Transforming health and social care in Kent and Medway

kernel

KeRNEL

Kent
Research
Network for
Education and
Learning

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West Kent CCGs
East Kent Hospitals

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OPSR Matrix

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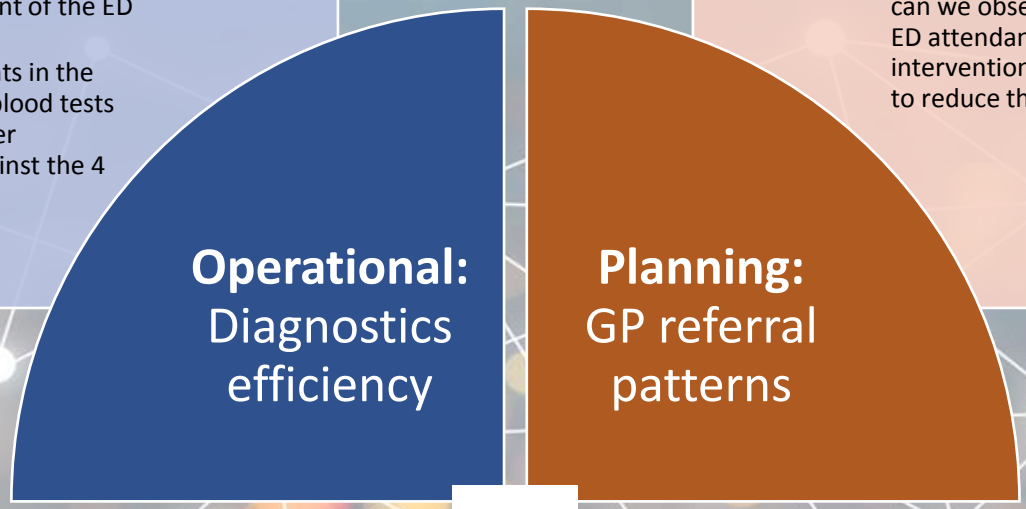

- What is the impact of the diagnostic element of the ED pathway?
- Can improvements in the prioritisation of blood tests help deliver better performance against the 4 hour target?

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

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

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.

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Background to KeRNEL

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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.

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Background to KeRNEL

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Drivers

- PHM Wave 3 from NHSE
- ICS/ICP/PCN development

Resources

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

Opportunity

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

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Infrastructure: breadth & depth

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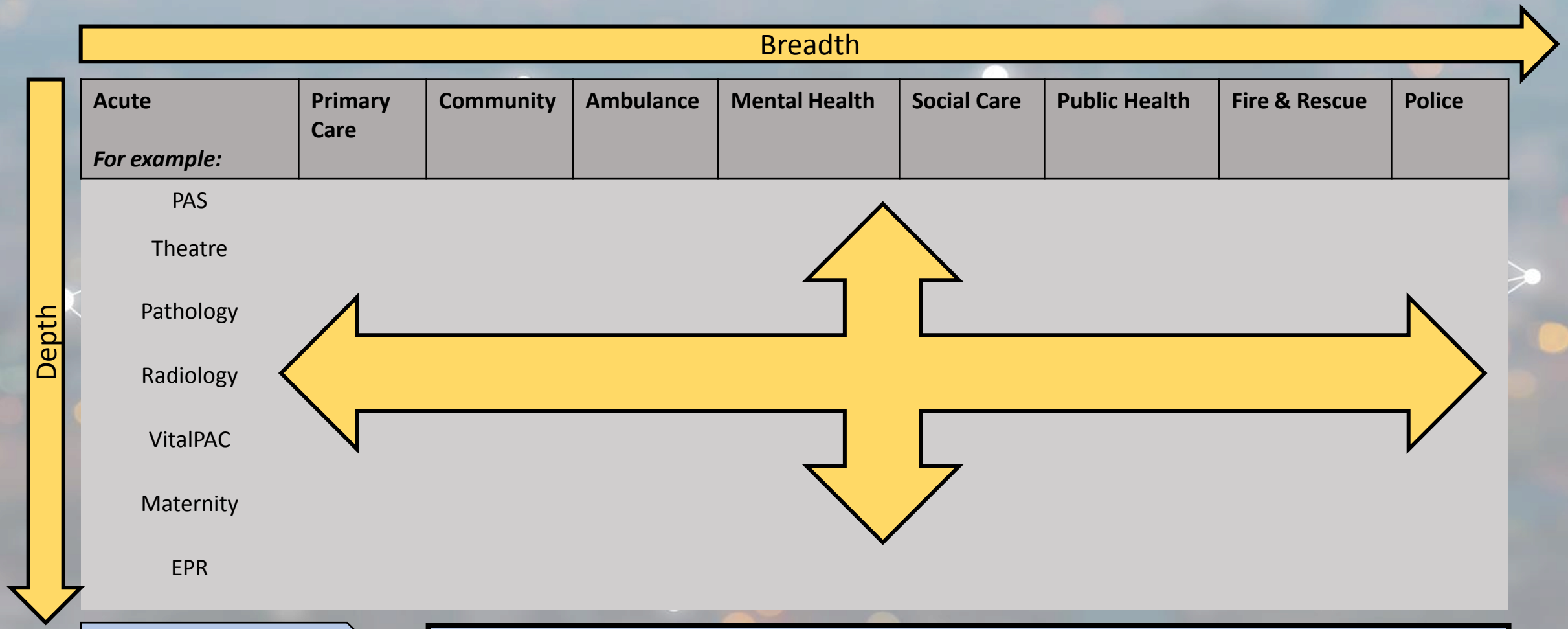

Supplemented and/or informed by:

- KMCR
- PMI
- Staffing and Personal data (e.g. wearables)

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Applications

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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 and Outcomes Measurement System dynamic modelling
Strategic	JSNA	UTC development				
Research	Health coaching evaluation Service evaluation			AI dev.		

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What KeRNEL Enables:

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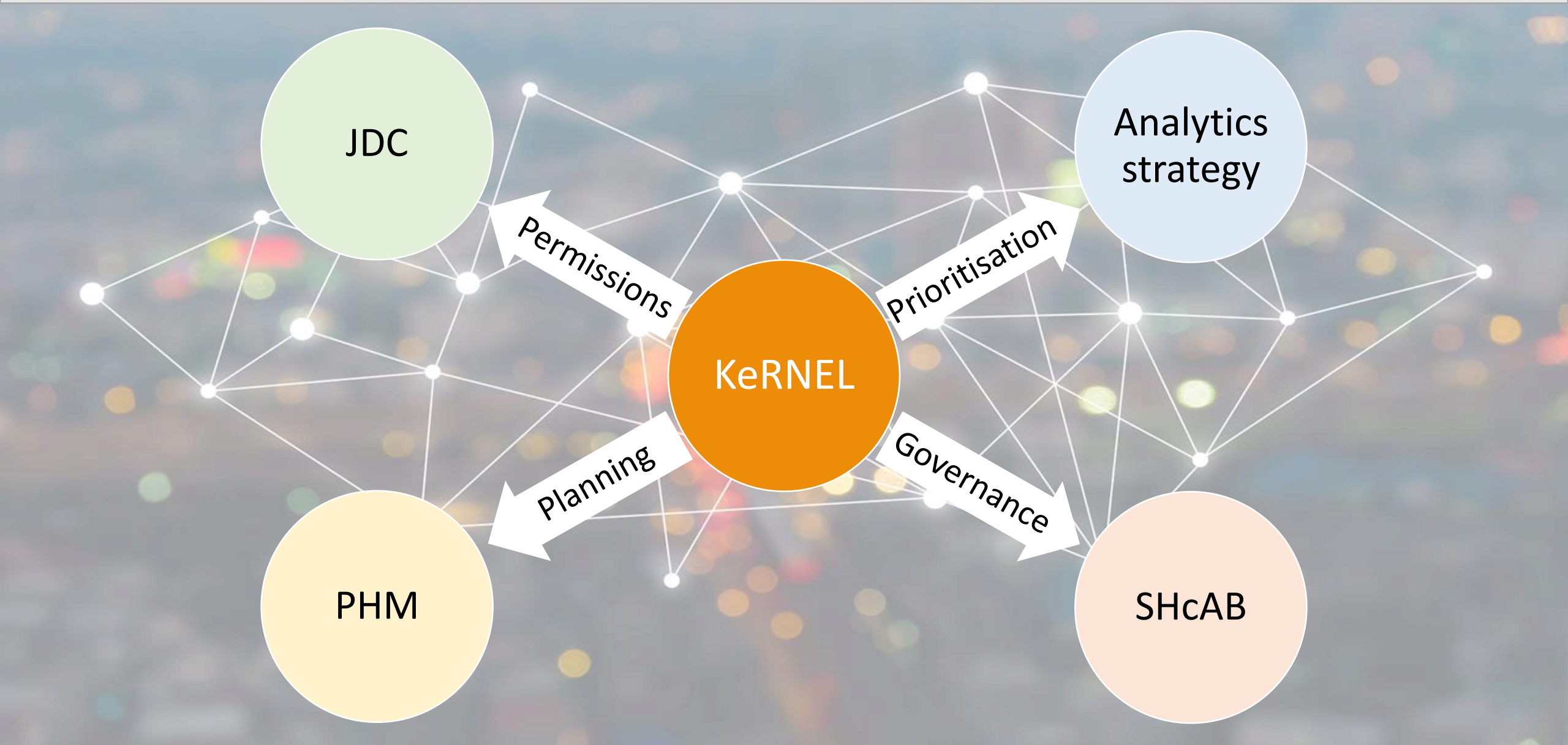

Benefits of the KeRNEL

- Operational
  - Close to real-time operational performance dashboards and reports
  - Automation of local and national returns and alignment of methodologies
- Planning
  - System-wide planning – views of demand and capacity across ICS / ICPs
  - Alignment of methodologies and automation of elements of the planning process
- Strategic
  - System-wide view of performance to support commissioning and service transformation / redesign
  - Benchmarking of quality and performance
- Research
  - Dataset to support local and national research initiatives
  - Building a centre of excellence for Data Science and AI with academic partners

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Segmentation and Modelling from Linked Data

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Whole Systems Partnership

outcomesbasedhealthcare