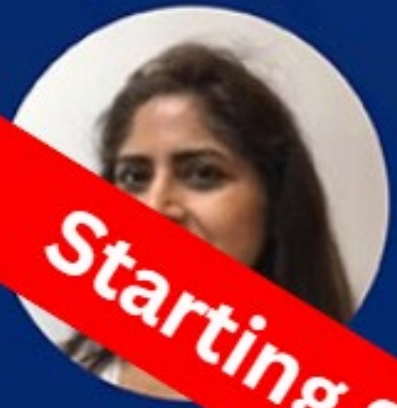
Population Health at the Neighborhood Level:

Community Care Best Practices from NHS Kent and Medway ICB



Starting Soon!

Live We… June 23, 2026 at 11am ET

NHS
Kent and Medway

Today's Speakers

Dr Malti Varshney, FFPH

Director of Strategic Change and Population Health

NHS Kent and Medway Integrated Care Board

Clint Taylor

Head of Population Health Analytics

NHS Kent and Medway Integrated Care Board

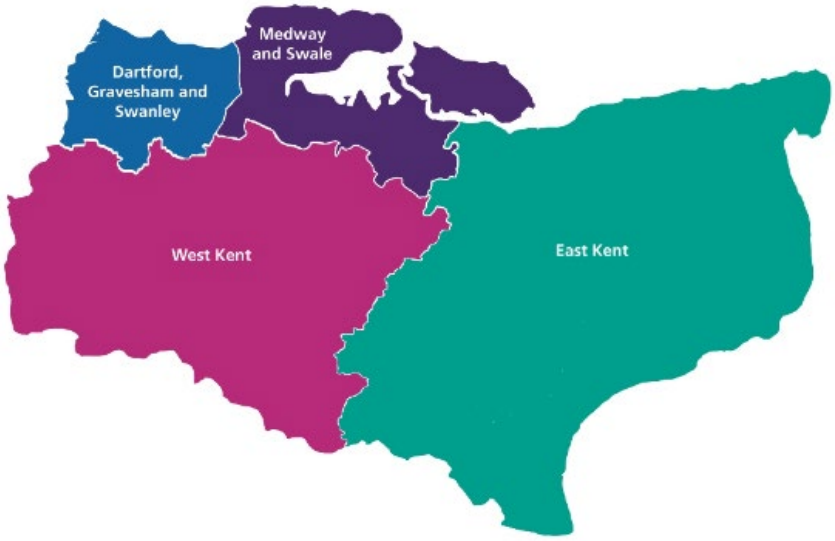
Sarah Adams

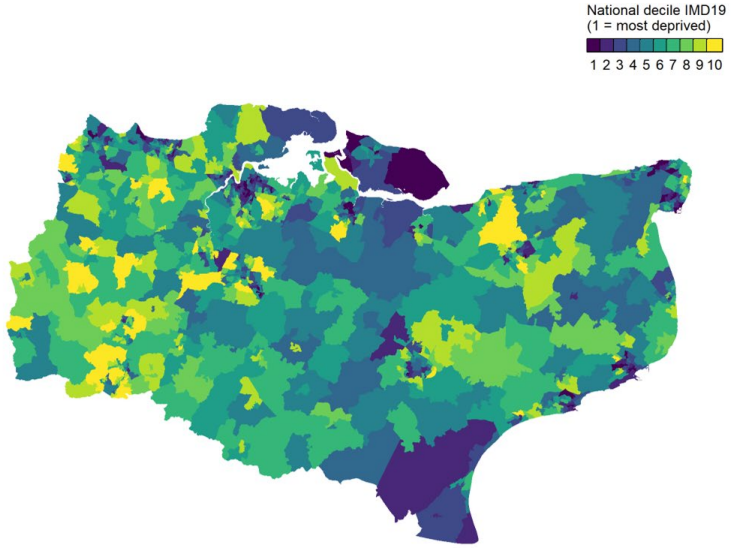
Director of Health Analytics

Graphnet Health

Together, we can

Kent and Medway





Ministry of Housing, Communities & Local Government. English indices of deprivation 2019.
Contains National Statistics data © Crown copyright and database right 2019
Contains OS data © Crown copyright and database right 2019
Produced by Medway Public Health Intelligence Team, Medway Council 2023-04-06

We have some of the most (bottom 10%) socially deprived areas in England. This correlates with the health outcomes achieved.

NHS
Kent and Medway

Our System

1.9 million people

Two health watch organisations

Approx **4,000** registered charities

90,000 staff working across health and care

13 housing authorities

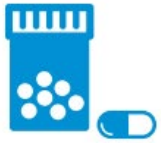
More than **74,000** businesses and enterprises

14 councils – one county, one unitary, 12 districts

182 GP practices in **42** primary care networks

684 schools and **1,713** nurseries/early yars settings

Four health and care partnerships



325 pharmacies

one medical school and **three** universities

Seven NHS provider trusts and **one** integrated care board

642 care homes

321 parish and town councils

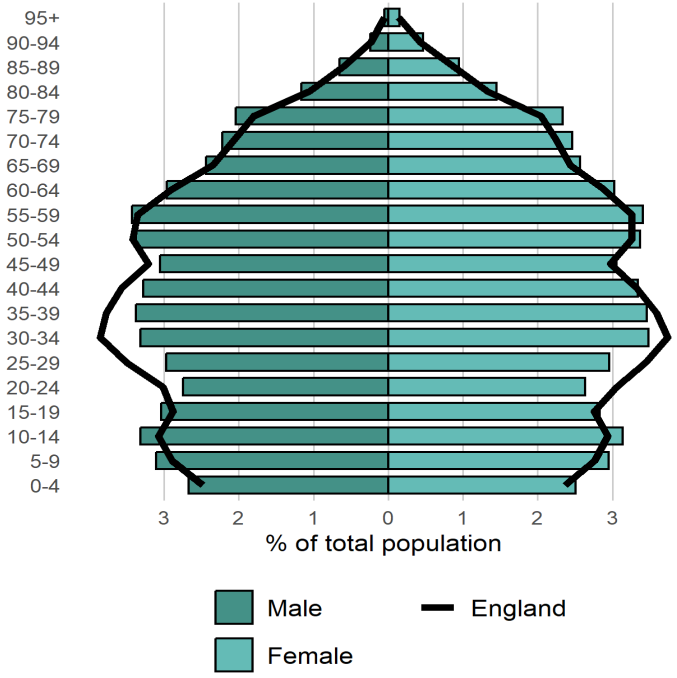
One police force and one fire and rescue service

Together, we can

Population

Age Profile for Kent & Medway ICS

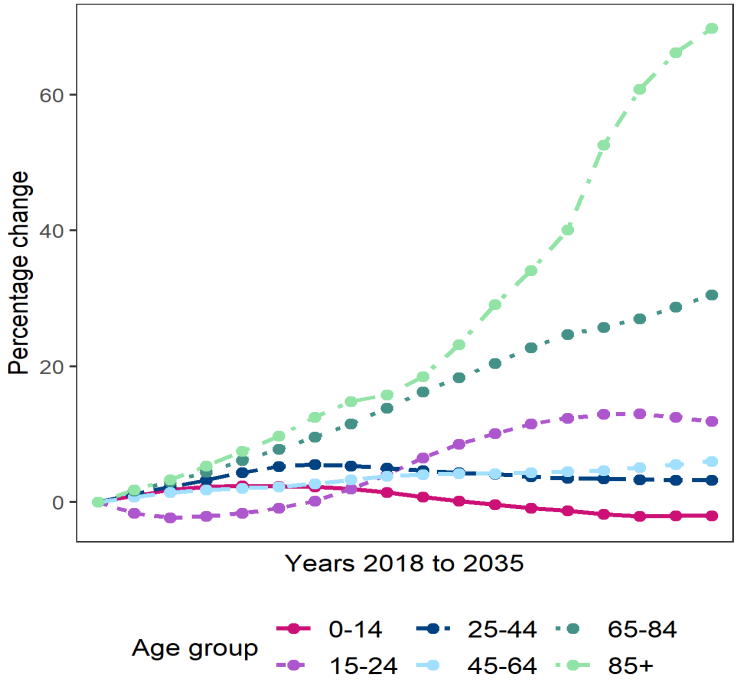
Total population: 2,020,089



Source: NHS Digital. Patients Registered at a GP Practice. 01Jan2023

Projected population for Kent & Medway ICS

Percentage change from 2018



Source: ONS. Population projections for local authorities. 2018 based.

Note: Population projections have been calculated by aggregating the local authority districts in Kent and Medway ICS.

What Matters to People?

How well would our systems and processes currently support PC…?

PC

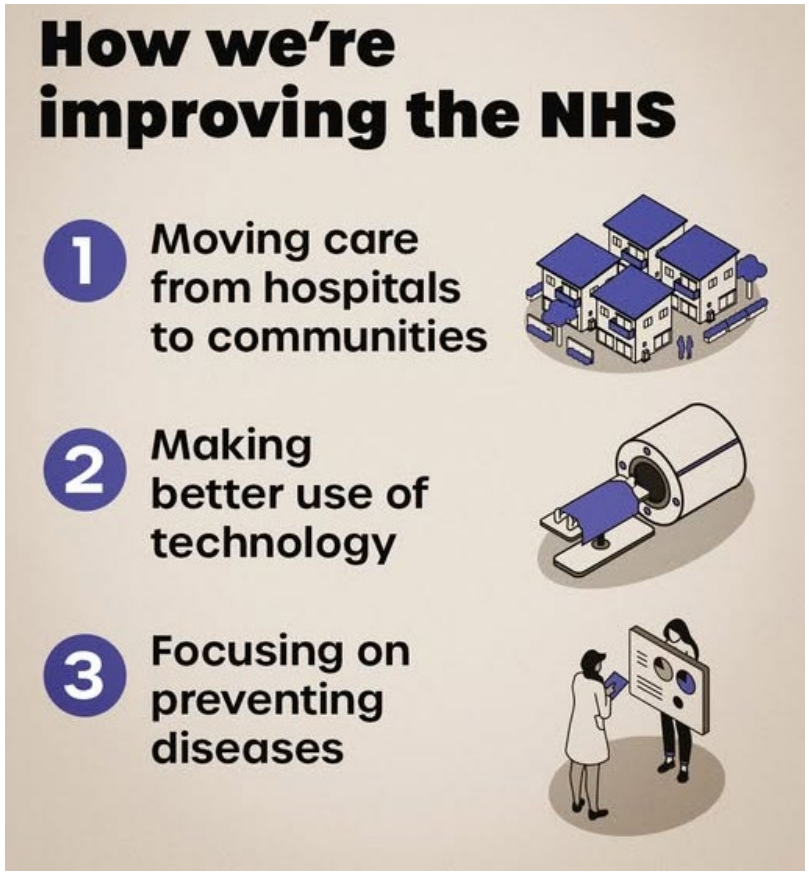
- 96 years old
- Recent history of falls and mobility issues
- Lives alone
- Retired nurse
- Past Medical History: cognitive impairment, hypertension, IHD, AF, TIA, CKD, T2DM, COPD, osteoporosis, metastatic breast cancer with liver and bony metastases
- Polypharmacy

An Emergency Call resulted in

- Paramedics on scene at 3 am
- Fall, mobility issues and new onset back pain
- Refusing to go to hospital
- No TEP/ReSPECT or DNAR

What matters to her?
What are the likely outcomes?

Strategic Context



Population health management
Using system-wide linked data to understand pop. need and stratify risk by complexity & future health/care resource use.

Modern general practice
Together with the broader primary care choices that improve patient access including use of the NHS App and Pharmacy First.

Community services universal offer
Describes the core components of NHS ICB funded community health services for adults and children and young people.

Integrated Neighbourhood Teams to support people with complex needs
Multi-agency teams jointly responsible for people with multiple complex needs, requiring coordinated access to a range of services – building on broader vision for integrated neighbourhood teams.

Urgent out of hospital services
Virtual wards and Urgent Community Response services accessed via a multidisciplinary single point of access for clinicians and professionals.

General Practice at the Heart of Neighbourhood Health

The NHS is shifting care into neighbourhoods — delivering more proactive, preventative and personalised support in the community rather than in hospitals.

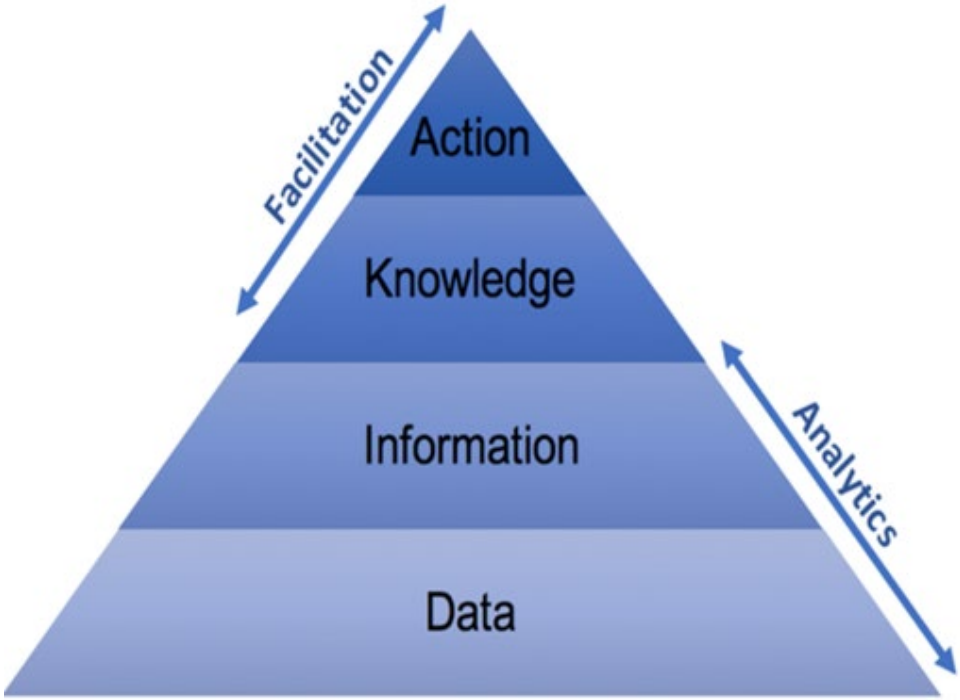
Kent & Medway's Neighbourhood Health model has been developed jointly with General Practice and system partners, shaped by frontline insight and local population need.

Why General Practice is essential

- They hold the continuity, relationships and knowledge needed to spot need early and coordinate care.
- Practices remain the first point of contact for most residents — placing them in the best position to lead neighbourhood-level decision-making.
- Strong primary care enables faster support, smoother escalation and consistent MDT working for people with the most complex needs.
- Clinical leadership from General Practice ensures the model is locally responsive, realistic and grounded in how practices already work.

NHS
Kent and Medway

Why a Data-Informed Improvement Approach?



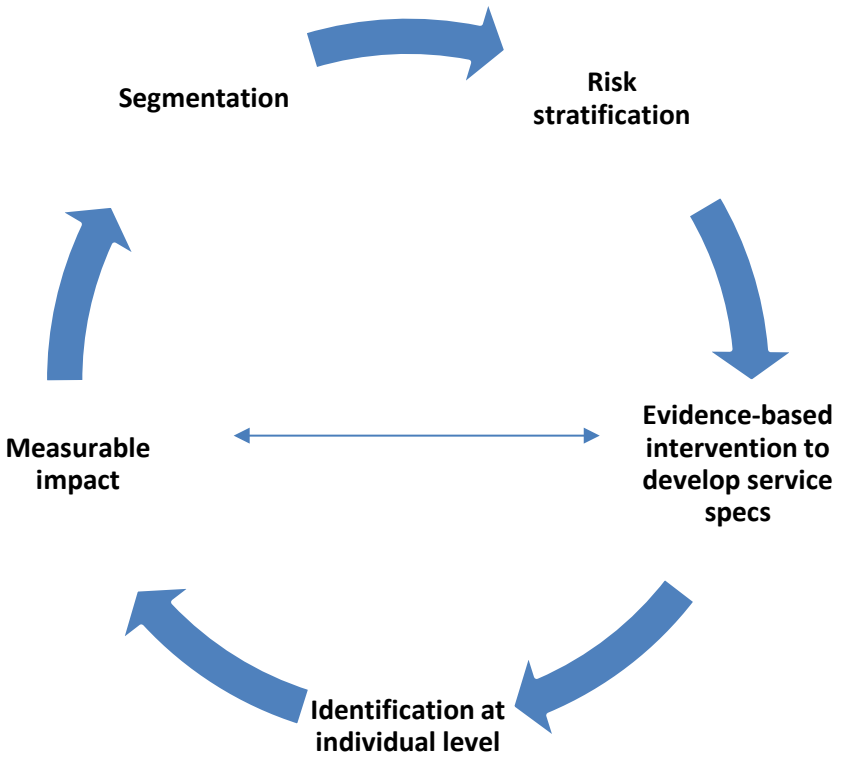
Data rich → Actionable Insights

Together, we can

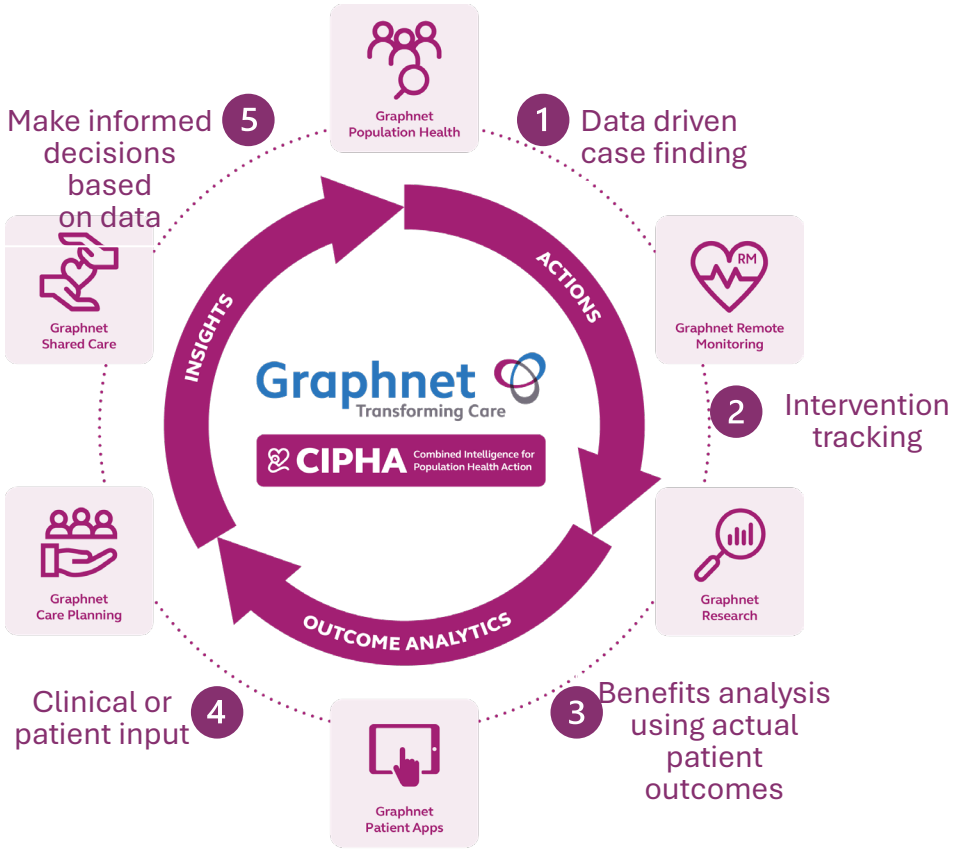
Why a Data-Informed Improvement Approach

- Once seen you can't unsee
- Provides opportunity to understand unwarranted variation and promotes equity
- It enables us to demonstrate measurable impact

Implementing Insights to Action: Our Approach



Enabling Population Health Through a Digital Ecosystem



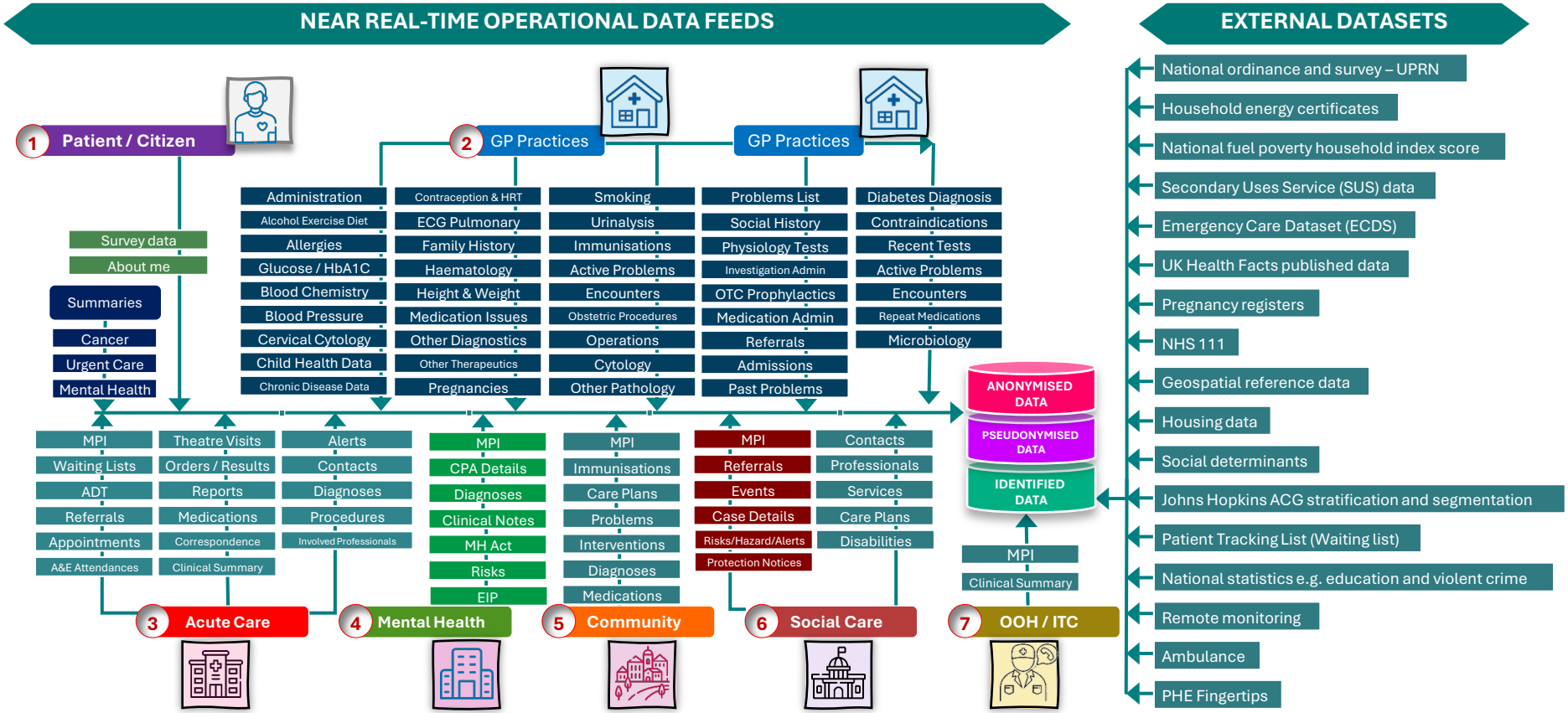
Our tool set
Used in 11 Integrated care systems in England

20 Million citizens health and care data flows into our Shared care records

17 million health and care records flowing into our population health solution

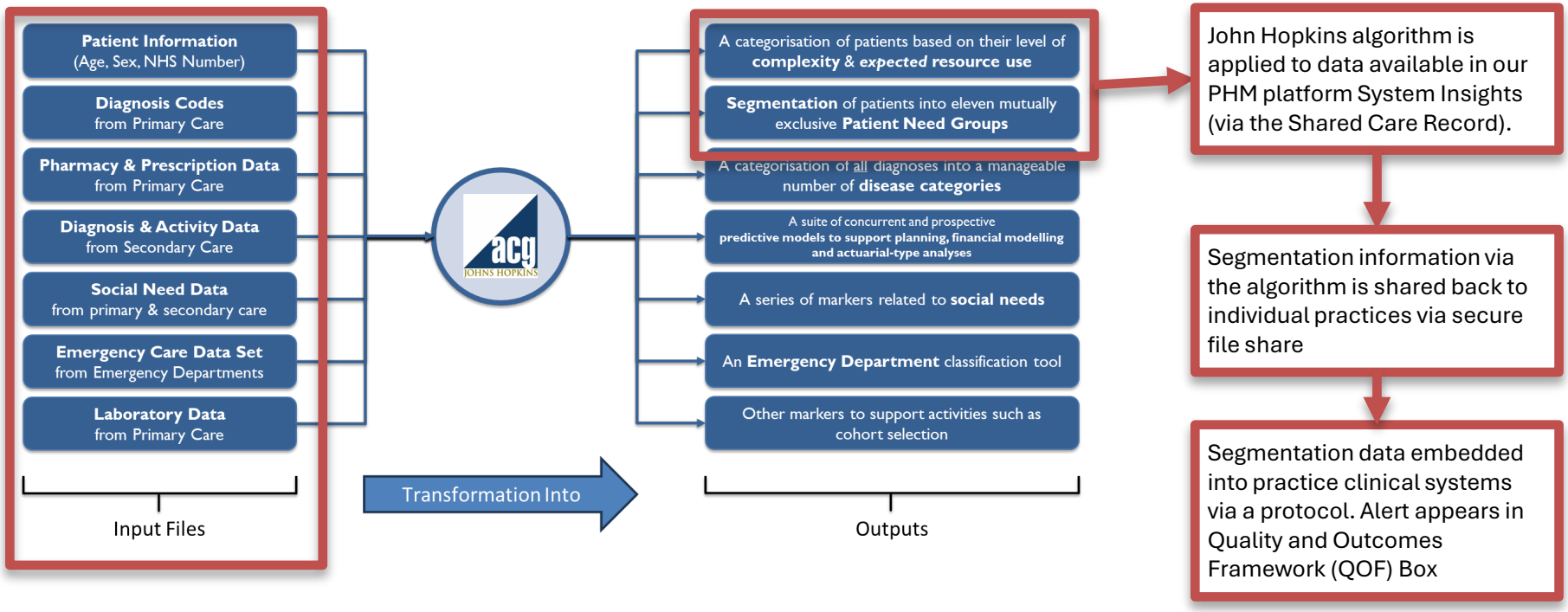
150k hands on clinical users using our solutions

Graphnet Population Health



The Johns Hopkins ACG® System Uses Diagnostic Codes, Prescription and Activity Data to Segment Patients

The Johns Hopkins ACG System is a comprehensive population health analytics solution that transforms data (ICD/SNOMED/Read/Dm+d) that exists in primary and secondary care records into a series of meaningful patient-centric, population-level and patient-level risk markers.



NHS Kent and Medway

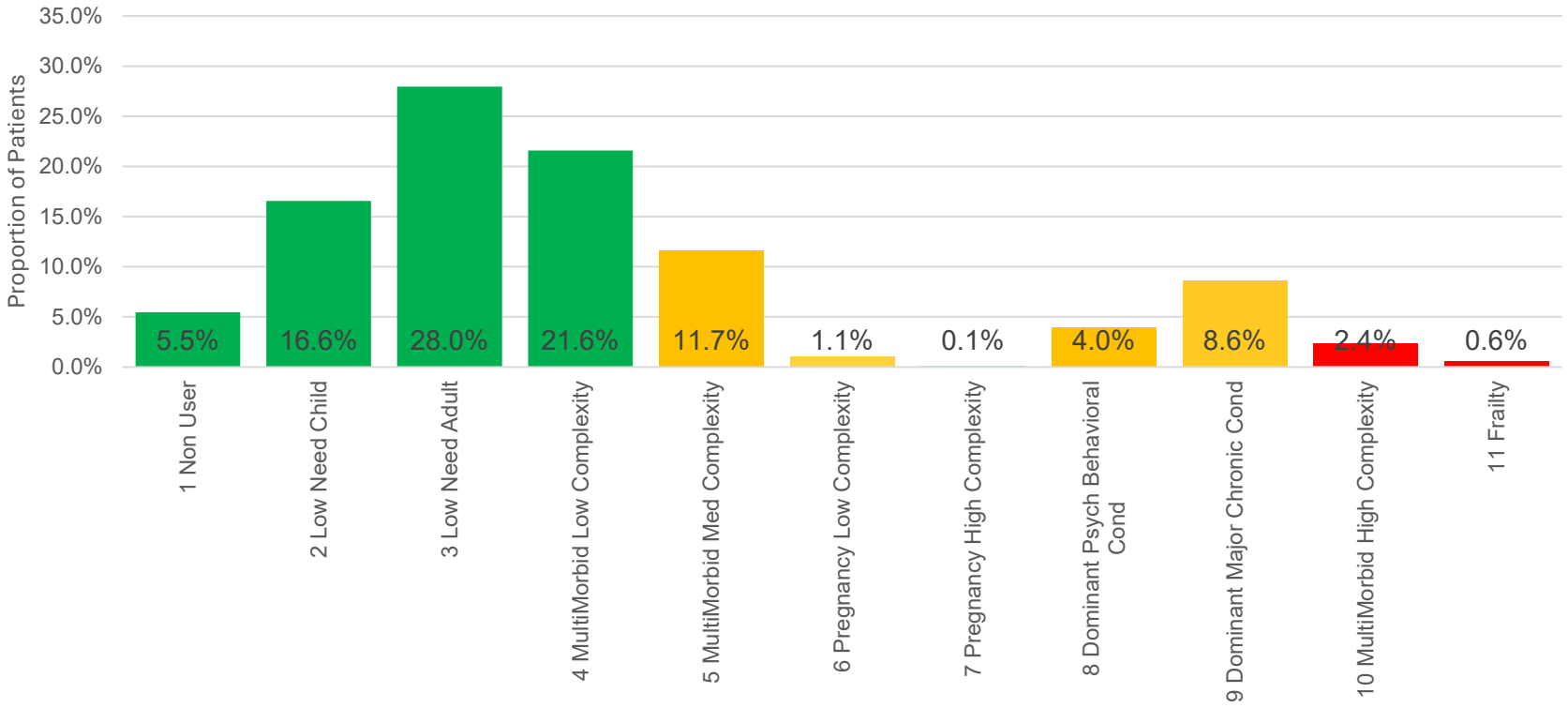
Patient Need Group (PNG) Segmentation Takes a Multimorbidity Approach to Categorising Patients

Increasing Health Need/Complexity

Description	RAG	PNG No.	PNG Category	PNG Description
High Complexity; Multi-Morbidity	Red	11	Frailty	*Adults aged ≥65 with evidence of ≥**2 frailty concepts** (e.g. difficulty walking, weight loss, cognitive impairment of incontinence)*
		10	Multi-Morbidity, High Complexity	*Multi-morbidity with **high complexity** (major and unstable chronic conditions).*
Dominant Chronic	Amber	09	Dominant Major Chronic Condition	***Somatic condition with high impact on health**, without treatment the condition is progressive and unstable over time (e.g. chronic liver disease; type 1 diabetes with complications).*
		08	Dominant Psychiatric/ Behavioural Condition	***Psychiatric condition with high impact on health**, without treatment the condition is progressive and unstable (e.g. bipolar disorder; personality disorders; major depression).*
Pregnancy		07	Pregnancy, High Complexity	*Pregnancy with or without delivery among women with **high morbidity burden.***
		06	Pregnancy, Low Complexity	*Pregnancy with or without delivery among women with **low morbidity burden.***
Moderate Needs		05	Multi-Morbidity, Medium Complexity	*Multi-morbidity with **moderate complexity** conditions.*
Healthy	Green	04	Multi-Morbidity, Low Complexity	*Multi-morbidity with **low complexity** conditions.*
		03	Low Need Adult	*Adults aged ≥18 with **acute morbidity** and no more than one low complexity condition.*
		02	Low Need Child	*Children aged 0 to 17 with **acute morbidity** and no more than one low complexity condition.*
		01	Non-User	*Individuals who have **no diagnosis.***

Together, we can

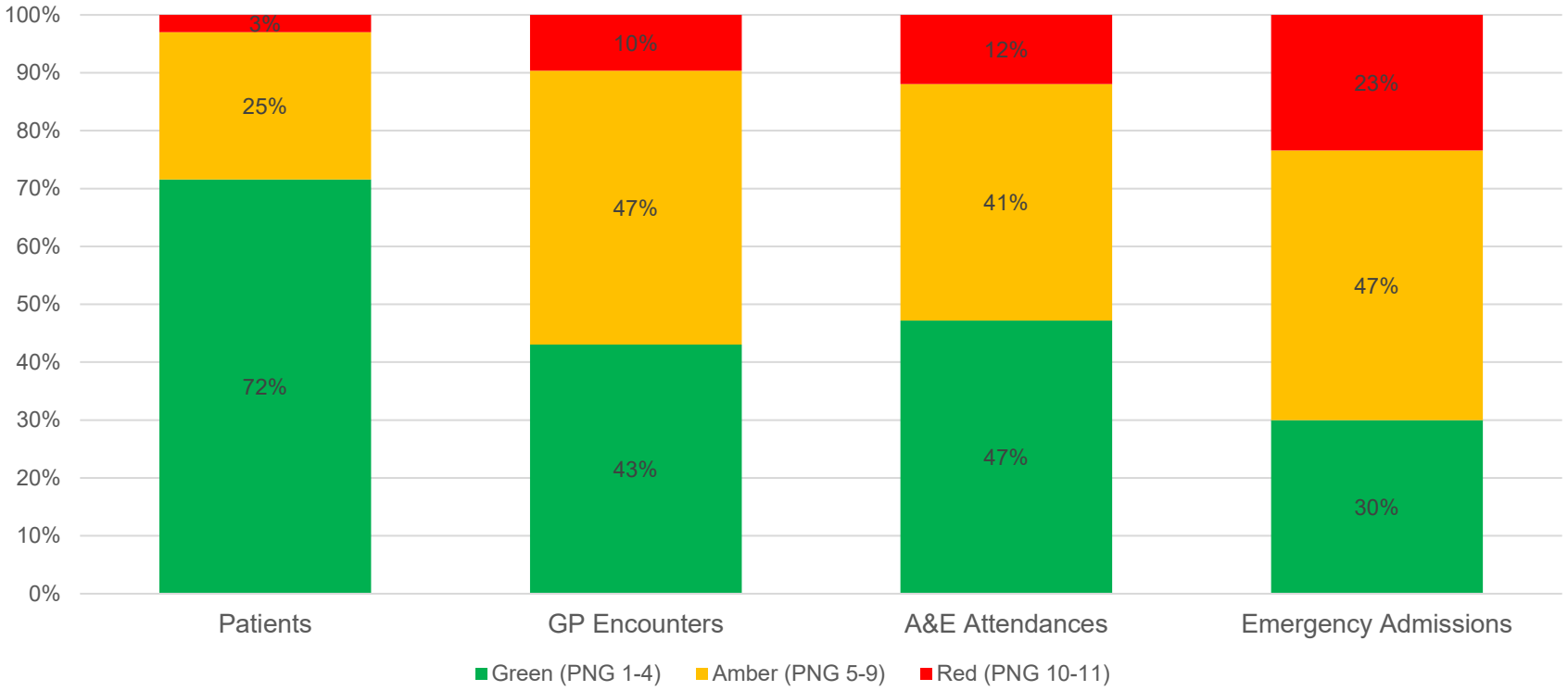
There Are 1.88 Million People in Kent & Medway: 72% PNG 1-4, 25% in PNG 5-9 and 3% in PNG 10-11



See appendix for PNG definitions. Note: There are 2,102 patients in Kent & Medway who have not been allocated to a PNG category due to opt-out/confidentiality

Together, we can

Across K&M, PNG 10-11 Patients Account for 3% of the Pop. but Almost 10% of GP Encounters & 25% Emergency Admissions

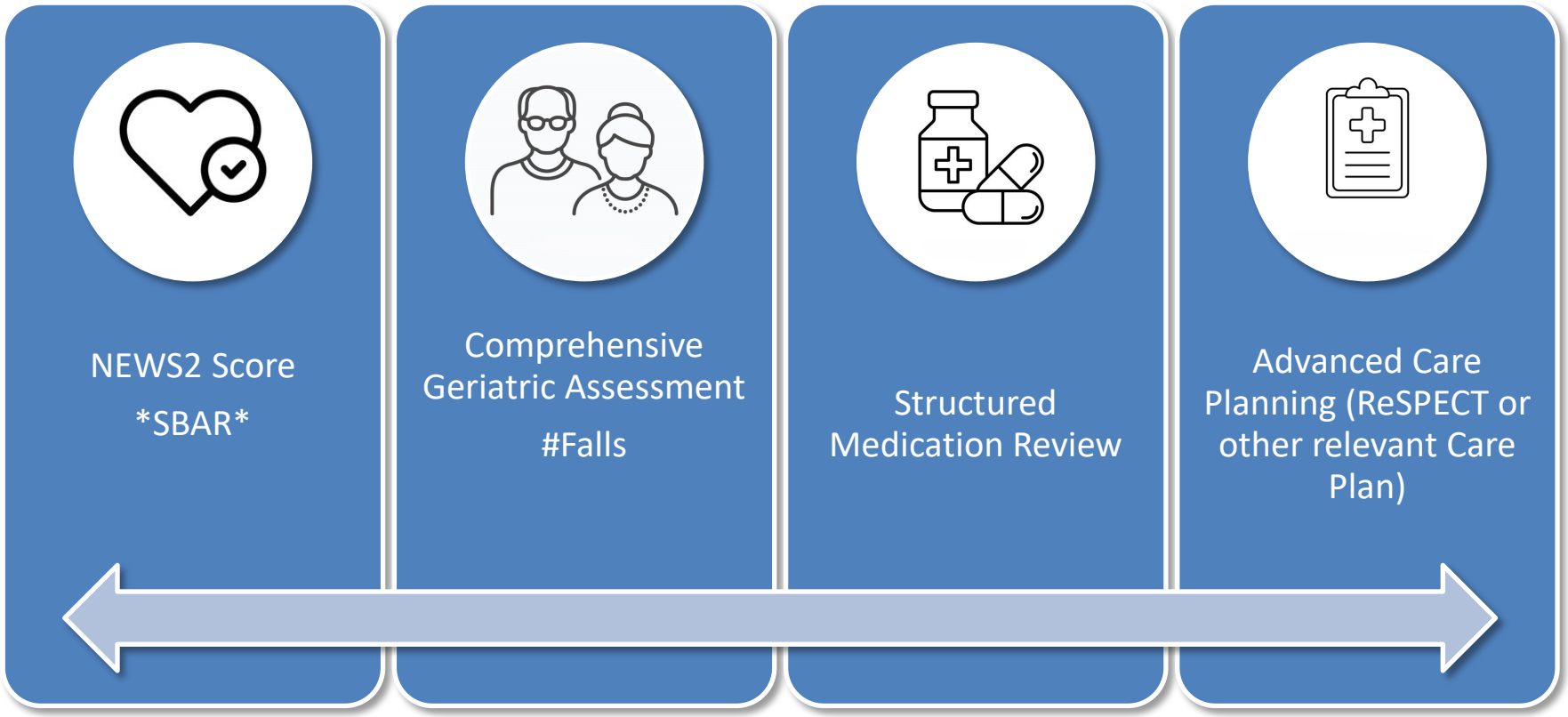


Note: GP encounters defined as the number of entries recorded on a patient's record in the last 12 months (includes both clinical and administrative encounters).

Together, we can

NHS
Kent and Medway

Evidence-Based Interventions for People with Complex Needs

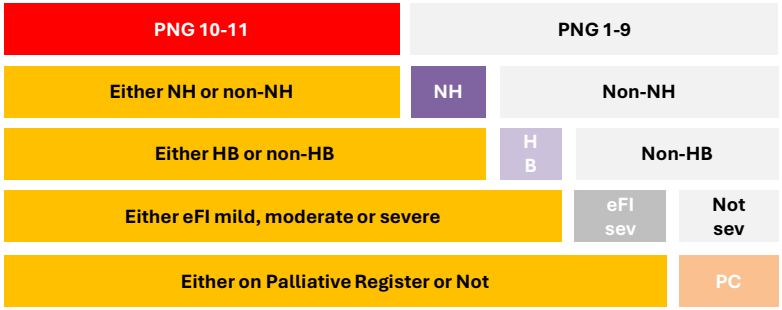


Together, we can

18

There Are >90k 'high-need' Patients Who Fit One of: PNG 10-11, Housebound, Nursing Home, eFI sev. or Palliative

The Logic: *Start with PNG 10-11, then add the remaining NH patients, then add the remaining HB patients, then add the remaining eFI severe patients, then add patients on the Palliative Care register*



	PNG 10-11 ✅	PNG 10-11 ❌ NH ✅	PNG 10-11 ❌ NH ❌ HB ✅	PNG 10-11 ❌ NH ❌ HB ❌ eFI severe ✅	PNG 10-11 ❌ NH ❌ HB ❌ eFI severe ❌ PC ✅
DGS	~6,600	~770	~1,100	~1,600	~320
EK	~27,800	~3,300	~3,100	~6,400	~500
M&S	~11,000	~1,400	~2,100	~3,100	~400
WK	~14,300	~2,100	~2,000	~3,800	~550
Total	**~59,800**	**~7,500**	**~8,400**	**~14,900**	**~1,700**
Total			**~92,500**		

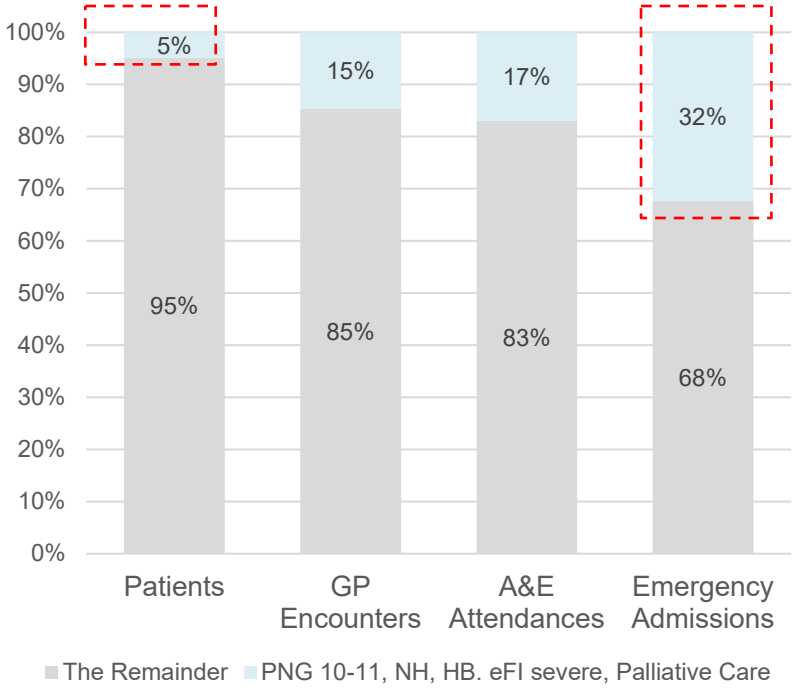
Average	PNG 10-11 ✅	PNG 10-11 ❌ NH ✅	PNG 10-11 ❌ NH ❌ HB ✅	PNG 10-11 ❌ NH ❌ HB ❌ eFI severe ✅	PNG 10-11 ❌ NH ❌ HB ❌ eFI severe ❌ Palliative Care ✅
GP Encounters	87	54	58	82	63
A&E Activity	1.3	0.6	0.6	0.9	0.9
Emergency Admissions	0.6	0.3	0.3	0.3	0.5
6m Hospitalisation Risk	**14.8% (K&M av. ~3%)**	**9.9%**	**11.3%**	**14.2%**	**19.2%**

eFI = electronic frailty index, HB = housebound, NH = nursing home, PC = palliative care register

Together, we can

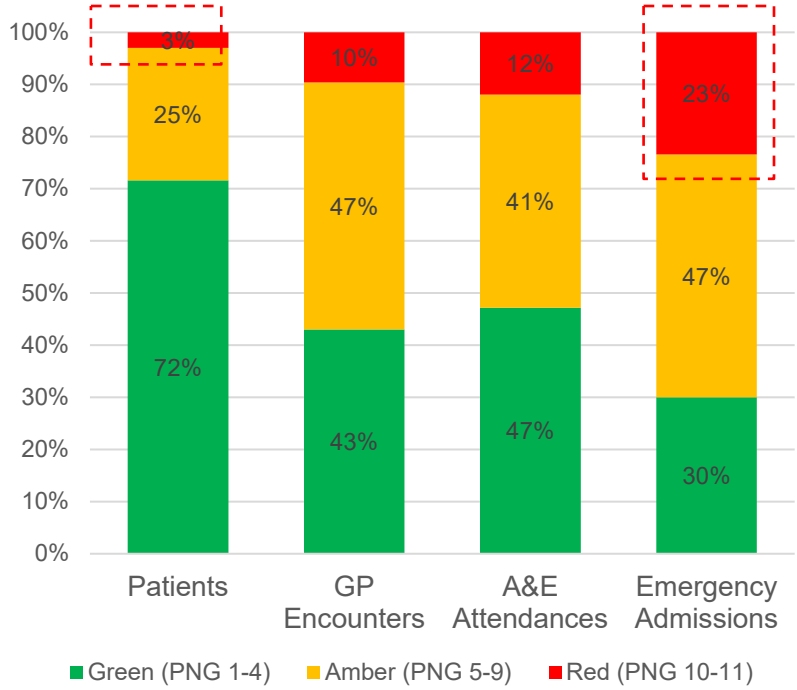
Focusing on PNG 10-11, NH, HB, eFI Sev and PC Means That Almost 1/3 of Admissions Are Captured by 5% of the Pop.

PNG 10-11, HB, NH, eFI severe and Palliative Care register patients compared to the rest of the K&M population



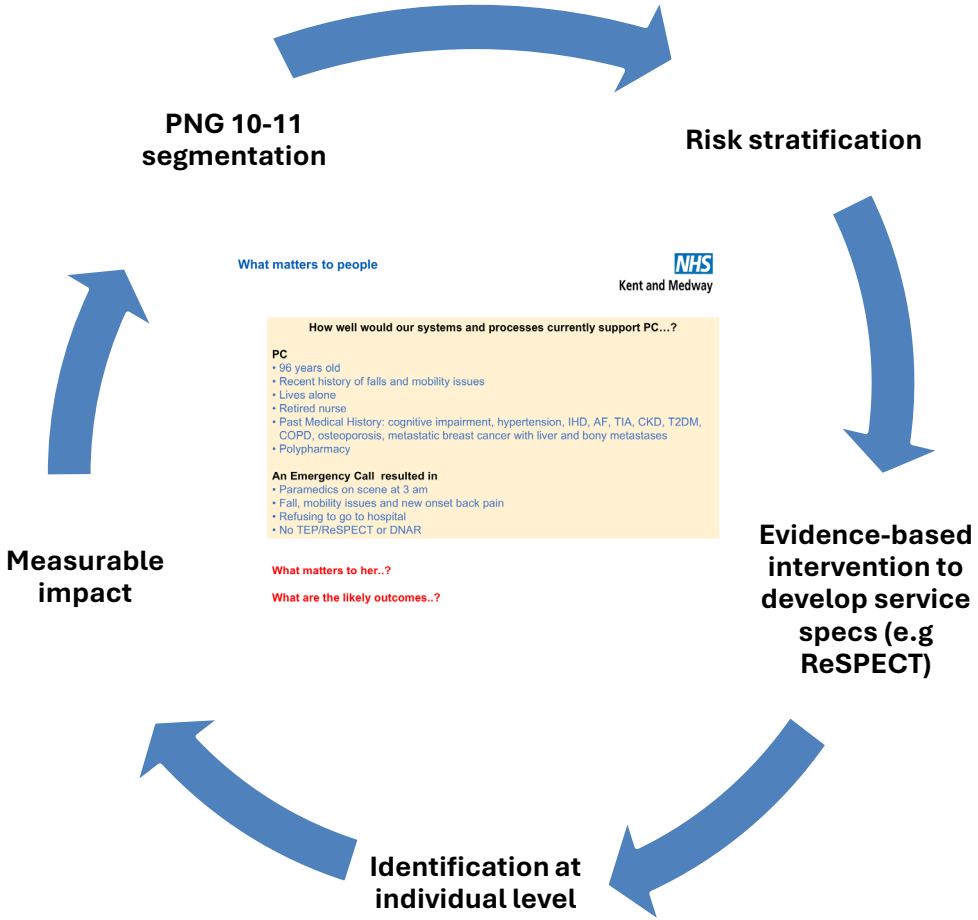
v.

PNG 10-11 only compared to PNG 5-9 and PNG 1-4



Note: GP encounters defined as the number of entries recorded on a patient's record in the last 12 months (includes both clinical and administrative encounters). eFI = electronic frailty index, HB = housebound, NH = nursing home, PC = palliative care register

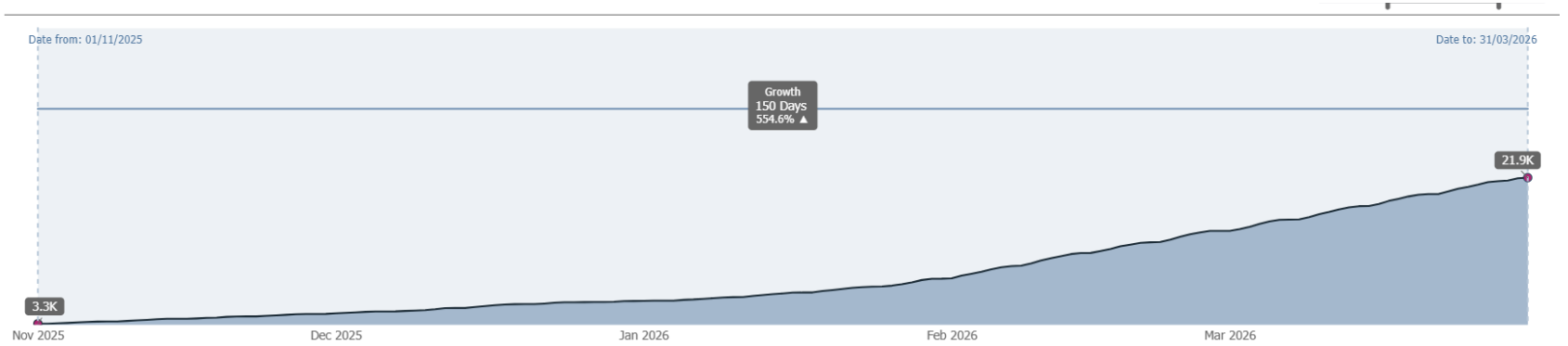
There Is a Compelling Case for Creating Dedicated Neighbourhood Complex Care Services for PNG 10-11+ Patients



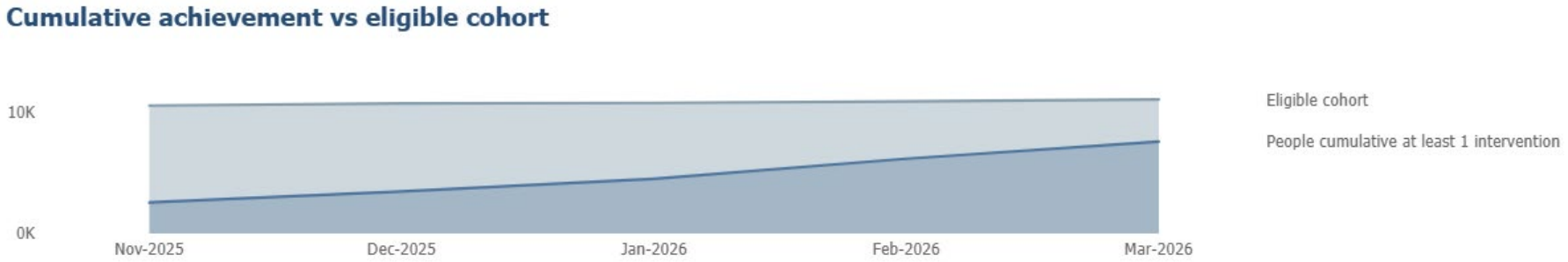
NHS
Kent and Medway

Improvement: Increasing Rate of Interventions Completed as the Programme Mobilisation Took Effect

- Interventions have grown by 555% between 1 November 25 and 30 March 26

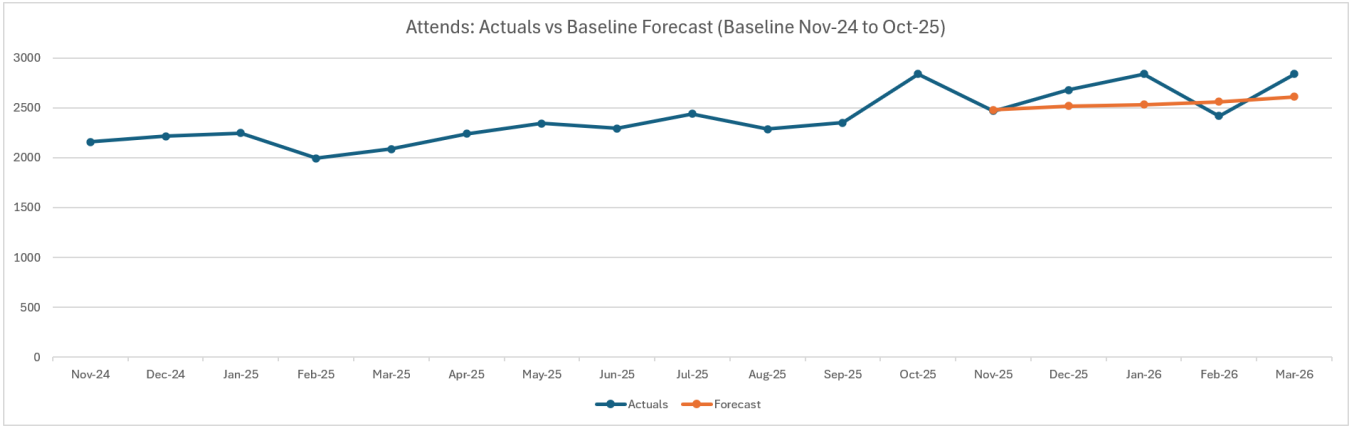


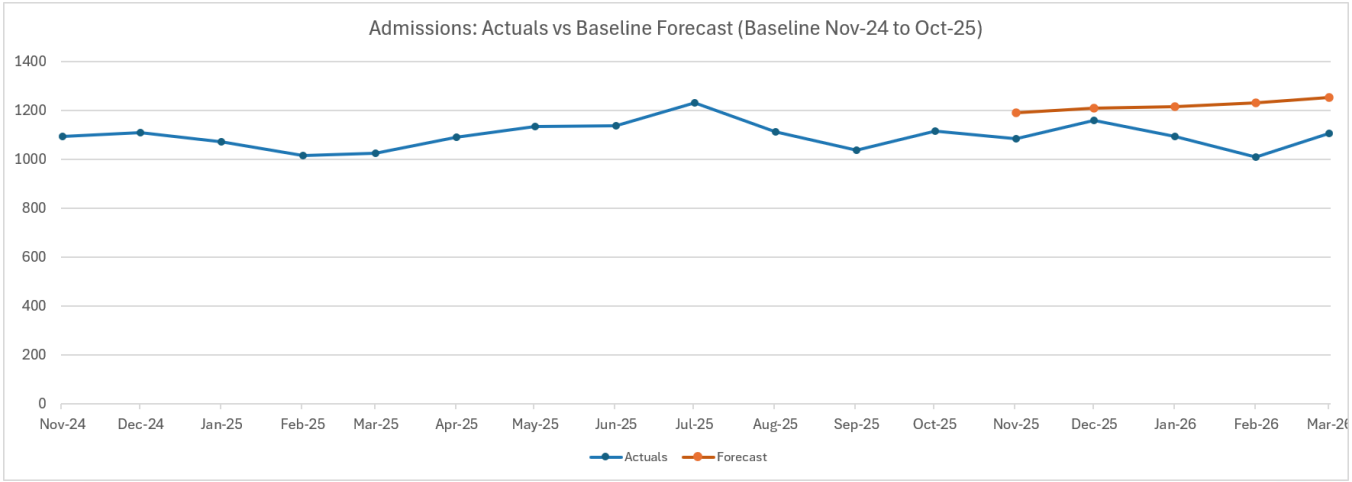
- The number of people with at least one intervention has grown from 24% to 69%



Together, we can

Impact: Approximately 600 Admissions but No ED Attendances





Acknowledgements

Dr Theo Bartholomew: GP Implementation Lead for Population Health

Karen Hardy: Population Health and Workforce Planning

Dr Rakesh Koria: Aging well Clinical lead

Contact details:

Malti Varshney : malti.varshney@nhs.net

Clint Taylor: clint.taylor@nhs.net

Sarah Adams: sarah.adams@graphnethealth.com

Any Questions?

Thank you