THE ESSENTIAL GLOSSARY FOR REALISATION OF THE 10 YEAR PLAN'S OBJECTIVE OF A VALUE-BASED APPROACH

Prepared by the Outcomes, Value and Stewardship Network & Association of Professional Healthcare Analysts

www.outcomesvalueandstewardship.weebly.com www.aphanalysts.org

VERSION	DATE	AUTHOR	CHANGE
2.0	02/08/25	MG	Unwarranted variation measures proposed ;including action taken as a result of having the information Heading of Column 3 changed to include both information and data
3.0	04/08/25	MG	Addition of an Appendix on the social determinants of health prepared by Anant Jani. Population health information includes personal data like smoking prevalence but it is important for healthcare to look beyond this and try to influence these determinants. This of course would also be an example of increasing social value
4.0	11/08/25	MG	Addition of two 'pictures' based on the principle of Wittgenstein that complex issues can often be described by a pictures rather than or as well as words and numbers
5.0	23/08/25	MG	Addition of measures of value and a picture of possible unwarranted variation
6.0	04/09/25	MG	Specific mention of over-diagnosis and over-treatment following the major BMJ conference on over-diagnosis held in Oxford 3-5 September, organized by the Centre for Evidence-based Medicine and Oxford University and based on the BMJ campaign called Too Much Medicine
6.1	19/09/25	JJ	Addition of suggested metrics and quantitative and qualitative data sources

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

The Glossary has been prepared based on principles from many sources including the creation of the Oxford English Dictionary. A quote from a document is included when possible but when no succinct clear definition can be found in the main OVSP Glossary , which is 250,00 words long a short definition is created There is also a longer version of this glossary and a book on the Fundamental Language for creating Value-Based Healthcare and a book on forty of the key source books titles the Fundamental Books for understanding Value-Based Healthcare

This sets out the meaning of key terms not only in words but also by defining the data that ned to be collected and the information that needs to be produced. A J Ayer argued in his 1935 book *Language, Truth and Logic*, written at the age of 24, that the best way to assess the meaning of someone's proposition such as "this hospital is more efficient than that hospital, and more efficient than it was last year" was to decide *if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false"* ie what data should be collected and what information produced. So our Glossary , developed by the Outcomes, Value and Stewardship Network which includes Analytic Professionals and Economists defines terms by measures as well as by words

THE KEY ROLE OF THE GLOSSARY

Words have meanings but the meanings create and change reality as well as expressing it. They change the circuits in the brain , a process sometimes called rewiring and to bring about a paradigm shift the leadership needs to tell people that new circuits are needed, and can be created due to the neuroplasticity of the brain. Of course formal training is essential and the five key skills for the new paradigm of value-based healthcare, mentioned 8 times in the 10 year Plan, and set out below

- *Ensuring the survival of universal healthcare by increasing value and reducing waste;*
- *Shifting the focus from bureaucracies to populations ;*
- *Developing population based systems and delivering care through networks ;*
- *Creating a culture of stewardship;*
- *Optimizing personal value*

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

But a paradigm shift also requires the adoption of a common language, which the military call Doctrine, not only to prevent confusion but also to create a new culture. Language creates social reality and here is the new language for the new reality, the culture of stewardship , namely that everyone has to feel a sense of stewardship for optimising value and minimising waste from the resources available for health and social care.

The leadership of a health service should ensure that everyone in that service understands the terms and uses them consistently

The key terms	**Necessary, Appropriate, Inappropriate and Futile –** **Clinicians' perceptions of value**
The written definition of the key terms	• **Necessary Care -** if there is general clinical agreement that it is essential, even though there is a risk. • **Appropriate Care** - if the majority of the clinical community agrees the benefits outweigh the risks and that the intervention is justified. • **Inappropriate Care** - if the majority of the clinical community agrees that the risks outweigh the benefits and that its use is not justified. • **Futile Care** - if the clinical community agrees the intervention would do more harm than good.
The key terms defined by measures and data required to produce that information	These terms are based on balancing clinical consensus, benefits, risks, and outcomes, so will need a mix of clinical, operational, and outcome data. • **Necessary Care** ○ NICE guidance compliance: % adherence to mandatory NICE elements e.g.Technology Appraisals (TAs), Highly Specialised Technology (HST) guidance and Clinical Guidelines. ○ NHS England Core Standards: tracking of compliance (e.g., urgent cancer referral pathways, sepsis bundles). ○ Quality and Outcomes Framework (QOF): GP-level adherence to evidence-based care (e.g., prescribing, screening). ○ Care audits: e.g., National Confidential Enquiry into Patient Outcome and Death (NCEPOD) reports. ○ Mortality/morbidity/HSMR: outcomes that may be linked to delayed/withheld essential interventions.

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	• **Appropriate Care**
	  ○ NICE Clinical Guidelines (non-mandatory sections): % uptake of recommended but non-essential interventions.
	  ○ Royal Colleges' specialty guidance: audit compliance with evidence-based "good practice" recommendations.
	  ○ National Audit Programmes (e.g., National Hip Fracture Database, Myocardial Ischaemia National Audit Project – MINAP) assessing adherence to best practice standards.
	  ○ Clinical audit data: e.g., RCP audits on COPD, stroke, etc.
	  ○ Shared decision-making metrics: documentation of discussions in line with NHS Patient Decision Aids.
	• **Inappropriate Care**
	  ○ Choosing Wisely UK: low-value care indicators (e.g., unnecessary imaging, antibiotics for viral infections).
	  ○ Getting It Right First Time (GIRFT): variation analysis identifying overuse of interventions without evidence.
	  ○ CQC inspections & quality accounts: flagging inappropriate use of resources or unsafe practice.
	  ○ Adverse event data: National Reporting and Learning System (NRLS) or new Learn from Patient Safety Events (LFPSE) system.
	  ○ Financial metrics: NHS RightCare benchmarking to identify unnecessary spending.
	  ○ PLCV
	• **Futile Care**
	  ○ End-of-life care audits: National Audit of Care at the End of Life (NACEL).
	  ○ ICU registries: Intensive Care National Audit & Research Centre (ICNARC) data on survival probability vs. intervention burden.
	  ○ Ethics and MDT reviews: documentation of clinical consensus on futility (commonly in palliative/critical care).
	  ○ Quality of Life measures: EQ-5D, QALY assessments from NICE health technology appraisals.
	  ○ Do Not Attempt Resuscitation (DNAR) & ReSPECT forms: monitoring use and appropriateness in line with GMC guidance. Getting It Right First Time (GIRFT): variation analysis identifying overuse of interventions without evidence.

The key terms	**Commissioning**

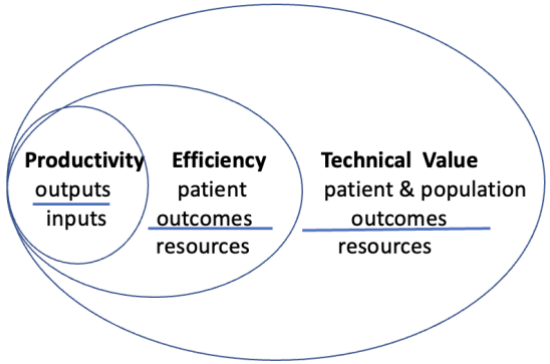
Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

The written definition of the key terms	*Commissioning is the continual process of planning, agreeing and monitoring services. Commissioning is not one action but many, ranging from the health-needs assessment for a population, through the clinically based design of patient pathways, to service specification and contract negotiation or procurement, with continuous quality assessment.* NHS website www.england.nhs.uk 14/4/25
The key terms defined by measures and data required to produce that information	In order to monitor the efficacy of the commissioning function, metrics need to cover outcomes, quality, efficiency, and patient experience, and should draw on multiple complementary data sources. • **Outcomes** ○ Mortality rates from ONS/SHMI ○ Disease incidence & prevalence (e.g. diabetes, COPD, CVD) from OHID/PaPi ○ Health inequality gaps – life expectancy, deprivation related from Fingertips/JSNAs ○ Service uptake by demographic group (ethnicity, socioeconomic status, geography). ○ ○ Equity audits (e.g. immunisation, screening uptake). • **Quality & Patient Safety** ○ Readmission rates ○ Never events and serious incidents from quality outcomes data, StEIs/LFPSE ○ CQC reports ○ Compliance with NICE standards through audit e.g. stroke, cardiac, cancer • **Efficiency/Value/Service Access** ○ Cost per patient or per outcome from Model Hospital/System & NHS Benchmarking Network ○ Variation in service utilisation and outcomes from Programme Budgeting data ○ Prescribing efficiency from MHRA and NHSBSA ○ RTT waiting tines, A&E waiting times, cancer 62 day target ○ GP appointment availability and access ○ Rates of hospital admissions for ambulatory care sensitive conditions (a proxy for effective primary/community care).

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	• **Patient Experience**
	  ○ Surveys such as Friends & Family and GP Patient Surveys
	  ○ PROMS/PREMS
	  ○ NIHR feedback studies
	  ○ Complaints and compliments – PALS, Healthwatch
	  ○ Staff reported experience – quality of support
	• **Equity and Reducing Health Inequalities**
	  ○ Service uptake by demographic group (ethnicity, socioeconomic status, geography) from NHSE EDS
	  ○ Equity audits and reports (e.g. immunisation, screening uptake) – UKHAS, HEA, PHOF

The key terms	**Cost-effectiveness, productivity, and efficiency**
The written definition of the key terms	• Productivity relates the outputs of a service to the inputs. • Efficiency relates the outcomes of care to the inputs, namely the resources used for that group of patients; this is the meaning of Value as used in the USA whereas the term value has a broader meaning in countries committed to population healthcare, with technical value one of the four types of value which is related to and includes efficiency but includes population outcomes, including equity • Cost-effectiveness relates the outcomes of a technology or intervention to the costs. Usually can be defined as a cost per QALY or cost per unit of health gain for a specific intervention or technology

The key terms defined by measures and data required to produce that information	 • **Productivity** ○ **Outputs** (activity) can be sourced from routine data submissions – Number of admissions, outpatient attendances, GP consultations, A&E attendances, Diagnostic tests (e.g. imaging, pathology) ○ **Inputs** (Resources) can be sources form workforce statistics, reference costs, PLICS – Workforce FTE's, Total expenditure, bed days, capital assets ○ ONS healthcare productivity index • **Efficiency** ○ **Outcomes** (quality) can be sourced from routine data submissions – Number of admissions, outcomes frameworks, patient experience feedback – 30 day mortality, readmission rates, Patient-reported outcome measures (PROMs, e.g. hip/knee QALYs, complication rates ○ **Inputs** (Resources) Same as productivity (costs, workforce, bed days) ○ Efficiency ratios – Cost per QALY, £ per reduction in readmission rates, £ per improvement in PROMS scores, using PROMS + PLICS + Reference costs • **Cost –** effectiveness from Reference costs and PLICS, supply chain pricing, NHSE finance, PROMS, ONS, clinical trials data, NICE tech appraisals ○ **Economic Evaluation -** Incremental Cost-Effectiveness Ratio (ICER) = (Cost_new – Cost_current) ÷ (QALYs_new – QALYs_current)

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	○ **Cost Inputs** - Direct medical costs – workforce, drugs, equipment. Indirect costs – follow ups, complications ○ **Effectiveness –** QALYs, disease specific measure e.g. HbA1c • **Example** **Hip replacement efficiency** ○ Inputs: £5,000 average cost (PLICS) ○ Outcomes: 0.4 QALY improvement at 6 months (PROMs EQ-5D) ○ Efficiency: £12,500 per QALY ○ Productivity: X procedures per £million spend ○
The key terms	**Culture**
The written definition of the key terms	*"Culture is the shared tacit assumptions of a group that it has learned in coping with external tasks and dealing with internal relationships."* Schein EH (1999) *The Corporate Culture Survival Guide*. John Wiley & Sons. Page 186.
The key terms defined by measures and data required to produce that information	Although culture is intangible it can be monitored and evaluated through stakeholder relationships by using a combination of qualitative and quantitative measures. VBHC depends on collaboration so indicators need to be identified that capture shared assumptions. First cultural attributes need to be identified e.g. openness & transparency, co- creation, patient centred, continuing improvement. Then link to VBHC goals such as better outcomes , equity and cost effectiveness. **Outcomes Linked to Culture** • Reduction in unwarranted variation and operational metrics. Shape Atlas, Rightcare/PROMS • Workforce – retention, sickness, absence, whistle blowing rates • Partnership – jointly delivered pathways, speed of cross system decisions **Governance & Accountability**

	• Board assurance frameworks • Integrated performance reports • Achievement of quadruple aim – i.e. culture treated as strategic
The key terms	**Efficacy and Effectiveness**
The written definition of the key terms	• Efficacy is the magnitude of the benefit demonstrated in the research setting. • Effectiveness is the degree to which an intervention whose efficacy has been proven in the research setting delivers benefit in the ordinary service setting.

The key terms defined by measures and data required to produce that information	• Efficacy in a research setting could use randomised control trial data – NIHR or MHRA trials measured against outcomes such as reduction in mortality, symptom scores. Risk reduction scores.
	• Effectiveness can be measured using NHS data to evaluate How an intervention performs
	  ○ Outcomes – admissions avoided, survival rates, QALYs
	  ○ Compare pre & post intervention
	  ○ Routine NHS audits
	  ○ Prescribing data
	  ○ PROMs

The key terms	**Empathy**
The written definition of the key terms	*Empathy is different from sympathy or compassion. It is the ability to understand what another is thinking from their perspective and, ideally, communicate to the other that they have managed to do this"* Howick J et al (2018) Therapuetic Empathy; what it is and what it isn't. JRSM 111-233-236

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

The key terms defined by measures and data required to produce that information	Measuring empathy means looking at both how staff demonstrate it (behaviour, communication, relational quality) and how patients perceive it (experience of being understood). • Patient reported measures such and PROMs and PREMs • CARE Measure (Consultation and Relational Empathy) in primary care • Staff satisfaction and outcomes • Reduced complaints • Qualitative feedback – friends & family • Although used in training, measures for empathy in consultants such as the Jefferson Scale of Physician Empathy (JSPE) Is not used in practice. Maybe an argument to be added to annual reviews?
The key terms	**Equity, Equality**
The written definition of the key terms	• Inequality is an objective difference in mortality, morbidity, or service provision. • Inequity is a difference in service access for people in the more deprived sections of the population or in some ethnic groups, and these two characteristics often occur together .
The key terms defined by measures and data required to produce that information	**Inequality Measures** • Mortality rate ratios or differences by deprivation decile (Index of Multiple Deprivation – IMD). • Standardised morbidity ratios (SMR) between local authorities or ethnic groups. • Utilisation rates of GP or A&E services per population. • Waiting time differences between patient groups or regions. **Inequality Data Sources** • ONS (Office for National Statistics): mortality rates, life expectancy. • Public Health Profiles (Fingertips, OHID): local area data on disease burden, risk factors.

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

	• SUS/HES (Hospital Episode Statistics): hospital admissions, procedures. • GP Practice data (e.g. QoF, OpenPrescribing): service provision and access. • NHS routinely submitted datasets: screening, waiting times, and patient experience. **<u>Inequity Measures</u>** Measuring inequity means linking the inequalities to social factors and avoidability using a number of analytical approaches Compare actual use vs. need: • Use age–sex standardized expected rates as a benchmark for "need." • For example, do deprived areas with higher expected need have *lower* access to a service? Equity ratios / concentration indices: • A concentration index measures whether a health variable (e.g., vaccination rate) is concentrated among richer or poorer populations. • Used by NHS England and WHO for equity audits. Equity audits (NHS Health Equity Audits): • Compare provision, access, or outcomes across groups (IMD quintiles, ethnicity, gender). • Identify whether differences are *avoidable or unfair*. • Recommend actions for local commissioners (ICBs, Trusts). • Health Equity Assessment Tool (HEAT) framework Measures commonly used in health Equity Audits • Mortality – lie expectancy gaps using IMD • Morbidity – Prevalence of LTC by IMD • Access – GP registrations, screening uptake, attendances – by ethnicity and IMD • Quality of Care – emergency readmissions, prescribing by IMD
The key terms	**Integrated care – System, Network and, Pathway**

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

The written definition of the key terms	• A network is a set of organisations and individuals that deliver the system's objectives. • A system is a set of activities with a common aim, a common set of objectives, and a set of criteria against which progress towards the outcomes that matter can be measured. A population based system is often called an ACO an Accountable Care Organisation • A pathway is the course an individual follows as they go through the system.
The key terms defined by measures and data required to produce that information	**<u>Network Outcomes (Collaboration & shared improvement)</u>** Networks are a number of organisations that collaborate to deliver shared objectives across boundaries to share learning, co-ordinate care and improve outcomes. Examples would be cancer alliances, stroke networks and maternity networks. To assess how well these collaborative arrangements are working, a mix of qualitative and quantitative measures can be monitored • % member organisations regularly attending network meetings and number of joint initiatives launched • Reduction in unwarranted variation in care between providers • Knowledge sharing – shared definitions and clinical guidelines • Variation in outcomes by geography or deprivation – e.g. cancer survival rates **<u>System Outcomes (Population health & value)</u>** • Population health outcomes – life expectancy, rate of preventable re-admissions, smoking prevalence, obesity rates • Performance – emergency readmissions, hospital acquired infection, A&E 4 hour standard • Efficiency – bed occupancy, delayed discharges, waiting times, cost per capita • Experience & Equity – friends & family, workforce survey, reduction in health inequalities **<u>Pathway Outcomes (patient journey e.g. cancer or stroke pathways)</u>** • Clinical effectiveness -mortality rates, readmission rates, recurrence for e.g. cancer or stroke • Patient experience, quality of life – PROMs, PREMs, Friends & Family • Timeliness of process - % patients diagnosed within 28 days of referral for cancer, stroke to thrombolysis

The key terms	Leadership, Management, & Accountability
The written definition of the key terms	• Leadership creates and changes culture. • Management achieves the objectives of an organisation working within that culture. • Accountability is a relationship based on the provision of information about performance from those who have it to those who have a right to it.
The key terms defined by measures and data required to produce that information	**<u>Leadership</u>** Leadership effectiveness and impact is observed indirectly through culture, behaviours and the experience of staff and patients. • Satff experience & engagement through staff surveys and annual national surveys, local surveys • Cultural development through staff feedback, staff forums, trust board reviews • Leadership behaviours – 360 degree feedback for senior leaders, appraisal, revalidation, whistleblowing • Patient centred culture through friends & family test, patient experience data, CQC inspections, patient & public involvement forum feedback **<u>Management</u>** Management is measured quantitatively, using KPIs aligned to the NHS Oversight Framework and the Trust's operational plan. • Operational performance – A&E 4 hour waits, elective waiting times, diagnostic and cancer targets, performance dashboards • Financial management – cost improvement programmes, QIPP, agency spend, financial performance reports • Quality & Safety – Serious incidents, mortality indicators e.g. HSMR or SHMI, infection control data, CQC reports, clinical/quality governance committees. • Workforce – vacancy rates, sickness absence rates, staff turnover, workforce dashboards

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

	<u>Accountability</u> Accountability is demonstrated through transparent reporting, triangulation of data, and Board assurance frameworks. • Clinical to managerial accountability – clinical audits, incident reports, clinical governance outputs • Trust Exec to Board – integrated performance reports combining finace, quality and workforce through monthly board meetings. Board assurance framework • Board to external bodies – CQC compliance, NHS/DHSC reporting requirements monitored through annual reports and publicly shared board papers • Public accountability – patient outcomes, safety metrics, staff survey published through trust websites, NHSE dashboards and public engagement meetings.
The key terms	**Overuse**
The written definition of the key terms	*"Overuse is the provision of medical services for no benefit or for which harms outweigh benefits."* Korenstein D, Falk R, Howell EA, Bishop T, Keyhani S (2012) Less is more. Overuse of healthcare services in the United States. An understudied problem. Arch Intern Med 172(2): 171-179. Within this term there is often a distinction between over-diagnosis and over-treatment, although the two are obviously inter-related
The key terms defined by measures and data required to produce that information	The umbrella term of Overuse as described above includes: • **Overdiagnosis:** Identifying a condition that would never cause symptoms or harm if left undetected. • **Overtreatment:** Administering therapy or procedures that offer no net benefit to the patient. The concept of overuse in the NHS aligns with low value care, unwarranted variation and inefficient resource use (GIRFT) and RightCare. **<u>Measuring Overuse</u>** • Indicator based measurements using do not do or procedures/care of low clinical value ○ Imaging for uncomplicated back pain

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	○ Antibiotics for viral infections ○ Routine pre op testing for low risk surgery ○ Thyroid cancer overdiagnosis • Adherence to Guidance ○ Comparing activity to NICE guidelines, RightCare or Choosing Wisely (AOMRC), e.g. rates of knee arthroscopy for osteoarthritis vs NICE NG59 recommendations. ○ • Utilisation vs Outcome ○ If rates of screening, testing, or procedures rise without improvement in morbidity/mortality, this suggests potential overuse. E.g. rising cancer detection (thyroid, prostate) with stable mortality • Outcome based measures ○ Identify key outcome indicators with no improvement despite high intervention rates Primary care and public health data will prove useful as well as outputs from NHS programmes, open research data (Open Safely) and prescribing data.
The key terms	**Population health, population healthcare, population medicine and population health management**
The written definition of the key terms	• Population health means the health status of a defined group of people. • Population healthcare focuses primarily on segments of the whole population defined by a common need which may be a symptom such as breathlessness, a condition such as arthritis or a common characteristic such as frailty in old age, not on institutions, or specialties or technologies. Population medicine is one aspect of population health in which a sub set of clinicians in primary and secondary care, for example one clinician in each specialist service is trained in the principles of population healthcare and

	given responsibility and time, even one half day a week to strengthen links with the population served, for example by reviewing referral from different segments of the population to identify inequity. • Population health management was originally a method which stratified the population by levels of risk, allowing resources to be focused on those subgroups at highest risk although it is now used more broadly and PHM and Population healthcare can be regarded as synonyms Populations may be defined bureaucratically but they can also be defined more generally and the term Neighbourhood is now used to define a population which people recognize as relevant to their life and work, often used as an adjective such as in 'neighbourhood team'
The key terms defined by measures and data required to produce that information	This is usually presented only as information about the behaviour of individuals in the population such as smoking prevalence but it is also important for a health service to be aware of how the social determinants of health affect their population and try to influence them. This could be considered as increasing social value. The measures and data sources for population health management are multiple. Summarising into focus areas make it clearer: • **Preventative care** – e.g. screening and vaccination coverage – NHS data, OHID, GP data • **Chronic disease** – prevalence, ambulatory care–sensitive conditions (ACSCs) admission rates, care plan completion – primary & secondary care data, QoF, RightCare • **Integrated Care** – delayed transfers of care, shared care plans – linked health & social care data, SDEs. • **Health Inequalities** – life expectancy gaps, QALY, access, disease prevalence by IMD, ethnicity, geography etc. – Model Health system, OHID, Fingertips (PHOF) • **Wellbeing** – Mental Health, patient & life satisfaction – ONS, NHS Outcomes Framework, Fingertips • **Prediction** – longer term prediction of those at risk of chronic conditions, identifying population segments for targeted interventions – Linked health & social care data sets, stratification and segmentation models, sociodemographic and deprivation data (ONS, PHOF) Prediction is key, turning descriptive insights into actionable intelligence, the ultimate goal being personalised equitable, proactive care rather than re-active episodic treatment

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

The key terms	Precision medicine, Stratified medicine and Personalised medicine and healthcare
The written definition of the key terms	• Personalised medicine considers a person's unique clinical characteristics and aligns evidence based treatment choices to those characteristics Personalised care considers a person's goals, beliefs, values and preferences and supports them to decide on a course of action that is most likely to lead to them attaining their goals. In the context of healthcare delivery, a preference is a course of action that is informed by a person's values (and by their knowledge of the benefits and harms of the options they face) and that maximises individual health gain by helping them move towards their life goals • Precision medicine uses the patient's biomarkers in addition to other clinical measures such as blood pressure. • Stratified medicine focuses on the person's level of risk, considering their genetic profile as well as their clinical condition.
The key terms defined by measures and data required to produce that information	**Personalised medicine** is split between clinical characteristics and the patients preferences and have distinct measures • Clinical ○ % patients receiving treatment based on clinical characteristics – EPR ○ % patients receiving pharmacogenomic testing before prescribing – genomic and prescribing data ○ Treatment as per NICE guidelines or local MDT recommendations – NICE standards, CQUIN ○ Improved outcomes – treatment response and adverse event rates from HES and outcomes framework • Personal ○ % patients reporting they were involved in care decisions – Patient experience survey ○ % patients with documented care plans ○ Social prescribing uptake rates ○ Equity – distribution of personalised care across deprivation quintiles and/or ethnic groups **Precision medicine** • Biomarker testing - % eligible patients receiving biomarker tests – genomics data, cancer services outcomes

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	• Integration into pathways – number of clinical pathways incorporating biomarker driven decisions – genomics data • Impact on treatment – changes in interventions and therapies, survival outcomes linked to biomarkers – cancer registry, HES • Infrastructure readiness – availability of molecular diagnostic platforms **Stratified medicine** • Risk stratification - % population stratified for LTC • Preventative action – uptake of preventative interventions (e.g. statins) in high risk groups – GP/QOF data • Genetic stratification - number of patients stratified on rare variant or polygenic risk – GP data, NICE • Predictive model use – adoption of risk prediction tools – GP data, NICE
The key terms	**Programme budgeting and marginal analysis**
The written definition of the key terms	Programme budgeting, sometimes called service line accounting in industry, is budgeting based not on institutions but on segments of the population defined by need, for example budgets for people with respiratory problems or people in the last year of life. Within a budget for such a segment there may be budgets for sub segments, for example budgets for people with asthma and for people with COPD within the respiratory budget. Marginal analysis is a technique for estimating the effects shifting resources from the budget for one segment or subsegment budget to another.
The key terms defined by measures and data required to produce that information	*The health economists and finance SMEs in the stewardship will have far more current and relevant knowledge to complete this section . But I have put in my bit as a starter to kick off discussions. And because it's what they do!* • **Programme/Service Line** – defined segment of population by need or condition – prevalence, incidence, demographic profiles • **Sub programme** – narrower segment of service line identified and measured in same way • **Programme Budget** – spend within that programme or sub programme – finance data • **Inputs** – resources, estates , workforce, clinical – costing data, workforce data, operational data on service use • **Outputs** – number of OPAs, admissions, prescriptions etc – HES, GP data, meds management

	• **Outcomes** – results through clinical and patient reported outcomes – mortality, readmissions, QALYs PROMs • **Marginal benefit** – health gain from investing additional unit of resource • **Marginal cost –** cost of that unit of resource • **Marginal Analysis –** process of comparing marginal cost and marginal benefit • **Opportunity cost –** benefits of reinvesting resources between programmes • **Cost effectiveness –** ration cost to outcomes – cost per QALY gained
The key terms	**Quality**
The written definition of the key terms	*"The quality of a service is the degree to which it conforms to pre-set standards of goodness."* Donabedian A (1980) The definition of quality: a conceptual exploration. In: *Explorations in Quality Assessment and Monitoring. Volume 1: The Definition of Quality and Approaches to its Assessment.* Health Administration Press, Ann Arbor. Quality has a number of dimensions including efficiency and safety. Here are the six defined by the Institute of Medicine namely that care should be: • Timely • Safe • Effective • Patient centred • Efficient • Equitable Quality measures can be used internally for quality improvement or externally for monitoring services
The key terms defined by measures and data required to produce that information	• Timely - waiting times data – A&E, RTT • Safe – Hospital acquired infection rates • Effective – compliance with NICE guidelines • Patient centred - PROMS, Friends & Family, patient survey

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	• Efficient – bed occupancy rates, delayed transfers, unit costs per episode • Equitable – access to services across socioeconomic or ethnic groups
The key terms	**Resilience**
The written definition of the key terms	Resilience is the ability of a health service to cope with challenges, first described by the World Health Organisation following their analysis of how well health services coped with the Covid Pandemic but relating to all major challenges such as population ageing and the growing need and demand for clinical services when resources are finite.
The key terms defined by measures and data required to produce that information	The WHO describe resilience in three phases: • **Absorptive capacity** – coping during shocks (e.g., pandemic, surge in demand). • **Adaptive capacity** – adjusting to ongoing stresses (e.g., staff shortages, ageing population). • **Transformative capacity** – long-term system change (e.g., digital transformation, integrated care models). They also describe six building blocks as a framework for evaluating resilience: • **Service Delivery** - Waiting times, elective recovery rate, access to urgent care, cancelled operations • **Health Workforce** - Vacancy rates, sickness absence, agency spend, staff retention, burnout scores • **Information Systems** - Data interoperability, timeliness of data reporting, public dashboard coverage • **Access to Medicines & Supplies** - no stock incidence, supply chain delays, critical medicine shortages • **Financing** - Financial sustainability, emergency spending ratios, capital investment resilience • **Leadership & Governance** - ICS coordination performance, emergency preparedness scores, trust in leadership From the pandemic surge planning work, the NHS developed the 4S resilience model, which can all be quantified through existing NHS datasets, SitReps, Model Health System, performance metrics • **Staff:** Workforce capacity, redeployment ability, wellbeing indicators. • **Stuff (Supplies):** Availability of PPE, oxygen, critical equipment. • **Space:** Bed occupancy, surge bed availability, ICU capacity. • **Systems**: Coordination, communication effectiveness, digital resilience.

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org
September 2025 - V6.1

The key terms	**Shared decision-making**
The written definition of the key terms	*"In a shared decision, a health care provider communicates to the patient personalized information about the options, outcomes, probabilities, and scientific uncertainties of available treatment options, and the patient communicates his or her values and the relative importance he or she places on benefits and harms."* Wennberg JE (2010) *Tracking Medicine*. *A Researcher's Quest to Understand Health Care*. Oxford University Press. It is also important to ensure that the benefits and harms of doing nothing be fully explored
The key terms defined by measures and data required to produce that information	In order to identify whether clinicians and patients truly explore all treatment options including doing nothing, there are two dimensions that need to be measured • **Process** – how the decision was made – were all treatment options including pros and cons discussed including doing nothing, Did patient feel involved in choosing. • **Decision Outcome** – does treatment choice reflect patient preference, is it consistent with what matters to the patient. Shared decision-making can be complex, involving multiple stakeholders like family members, which can add layers of ethical and practical considerations. There are no routinely used patient decision aids or shared decision making tools, so there is a reliance on clinical outcomes and patient experience. SDM can be assessed through • Patient recorded outcome and experience measures • Patient surveys • Audit of clinical notes • Complaints and PALS This can then be linked to treatment outcome data
The key terms	**Stewardship**

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

The written definition of the key terms	Stewardship is a culture in which people who do not own something are committed to ensuring its survival for future generations. "*stewardship is to hold something in trust for another"* Block P (1996) Stewardship; choosing service over self- interest – Berrett- Kohler
The key terms defined by measures and data required to produce that information	The core challenge here is identifying how we evaluate a culture of stewardship, where individuals don't own resources but have a duty to protect them responsibly in order to maintain high quality care. Evaluation of cultures an behaviours can be done through; • Staff surveys to identify perceptions of integrity, fairness and attitudes towards improvement • Clinical outcomes and improved patient outcomes • Audit and feedback • Governance indicators – integration of stewardship principles in decision making • Transparency and accountability • Patient public involvement
The key terms	**Strategy**
The written definition of the key terms	*A strategy is a coherent collection of actions that has a reasoned chance of improving results.* Friedman, M. (2005) Trying Hard is not Enough. How to Produce Measurable Improvements for Customers and Communities. Trafford Publishing. (p. 20). The Military distinguish clearly between strategic, operational and tactical decision making
The key terms defined by measures	Each strategy whether national, regional or organizational will have a clear theory of change, identifying the problem it is trying to solve, the expected outcomes, over what time period?

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

and data required to produce that information	Measuring the success of a strategy requires a balance of qualitative & quantitative outcomes, patient experience, staff experience, financial sustainability and system wide impact. • **Health outcomes** – measuring clinical effectiveness through mortality rates, readmissions, complication rates, QALYs, prevalence of disease, preventable admissions, health inequalities gaps, service uptake can be collected from HES data, QoF, ONS and NHS/PH performance dashboards • **Patient experience** – improved waits in A&E, RTT, cancer waits, GP access, MH referrals – dependent on aim of strategy. PROMs, PREMs, Friends & Family and national patient surveys can provide information on patient experience. • **Workforce** – Model Health system can provide figures on staff engagement (turnover etc) along with the annual staff surveys. Recruitment and retention from workforce data, training uptake will also show staff satisfaction and engagement. • **Operational & Financial Sustainability** – measures such as cost per patient episode, bed occupancy, agency spend, achieving control totals, reduction in deficit and implementation of new technologies will all help indicate sustainability. • **System level Integration and Collaboration** – with the move to community, the left shift, evidence of cross organizational data sharing and reduction in duplication together with discharge co-ordination and community care follow up rates all point to effective integration and collaboration.
The key terms	**Structure, Process and, Outcome**
The written definition of the key terms	• The structure is the organisation which may be a bureaucracy or a market or a network. • The process is the activities, for example the number of operations done. • The outcome is the result of the process. Outcomes that matter to health and social care These outcomes are the results of health and social care interventions that indicate that high value is being realised for individuals and populations.

	Outcomes that matter to individuals These outcomes are the results people care about most and they often differ from the outcomes regarded as important by clinicians and people who manage health services. ICHOM has produced very good sets of outcomes https://www.ichom.org/about-ichom-sets/)

The key terms defined by measures and data required to produce that information	In terms of measurement for improvement in health and social care, each term needs to be clearly defined with proposed measures and data sources:
	• **Structural Measures** – how the system is organized, governed and resourced
	  ○ Staffing levels – workforce data including numbers, grades and skill mix
	  ○ Availability of equipment/theatre capacity/clinic capacity – estates data
	  ○ Bed capacity – HES
	  ○ Funding per service – financial data
	  ○ Service directories
	• **Process measures** – the activity, the process of delivering the care rather than outcome
	  ○ Number of appointments, procedures, visits etc from HES
	  ○ Waiting times – NHS waiting lists data, performance dashboards
	  ○ Compliance with guidelines – clinical audits
	  ○ Readmission rates – HES
	  ○ Operational performance – [performance dashboards
	• **Outcome measures for health & social care**
	  ○ Mortality rates, eg 30 day post surgery – ONS/HES
	  ○ Disease prevalence & incidence – ONS, PHE, Fingertips
	  ○ Life expectancy – ONS
	  ○ Length of stay - HES
	  ○ Avoidable admissions/re-admissions – HES
	  ○ Cost effectiveness – finance and performance data, model health system.
	• Outcome measures for Individuals

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

<table>
<tr><td></td><td>

Improvement in quality of life
Living independently
Pain management
Emotional wellbeing & mental health
Satisfaction with care & support received
Achieving patient defined outcomes

</td></tr>
<tr><td>The key terms</td><td>Value</td></tr>
<tr><td>The written definition of the key terms</td><td>Value is assessed by weighing up the benefits received by an individual or a group if people with a common need or by a population, considering the resources that have been used. It is essential to measure outcomes and to use the population as the denominator as well as the number of patients treated because.
The EU defined four perspectives on value, one of which, personal value is of vital importance in assessing the other three perspectives

<table>
<tr><td rowspan="3">personal value - appropriate care to achieve a patient's personal goals</td><td>technical value - achievement of best possible outcomes with available resources; it is important to emphasise that this means using the resources for all the people in need in the population not just those who reach the service and become patients, for example focusing on all the people in with hip pain, not just those people who have had a hip replacement. This means that technical value also includes measurement and minimisation of inequity</td></tr>
<tr><td>allocative value - equitable resource distribution across all populations and within each population across all patient groups</td></tr>
<tr><td>social value - contribution of healthcare to social participation and connectedness</td></tr>
</table>
</td></tr>
</table>

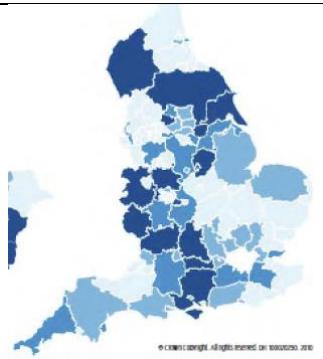
Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

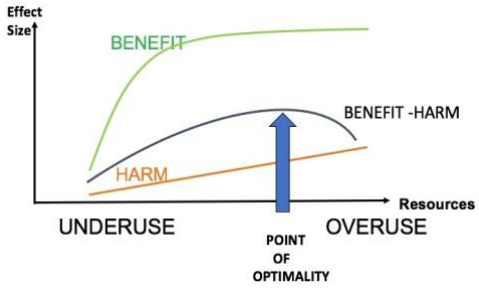
The key terms defined by measures and data required to produce that information	Personal value; % of people receiving elective surgery who had formal decision support Technical value; measures of efficiency and equity Allocative value ; spend on different segments of the population eg on people with respiratory disease, bearing in mind the need to measure multi morbidity Social value - This is usually presented only as information about the behaviour of individuals in the population such as smoking prevalence but it is also important for a health service to be aware of how the social determinants of health affect their population and try to influence them. This could be considered as increasing social value Picture; the ppt box in the left hand column was created when someone looked at a simple list and said 'surely personal value relates to all the other three types
The key terms	**Variation, Warranted and Unwarranted**
The written definition of the key terms	• Warranted Variation is variation in spend or provision of services that can be explained by differences in the populations served, for example differences in spend and activity on haemoglobinopathies in Cornwall and London is warranted variation • Unwarranted Variation is, to quote the person who created the concept "*Variation in the utilization of health care services that cannot be explained by variation in patient illness or patient preferences"* Wennberg JE (2010) *Tracking Medicine. A Researcher's Quest to Understand Health Care*. Oxford University Press. The importance of the publication of unwarranted variation, firstly in the Dartmouth Atlas of Health Care and then in the NHS Atlases is that it forces people to ask

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	○ If I am in the upper end of the range is that right for my population or could it be overuse and waste? ○ If I am in the lower end of the range is that right for my population or could it be underuse of high value healthcare and an indication of possible inequity?
The key terms defined by measures and data required to produce that information	National publication of population based rates of Imaging Prescribing eg of anti- depressants % of people in 80s and 90s on 10 or more drugs Lab testing Elective surgery Admissions to hospital in last year of life Programme budget spend eg on people with respiratory disease At ICB level Number of enquiries about possible overuse if the ICB Is in the top decile Number of enquiries about possible underuse and inequity if the ICB. Is in the top decile The key picture is a map of population based variation

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	
The key terms	**Waste**
The written definition of the key terms	Waste is the use of resources that would produce more value if used for another purpose or another subgroup of the population. There are four types of waste in healthcare: • Waste left after a job has been done. • Waste due to inefficiency. • Waste when the resources used do not achieve outcomes that matter to patients. • Waste due to opportunity costs, namely when those resources could have provided greater value when used for another purpose for people with a defined health problem or reallocated for use for people with another type of health problem.
The key terms defined by measures and data required to produce that information	This is one term whose meaning is explained by a picture, the graph produced by Avedis Donabedian in 1980

	
The key terms	**Wellbeing**
The written definition of the key terms	There is no single definition of the term health except the WHO definition that it is that it is more than the absence of disease. For this reason the term wellbeing is increasingly used in part because there are a number of criteria that can be used to measure wellbeing *By wellbeing we mean, how do you feel about your life, how satisfied you are. We do not mean external circumstances that affect your wellbeing. We mean the thing that ultimately matters :your inner subjective state – the quality of your life as you experience it , how happy you are* *How should we measure it ?* • *Evaluative measures; life satisfaction approach, on a scale from 0 to10* • *Hedonic measures based on 'affect'* • *Eudamonic measures…'do you feel that the things that you do in your life are worthwhile* Richard Layard and Jan-Emmanuel de Neve Wellbeing, science and policy Cambridge 2023
The key terms defined by measures	**Evaluative measures** (Life satisfaction) • NHS wellbeing surveys but these are infrequent

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

and data required to produce that information	• Workforce wellbeing from staff surveys • Public Health Outcomes Framework **Hedonic Measures** • NHS wellbeing surveys but these are infrequent • GP patient surveys • NHS Staff Survey • Health Survey for England **Eudaimonic Measures** – (meaning & purpose) • ONS4 • Warwick–Edinburgh Mental Wellbeing Scale (WEMWBS) in mental health and research

Dictionary of Acronyms

NB – there is an inconsistency of acronyms used so far (e.g. SUS/HES, Fingertips/PHOF). Once the "The key terms defined by measures and data required to produce that information" has been agreed, this can be tidied up and a dictionary of acronyms added below. I will potentially also add a table summarising terms/measures and sources into one table – Jane J

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

APPENDIX ON THE CAUSAL DETERMINANTS OF HEALTH BY ANANT JANI

Determinant	Description	Illustrative examples
Social (S-DoH)	*They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.(WHO 2024)*	Social determinants include factors such as education, employment, housing, access to safe drinking water, nutritious food. - Education shows a dose–response relationship with all-cause adult mortality, with an average mortality risk reduction of up to 2.9% for every additional year of education. (IHME-CHAIN 2024) - Unemployment and job insecurity are linked with several negative health outcomes including increases in all-cause mortality, death from cardiovascular disease and suicide and higher rates of mental distress, substance abuse, depression and anxiety. (Bambra 2020; Hensher 2020; Worldbank 2020)
Environmental (E-DoH)	*…global, regional, national, and local environmental factors that influence human health, including physical, chemical, and biological factors external to a person, and all related behaviors. These environmental threats can occur naturally or because of social conditions and ways people live.* (PAHO 2024)	The WHO estimates that between 13-32% of global disease burden can be attributed to environmental determinants of health (Gibson 2017; PAHO 2024; Romanello et al 2023). - Climate change-linked extreme weather events like severe heat. In 2018-22, people experienced an average of 86 days of health-threatening high temperatures annually - The increase in heatwave days and drought in 2021, as compared to 1981-2010, was associated with 127 million more people experiencing moderate-severe food insecurity - Environmental hazards such as electronic waste, nanoparticles, microplastics, hazardous chemicals (e.g. lead, toxic pesticides) etc.
Digital (D-DoH) (Chidambaram et al 2024)	*Digital determinants refer to factors intrinsic to the technology[...]these include aspects such as ease of use, usefulness, interactivity, digital literacy, digital*	Digital determinants are driven by digital health, which encompasses technology (e.g. mobile health, wearables, telehealth, AI, etc.) used to deliver healthcare services.

Sir Muir Gray; Oxford Value & Stewardship Programme www.ovsp.net muir.gray@oapltd.com
Jane Johnston Co-CEO AphA www.aphanalysts.org jane.johnston@aphanalysts.org

	accessibility, digital availability, digital affordability, algorithmic basis, technology personalization, and data poverty and information asymmetry.	As of 2021, there were over 3 million applications on the Google Play store, the largest proportion of which were health and fitness apps.
Commercial (C-DoH)	*…systems, practices, and pathways through which commercial actors drive health and equity"; "refer to the conditions, actions and omissions by commercial actors that affect health.* (The Lancet 2023)	Commercial determinants of health shape physical, social and cultural environments through commercial activities – both what is made commercially available as well as through actions of commercials entities linked to protecting and/or growing market share. - Four industries (tobacco, unhealthy food, fossil fuel and alcohol) are responsible for at least one third of global deaths every year (Rollin et al 2023; WHO 2024)
Political (P-DoH)	*…the government . . . at every stage of our life, whether through policy or legal actions or inactions, through a complex web of political structures and processes that have been created at the international, federal, state and local levels, impacts our health status.* (Alberti and Pierce 2023)	Policy decisions (implementing as well as not implementing policies) can have large implications for health and wellbeing. - Policies that ban smoking lead to improved health outcomes (Frazer et al 2016) - In the UK, it is estimated that the sugar sweetened beverage tax prevented over 5000 cases of obesity in 10/11 year old girls between 2014-2020 (Andreyeva et al 2022; Rogers et al 2023).

ref: https://www.mwv-berlin.de/_publikationen/Hager_Gemeinschaftsprojekt_Gesundheit/Hager_Gemeinschaftsprojekt_Gesundheit_B_2.pdf