



GIG  
CYMRU  
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WALES

Bwrdd Iechyd Prifysgol  
Cwm Taf Morgannwg  
University Health Board

**AGENDA ITEM**

5.2

**POPULATION HEALTH & PARTNERSHIPS COMMITTEE**

**POPULATION HEALTH MANAGEMENT: UPDATE**

<b>Date of meeting</b>	3 <sup>rd</sup> May 2023
<b>FOI Status</b>	Open/Public
<b>If closed please indicate reason</b>	Not Applicable - Public Report
<b>Prepared by</b>	Gemma Northey, Consultant in Public Health
<b>Presented by</b>	Gemma Northey, Consultant in Public Health
<b>Approving Executive Sponsor</b>	Executive Director of Public Health (Deputy Director of Public Health (Interim))
<b>Report purpose</b>	FOR DISCUSSION / REVIEW

**Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)**

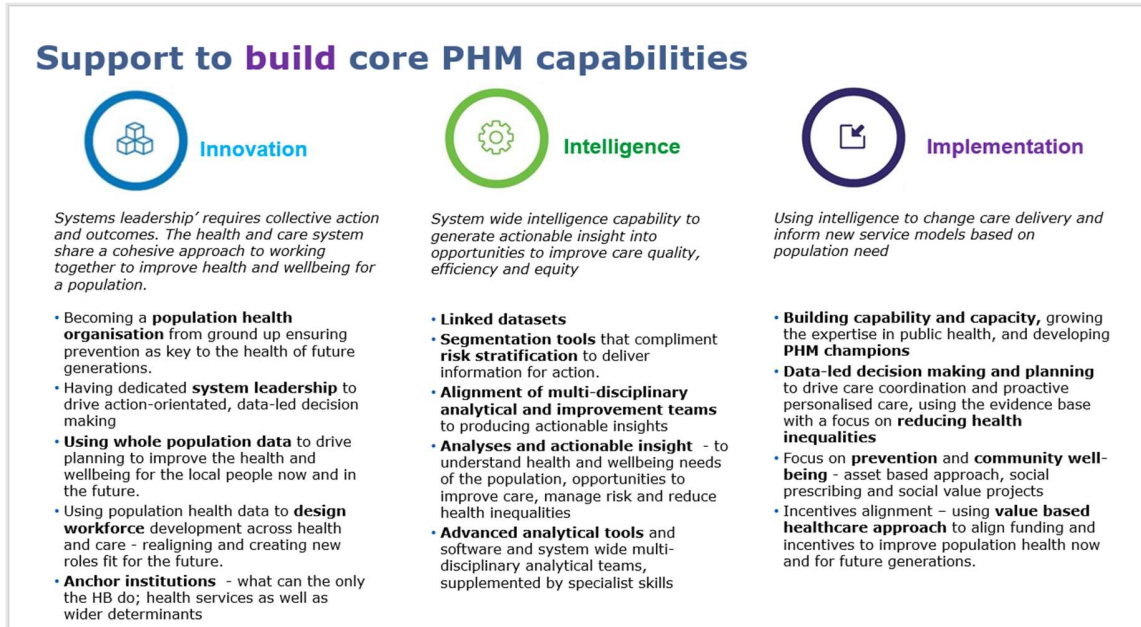
<b>Committee/Group/Individuals</b>	<b>Date</b>	<b>Outcome</b>
Population Health and Partnerships Committee	01/02/2023	ENDORSED FOR APPROVAL

<b>ACRONYMS</b>	
CTMUHB	Cwm Taf Morgannwg University Health Board
PSRS	Population Segmentation and Risk Stratification
DHCW	Digital Health and Care Wales
SWIYC	Stay Well in Your Community
CHWT	Community Health and Welfare Team
GP	General Practitioner
MDT	Multidisciplinary Team
IPC	Institute of Public Care
IGRP	Information Governance Review Panel (for SAIL)
DHCW	Digital Health and Care Wales
DPA	Data Process Agreement
DPIA	Data Protection Impact Assessment
SAIL	Secure Anonymized Information Linkage
LPHT	Local Public Health Team
ABUHB	Aneurin Bevan University Health Board

## **1. SITUATION/BACKGROUND**

- 1.1 This report provides an update on the population segmentation and risk stratification (PSRS) approach to Population Health Management in Cwm Taf Morgannwg University Health Board (CTMUHB) for the committee to note.
- 1.2 Population Health Management (PHM) improves population health by data-driven planning and delivery of proactive care to achieve maximum

impact for the health and wellbeing of the population<sup>1</sup>. It is dependent on system capabilities for implementation as outlined below:



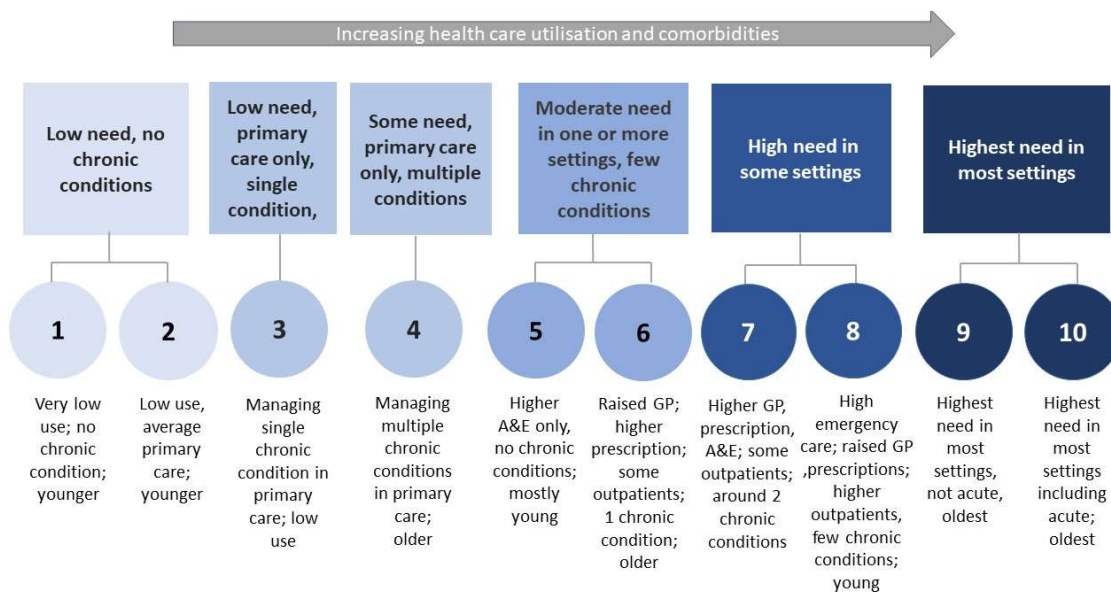
- 1.3 A PHM tool has been developed in CTM - Population Segmentation and Risk Stratification (PSRS). This aims to help Primary Care Clusters, GPs, Care Groups, Strategy Groups and other partners to decide how best to use limited time and resources to deliver anticipatory and pre-emptive care for patients. Linked primary and secondary care datasets are used to segment the population, stratify and model the local 'at risk' and 'rising risk' cohorts that in turn are used to design, target and personalise interventions to deliver proactive care which reduces health inequalities.
- 1.4 This approach uses data from all bar one GP practice in CTM via the SAIL Databank. Data are being updated quarterly with the LPHT receiving an anonymised dataset and GP practices receiving patient-level data via the Digital Health and Care Wales (DHCW) portal. This allows individual practices to understand both the characteristics and proportion of their practice patients across the segments as well as the patients at high risk of admission in the following year.
- 1.5 A summary of the data, details of the segments at CTM level and population profiles have been created at local authority and cluster levels as well as individual practice summaries that contain case-mix

<sup>1</sup> Nnoaham KE, Cann KF. Can cluster analyses of linked healthcare data identify unique population segments in a general practice-registered population? BMC Public Health. 2020; 20(1):798.

information. Senior Practitioners from the CTM PHM Unit have been supporting clusters to use these data in the planning of services, identify population cohorts most at need for proactive intervention aiming to reduce inequalities. These are available to be shared.

- 1.6 The PHM approach is focused around translation of PSRS data into practice to support delivery of improved population health outcomes in CTM as described below.

*CTMUHB Data-driven segments*



**2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)**

**Implementation of PSRS in CTMUHB**

2.1 Priorities for 2023/4 are:

- Develop and implement new applications of PSRS data (inequalities, Value Based Healthcare projects – hypertension & diabetes, lung health pilot, frailty)
- Review current value and utility of PSRS data and explore wider PHM approaches (evaluation)
- Develop sustainable and stable approach (funding, PSRS data flows/architecture/Information Governance, National Data Repository (NDR) preparation)

- Support national PHM agenda (policy setting, national fora, collaboration with other HBs, evidence generation)
- 2.2 PSRS data has the potential to be utilised by Clinical Care and Strategic groups in CTM. Discussions are underway to support a number of projects, including lung health, diabetes and frailty.
  - 2.3 The two PHM feasibility projects in Taff Ely and Bridgend East clusters (described in detail in Appendix 1) completed in April 2023. Both projects are being evaluated with initial process evaluations in May and full evaluations in October 2023.
  - 2.4 A PHM collaboration started in September 2022 between ABUHB and CTMUHB Local Public Health Teams. This partnership aims to share knowledge and learning of PHM approaches, present definitions of population health and PHM that can be built on for a shared understanding across Wales and describe how we can build PHM programmes in Wales to support improvements to population health.
  - 2.5 PSRS data has been used to undertake a backwards mapping of the patients referred to the Community Health and Wellbeing Teams (CHWT) or Multidisciplinary Teams (MDT) to data-driven segment and risk stratum in volunteer GP Practices. Evaluation of this is planned for July 2023 to inform future referral processes.
  - 2.6 A separate but parallel research project is being conducted by the LPHT to examine the predictive ability of segmentation including the development of the CTM UHB data-driven segmentation model to date. This work was delayed due to reprioritisation of the work plan to include in depth analyses of segments and support to feasibility projects but is planned for July 2023.
  - 2.7 The governance arrangements for PHM in CTM since October 2021 have included a Steering Board for PHM. Note that PSRS is one component of PHM in CTM and progress will be reported via these new governance structures.

## Evaluation

- 2.8 The potential for using utilization-based cluster analyses to segment a local General Practice-registered population in the Rhondda cluster was assessed as a pilot during April 2018 – July 2019. A process evaluation assessed the feasibility of the approach and compared the use of a traditional expert-driven segmentation approach with data-driven

utilization analysis. The findings have previously been presented and are available upon request.

2.9 An independent evaluation of Stay Well in Your Community (SWIC) was carried out by the Institute of Public Care (IPC) at Oxford Brookes University. The PSRS Workstream evaluated the effectiveness of PSRS in identifying the health and care needs of the CTMUHB primary care-registered population. This was supported by two objectives:

- (1) To evaluate the predictive ability of population segmentation.
- (2) To undertake a process evaluation to inform wider roll out of this approach.

2.10 The evaluation does not include specific interventions, which are implemented using the findings of the segmentation, over and above identifying the added benefit that segmentation offers.

## Next steps

Task	Timeline
<b>PHM implementation projects</b>	
<ul style="list-style-type: none"> <li>• Bridgend East Cluster project <ul style="list-style-type: none"> <li>○ implementation</li> <li>○ evaluation</li> </ul> </li> </ul>	<p>Jan – Apr 23 Apr – Oct 23</p>
<ul style="list-style-type: none"> <li>• Taff Ely Cluster project <ul style="list-style-type: none"> <li>○ implementation</li> <li>○ evaluation</li> </ul> </li> </ul>	<p>Dec 22 – Apr 23 Apr – Oct 23</p>
<ul style="list-style-type: none"> <li>• MDT backward review</li> </ul>	Apr – Jul 23
<ul style="list-style-type: none"> <li>• Predictive ability of segmentation paper</li> </ul>	Jul 23
<ul style="list-style-type: none"> <li>• Bridgend North inequalities project</li> </ul>	Jul 23 – Dec 23
<ul style="list-style-type: none"> <li>• VBHC AF/Hypertension project</li> </ul>	May 23 – Apr 24 (dates tbc)
<ul style="list-style-type: none"> <li>• North Rhondda Lung Health Pilot - tobacco</li> </ul>	May – Oct 23 (dates tbc)
<ul style="list-style-type: none"> <li>• Wider Frailty Segmentation work</li> </ul>	Apr 23 – Jan 24 (dates tbc)
<ul style="list-style-type: none"> <li>• VBHC Diabetes project</li> </ul>	May – Dec 23 (dates tbc)
<b>PSRS programme review and support</b>	
<ul style="list-style-type: none"> <li>• Review PSRS data flows &amp; architecture</li> </ul>	Apr 23 – Apr 24
<ul style="list-style-type: none"> <li>• Review risk stratification model</li> </ul>	Apr – Oct 23
<ul style="list-style-type: none"> <li>• Identify sustainable funding for PHM</li> </ul>	Apr 23 – Apr 24

## 3. KEY RISKS/MATTERS FOR ESCALATION TO BOARD/COMMITTEE

- 3.1 Key risk that remains in the progression of PHM is the capacity of primary care to support work. Measures are being taken to alleviate the requirement on primary care, with support from the LPHT and other professionals (such as MDT leads or Cluster Development Managers) however it is inevitable that requirements of practitioners will remain in some areas. The LPHT continue to engage regularly with GP practices and other primary care professionals via the cluster meetings and are fully engaged at locality level in realizing the ambition of a wider partnership through the Accelerated Cluster Development work.
- 3.2 CTMUHB currently fund the staffing for the PHM Unit, however long-term funding to support the data flows (including licensing fees) has not been identified. Work is ongoing at local and national level to identify and secure funding to continue to deliver PSRS in CTM and provide an evidence base useful to inform the national rollout of PHM across Wales.

#### 4. IMPACT ASSESSMENT

<b>Quality/Safety/Patient Experience implications</b>	There are no specific quality and safety implications related to the activity outlined in this report.
<b>Related Health and Care standard(s)</b>	Staying Healthy If more than one Healthcare Standard applies please list below: Staff and resources, effective care
<b>Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.</b>	No (Include further detail below)  If yes, please provide a hyperlink to the location of the completed EIA or who it would be available from in the box below.  If no, please provide reasons why an EIA was not considered to be required in the box below.  EIA not required as this report is an update to population health management approach previously agreed.



<b>Legal implications / impact</b>	There are no specific legal implications related to the activity outlined in this report.
<b>Resource (Capital/Revenue £/Workforce) implications / Impact</b>	There is no direct impact on resources as a result of the activity outlined in this report.
<b>Link to Strategic Goals</b>	Creating Health

## 5. RECOMMENDATION

- 5.1 The Population Health and Partnerships Committee is asked to:
- 5.2 **NOTE** the progress and future approach to Population Health Management outlined in this report.