Kent Surrey Sussex Academic Health Science Network

Part of The AHSN Network

Office for Life Sciences

NHS

ARC KSS implementation approach

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Transforming lives through innovation

Order

- Who KSS AHSN are and what we do
- Our approach to change management
- Co-design
- Pull as well as push

KSS AHSN

- Commissioned nationally (1 of 15) by NHSE/I and OLS. Second 5 year licence.
- Bring evidenced innovation into pathways of care to improve health and contribute to economic growth.
- Approx 30:70% budget split on national:'local'.
- 2nd licence and going forward – required to act as a national network more than previously.
- Contributed to ARC licence application and strong supporter of concept of discovery needs to be translated into improved care for people, with a consequent impact.

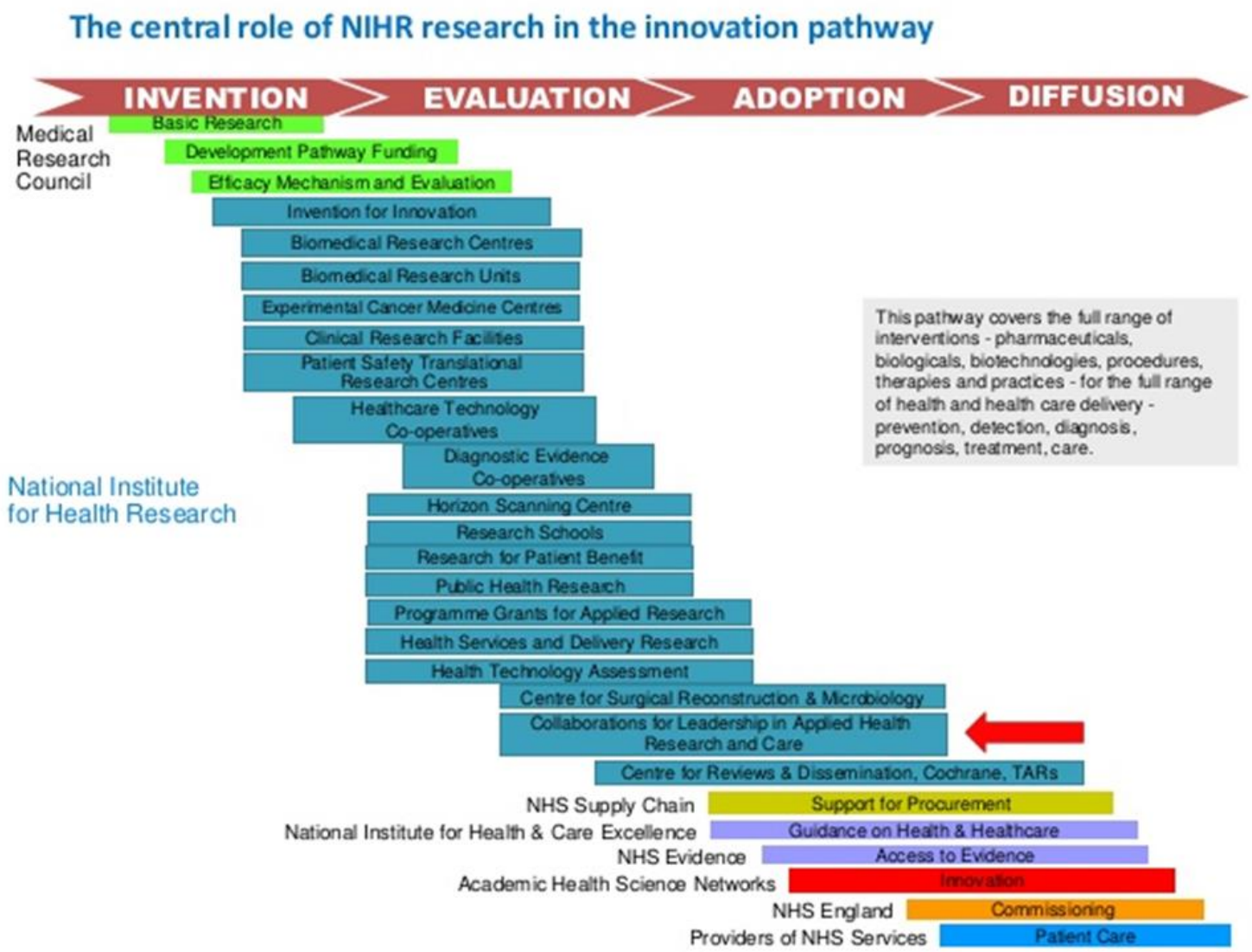
Disparity between research and innovation investment

Annual spending on research and development in the NHS, including through the National Institute for Health Research, 2014-15.

Approximate annual spending to support adoption and spread of innovation in the NHS through the AHSNs, 2013 to 2018.

Sources: Department of Health 2016; NHS England 2017

England's innovation landscape



WHO

People who often experience **the best that care has to offer**

- People who are **under-represented and less heard**
- People not **benefiting from innovation**
- People not **engaged with traditional services**

HOW

Needs articulation

Signposting & **matchmaking**

Real world validation

Spread & **adoption**

Transforming ***lives***

WHY

through ***innovation***

Physical health

Mental health

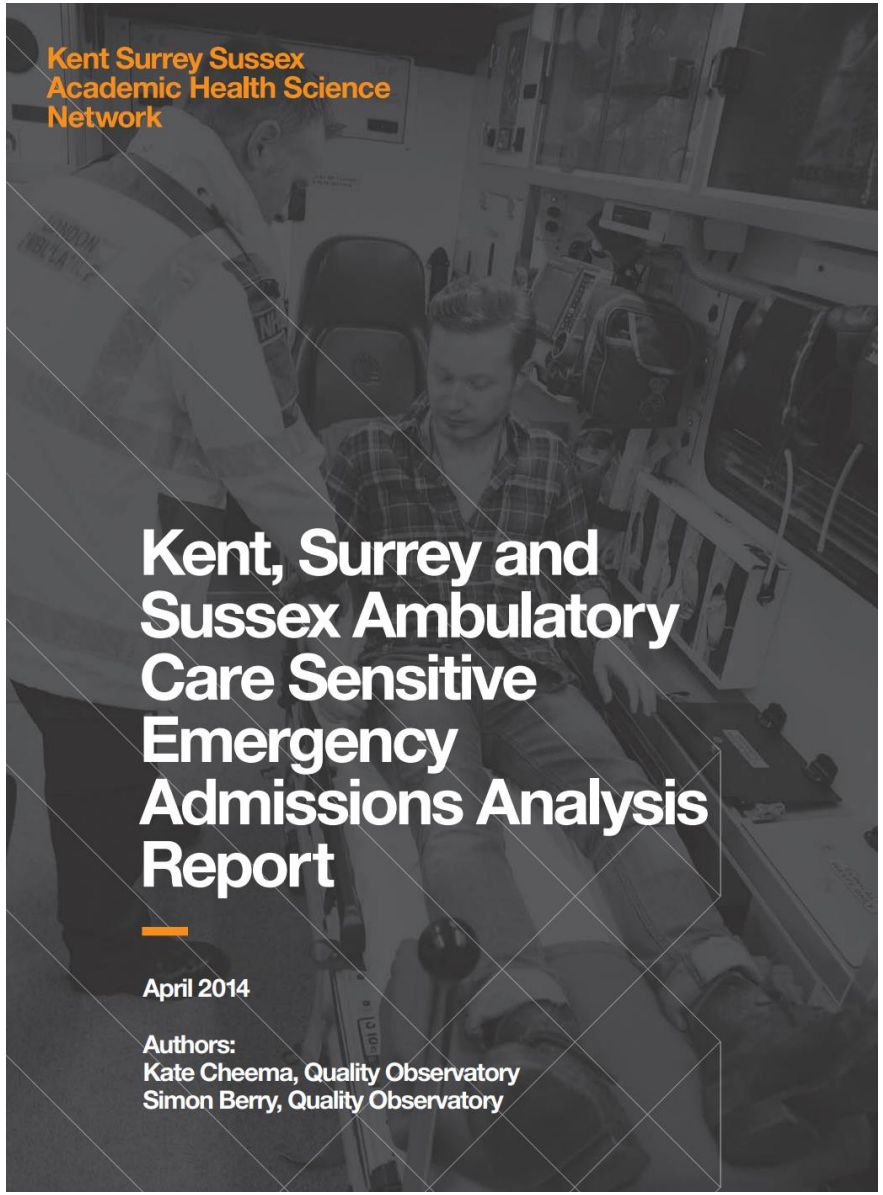
Healthcare

Social care

Secondary care

Primary & **community** care

QI is in our DNA

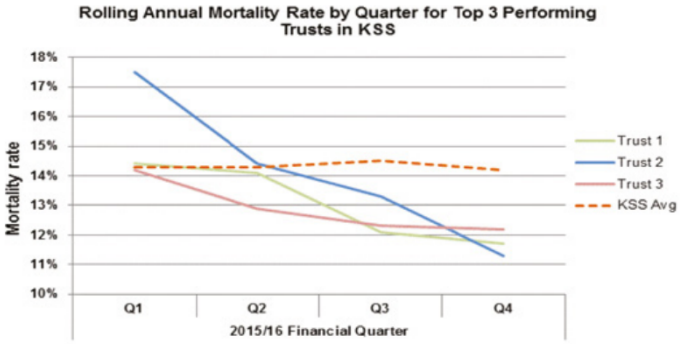


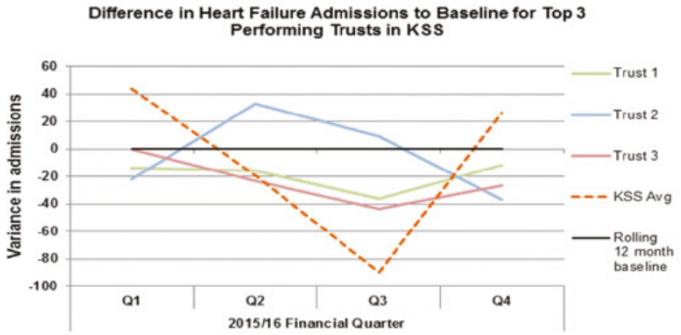
AHSN quality improvement expertise (1)

Measuring outcomes where the care bundle has been adopted

Early positive results

The top 3 trusts to apply the EQ care bundle within the KSS region managed to reduce admissions by a combined 190 patients few than baseline forecasts, which would account to a non-cash releasing saving in the region of just over half a million pounds based on the average cost of heart failure admissions in those specific hospitals.





The top performing Trusts LOS reduced by just over half a day equating to potential spare capacity of 452 bed days.

The three Trusts that saw the biggest improvements in mortality saved proportionally 35 more lives combined against baseline.

Measuring outcomes is a challenge to undertake reliably due to coding inconsistencies.

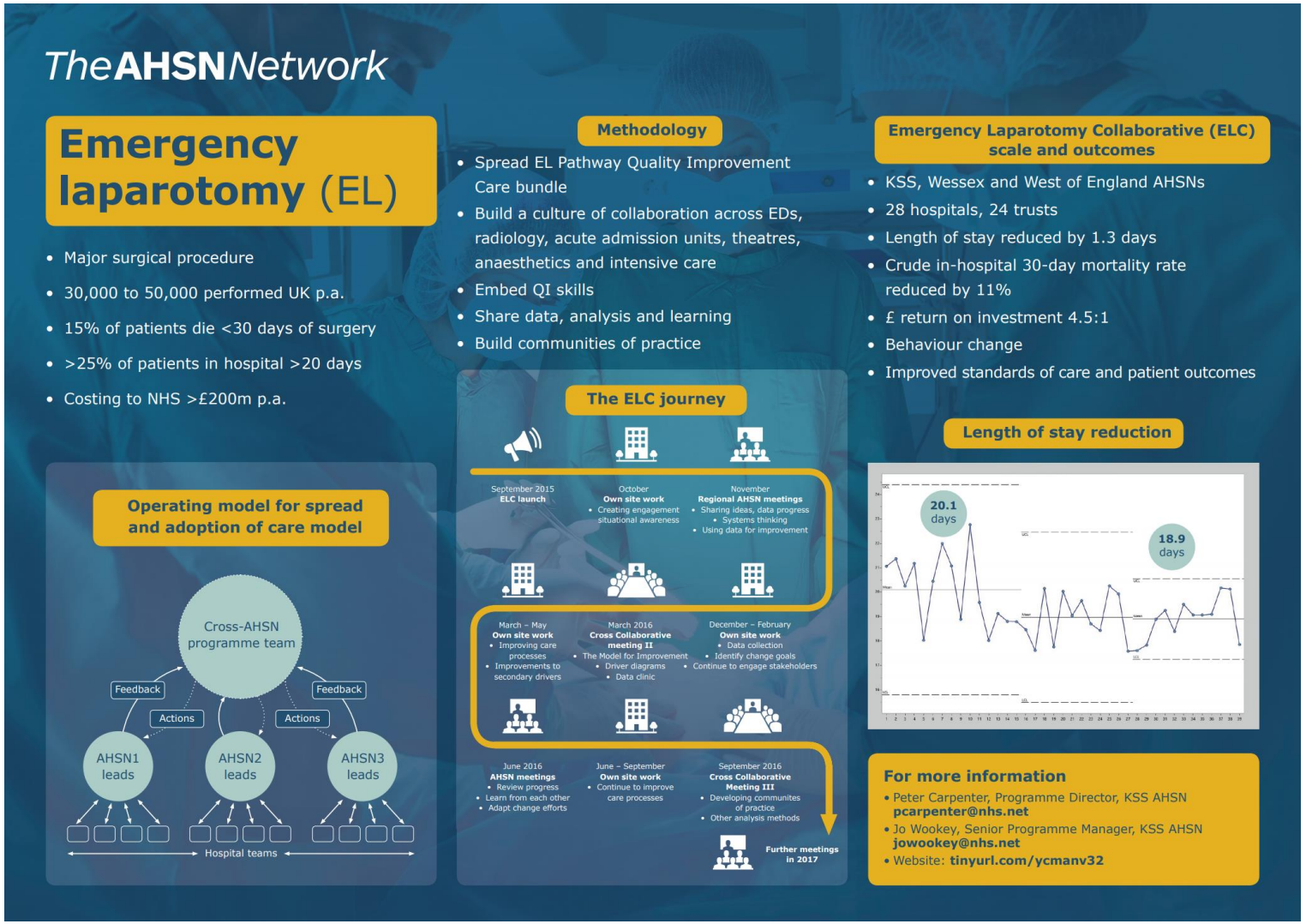
Localised aggregated data is used to provide correlational results as outcomes cannot be tracked at patient level. Aggregated data is however a useful proxy measure in being able to show a relationship to the process measures.

To ensure effective change monitoring much care is also taken to ensure the base-lining is applied accurately based on 3 year historic averages and trends, as well as being localised to each trust.

The prevalence of heart failure continues to grow nationally of the rate of between 3-6% per year. This appears to be echoed within the KSS region, evidenced by the increase in heart failure admissions. Consequently it is likely that care bundles have slowed the rate of increase expected and although the base-lining takes this into account, it is probably not introducing it as quickly as the increase is taking place in reality.

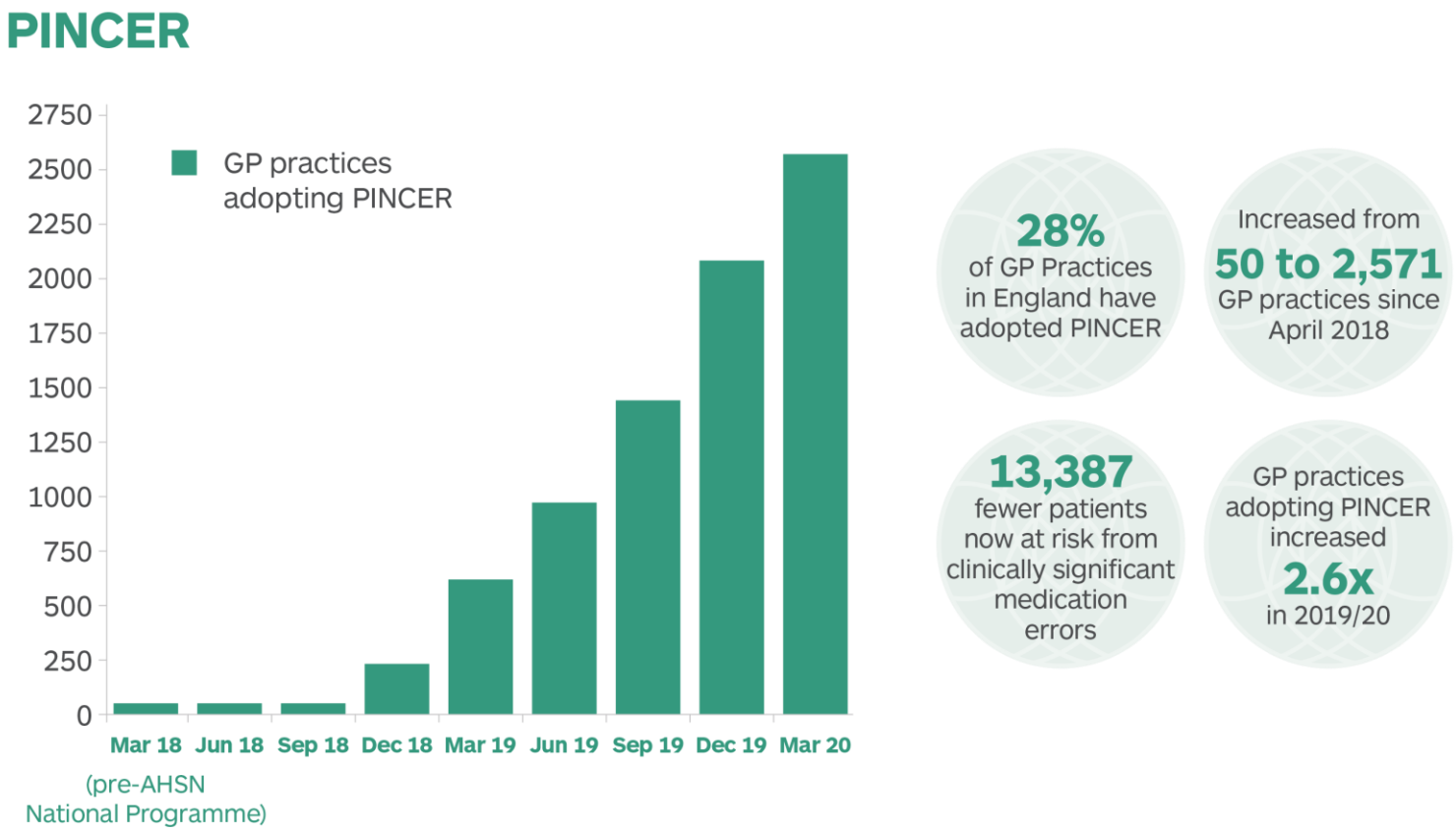
AHSN quality improvement expertise (2)

The ELC began life as a local initiative and was spread nationally through the AHSN Network



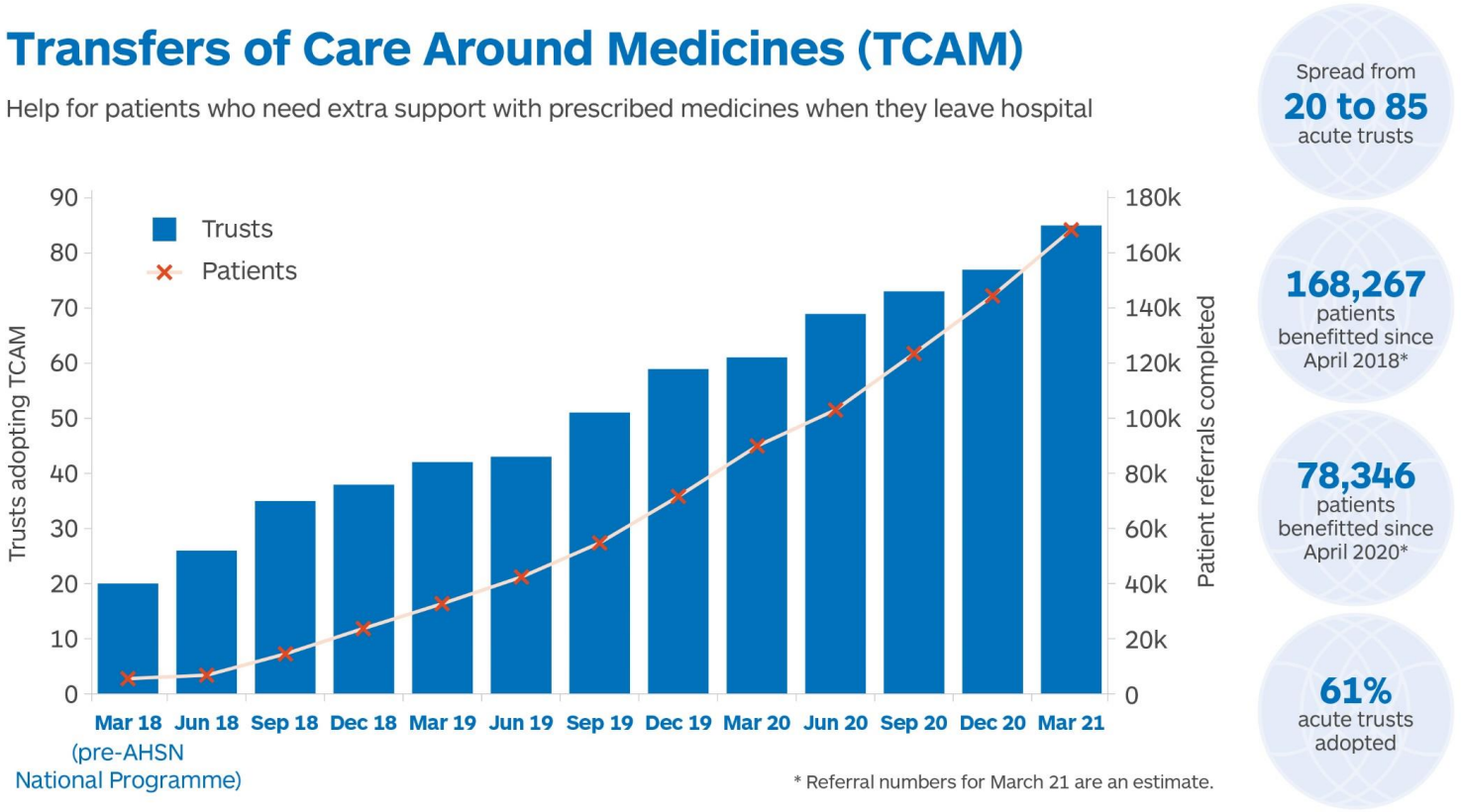
AHSN quality improvement expertise (3)

PINCER was a national AHSN Network programme



AHSN quality improvement expertise (4)

TCAM is a national AHSN Network programme



The co-design of better

- Need articulation.
- To have the greatest relevance, and create pull the needs of people living with the problem being considered (those affected, those providing interventions and care) need to be understood and presented with as much granularity as possible.
- No matter how much sincere intention, and how much historic experience this can’t be done remotely from the ‘front line’…

Leach Court (Brighton)

Kent Surrey Sussex Academic Health Science Network

UNIVERSITY OF SUSSEX

Brighton & Hove City Council

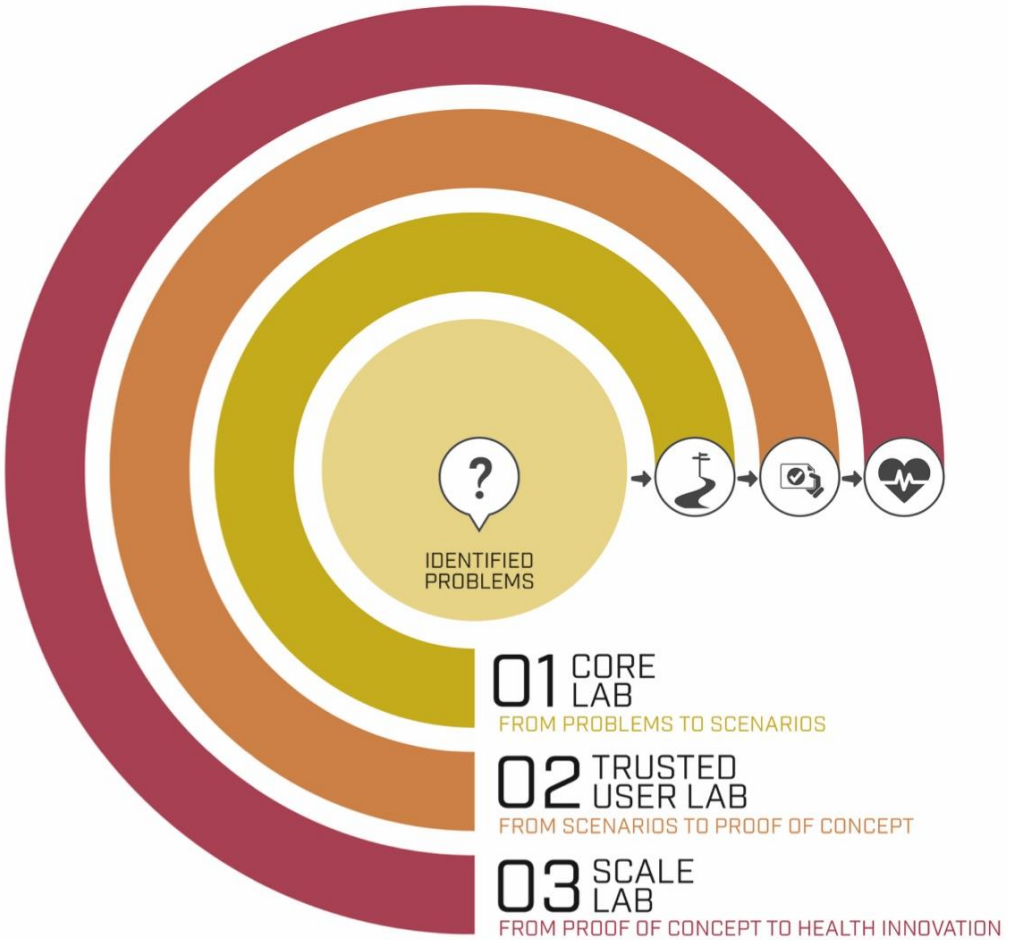
NHS
Brighton and Hove Clinical Commissioning Group

Case study 1: respiratory out-patients

- Well performing service, high patient recommendation scores.
- No concerns.
- 20+ service users (patients and carers), Darzi fellow, respiratory consultant, Trust Dir. Corporate Affairs. A community…

- Insights that emerged
- Wanted less talking at
- Wanted more of consultation to focus on partner/ needs
- Wanted more peer support – set up a on line group to provide.

KSS AHSN / Public Intelligence
User-driven health innovation methodology



In each case, a **living lab** is a **non-physical arena for the development of and experimentation with new health innovation solutions**.

Physical meetings will take place between the different users of each lab, but the lab as such is a framework for the innovation work.

PUBLIC INTELLIGENCE

Case study 2: physiological monitoring in dementia

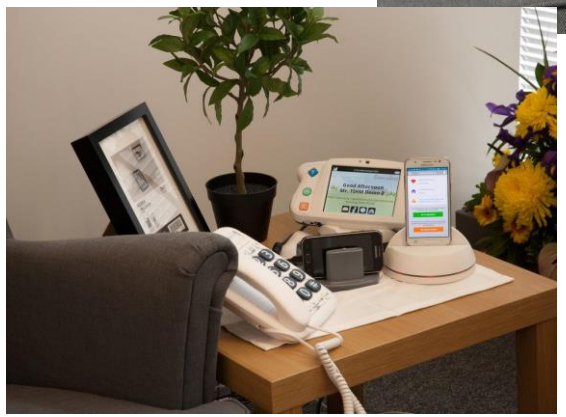
- Hypothesis – people with dementia can be kept at home safely if common problems causing admission are spotted early and managed aggressively.
- ‘Trusted users’ recruited to help assess technology – rejected much.
- The technology (acceptable to) chosen by the users performed well and had confidence of the project.
- Main benefit may be carer confidence and support to keep their loved one at home.
- Commercial solution now being offered nationally.

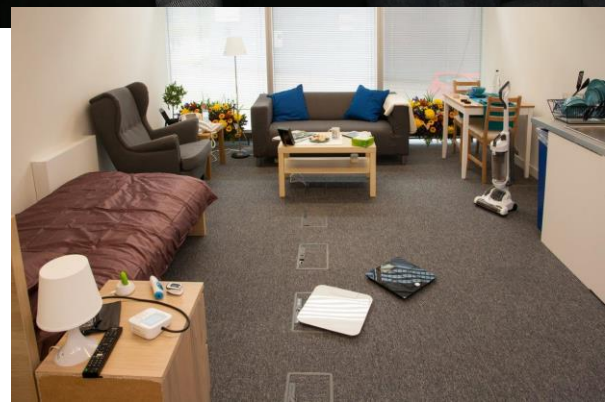
TIHM for Dementia

Living Labs at University of Surrey

- Simulate a home environment
- Test device functionality, deployments and integration
- Simulate patient monitoring
- Test machine learning algorithms with training data
  - Clinical alerts including UTI, Agitation, Weight & Blood pressure
- Staff training (SAPB, Alzheimer's society)
- Public demonstrations
  - Open days (Carers, PWD, Researchers, Council, Companies, Government officials)

… plus 10 ‘Trusted Users’ providing feedback on needs and testing new technologies in their own homes





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UNIVERSITY OF SURREY

Alzheimer's Society Leading the fight against dementia

Surrey and Borders Partnership NHS Foundation Trust

Case Study 1: TIHM for Dementia (Test Bed 1)

- Technological devices such as sensors, apps and trackers installed in people's homes
- Testing remote monitoring of health and wellbeing using data combinations gathered via Internet of Things
- Evaluation of results and share health technology learning to support other long term conditions

Take home messages for implementation from KSS perspective

- ARCs live and die on implementation and impact, not purely on discovery.
- Implementation/ spread of the new has always been difficult (although COVID interesting in this respect).
- Involving people as a community of experience gives greater granularity to the question, and creates interest and pull from the front line.
- This is not a one off but an ongoing relationship with the public, professional groups and commissioners. The ARC is their ARC.
- Pull from people and the system will see quicker and better implementation than push alone.
- Measurement must be designed in, not left to last moment, and not forgotten!

WHAT

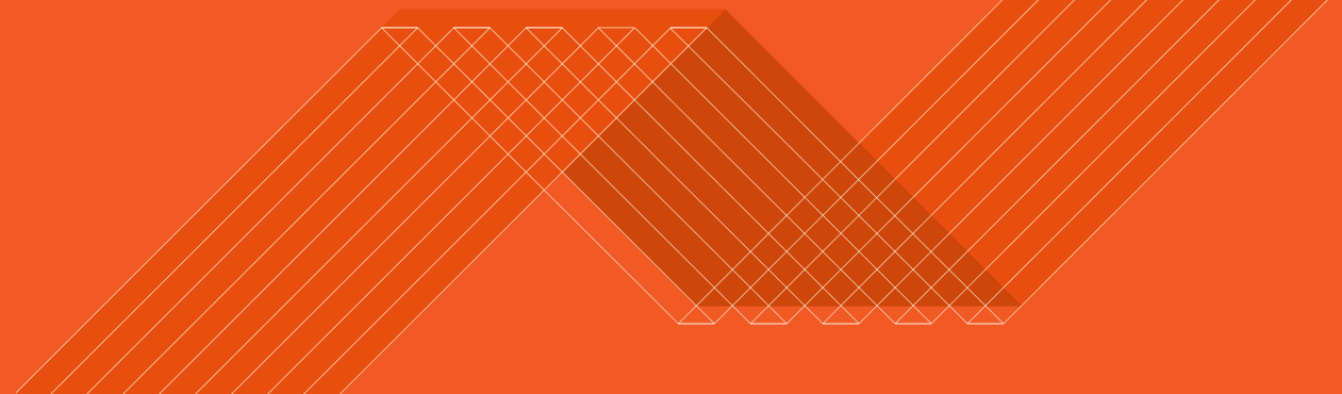
Improved research and innovation

Thriving co-design

Strong and successful ARaC

More public benefit

Q&A



Thank you

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