
- PHM Wave 3 from NHSE
- ICS/ICP/PCN development
- Move towards local control and flexibility around requirements

Resources

- Analytics strategy for Kent and Medway
- Shared Health and Care Analytics Board and Joint Data Control
- Academic and industry relationships in Kent and Medway

Opportunity

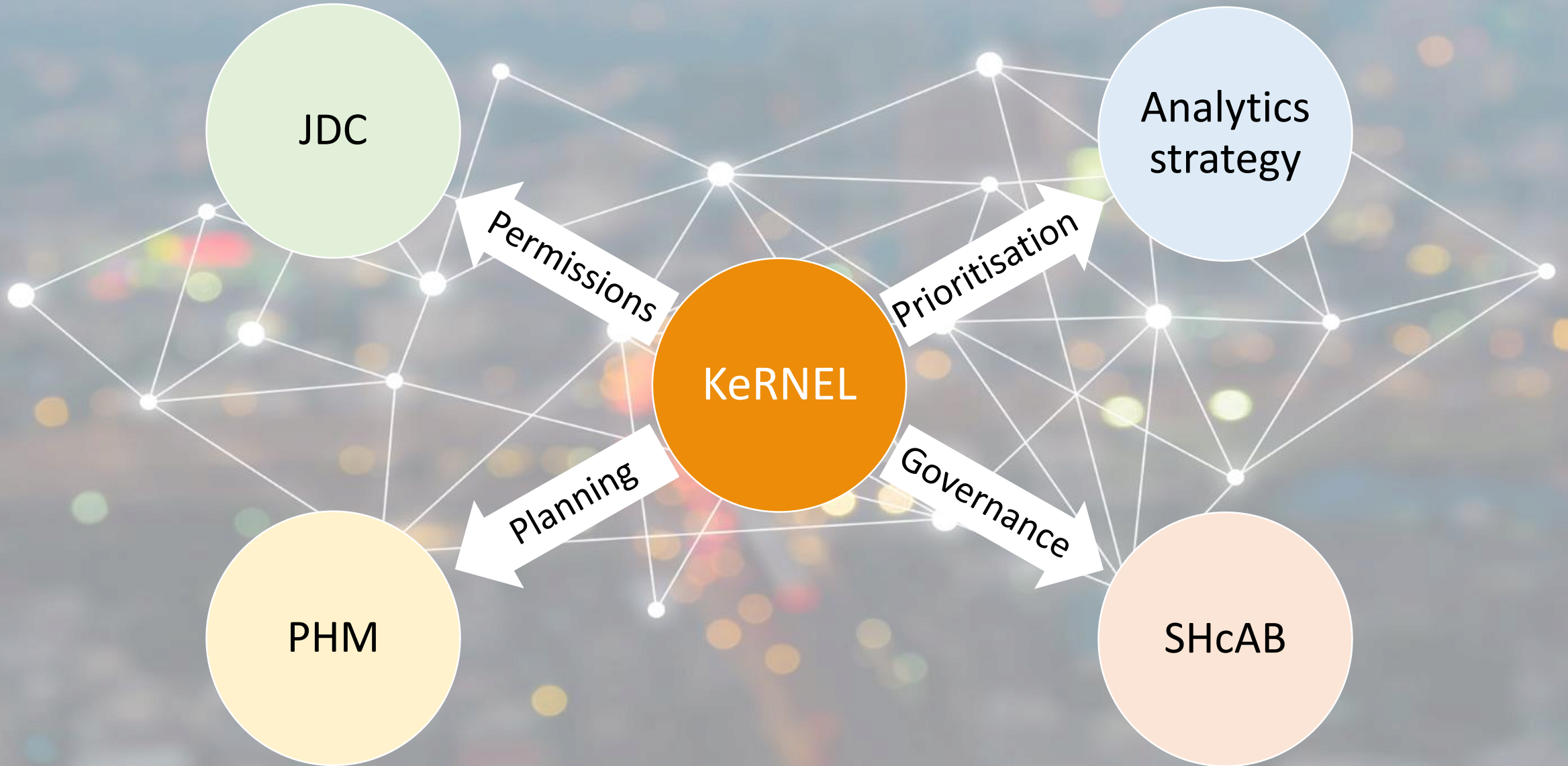
- Lead the way on PHM; adverse childhood events, intimate partner violence
- Data feeds from KMCR
- Leverage local expertise and national connections



Analysis vs team	KMAP	Public Health	Providers	CSU	Universities	Independent Sector
Operational		PCN profiles	ED dashboards			Mortality monitoring
Planning	MSK pathway demand and capacity modelling					Segmentation Outcomes analysis System dynamic modelling
Strategic	<div style="border: 2px solid black; border-radius: 20px; background-color: #90EE90; display: inline-block; padding: 5px 15px;">JSNA</div> UTC development					
Research	Health coaching evaluation				<div style="border: 2px solid black; border-radius: 20px; background-color: #8A2BE2; display: inline-block; padding: 5px 15px;">AI dev.</div>	

Workstream	Action	Indicative timescale
Governance	Get K&M organisations signed-up to Joint Data Control	
	Complete KERNEL DPIA	
	Register KERNEL with CAG	
	Establish KERNEL operating model and allocate roles	
Funding	Secure STP/Central allocated funding	
	Secure funding contributions from SHCAB member organisations	
	Secure research funding/grants	
	Transition to become self-funding (within 3 years)	
KERNEL development phase 1	Implement de-id/re-id/pseudonymisation tool	Q1 2020 (January – March 2020)
	Load PMI from NHSE (NHS AIS)	
	Implement/import geo-demographic segmentation tools	
	Loading historic provider data (timeframe: 10 years or as historic as possible) – the same dataflows which were used to inform the KID	
	Acute provider data: EKHUFT, MTW, MFT, DGT	
	Community provider data: KCHFT	
	Mental health provider data: KMPT	
Ambulance provider data: SECamb		
Non-health provider data: Kent Police, Education		
KERNEL development phase 2	Load in primary care data (via KMCR)	Q2 2020 (April – June 2020)
	Loading Infoflex (cancer) data from all Acute provider Trusts	
KERNEL development phase 3	Loading additional provider data ('breadth and depth') – could occur during Phase 2 depending on how quickly provider organisations can make this data available and how the data can be ETL'd for KERNEL:	Q2/Q3 2020 (April – June / July – September 2020)
	Acute provider data: Theatres, Radiology, Pathology, Vital Signs, Maternity	
KERNEL development phase 4	Loading additional datasets from other organisations	Q3/Q4 2020 (July – September / October – December 2020)

What KeRNEl Enables:



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Additional material

Creating a Strong Data Culture to Drive Success

