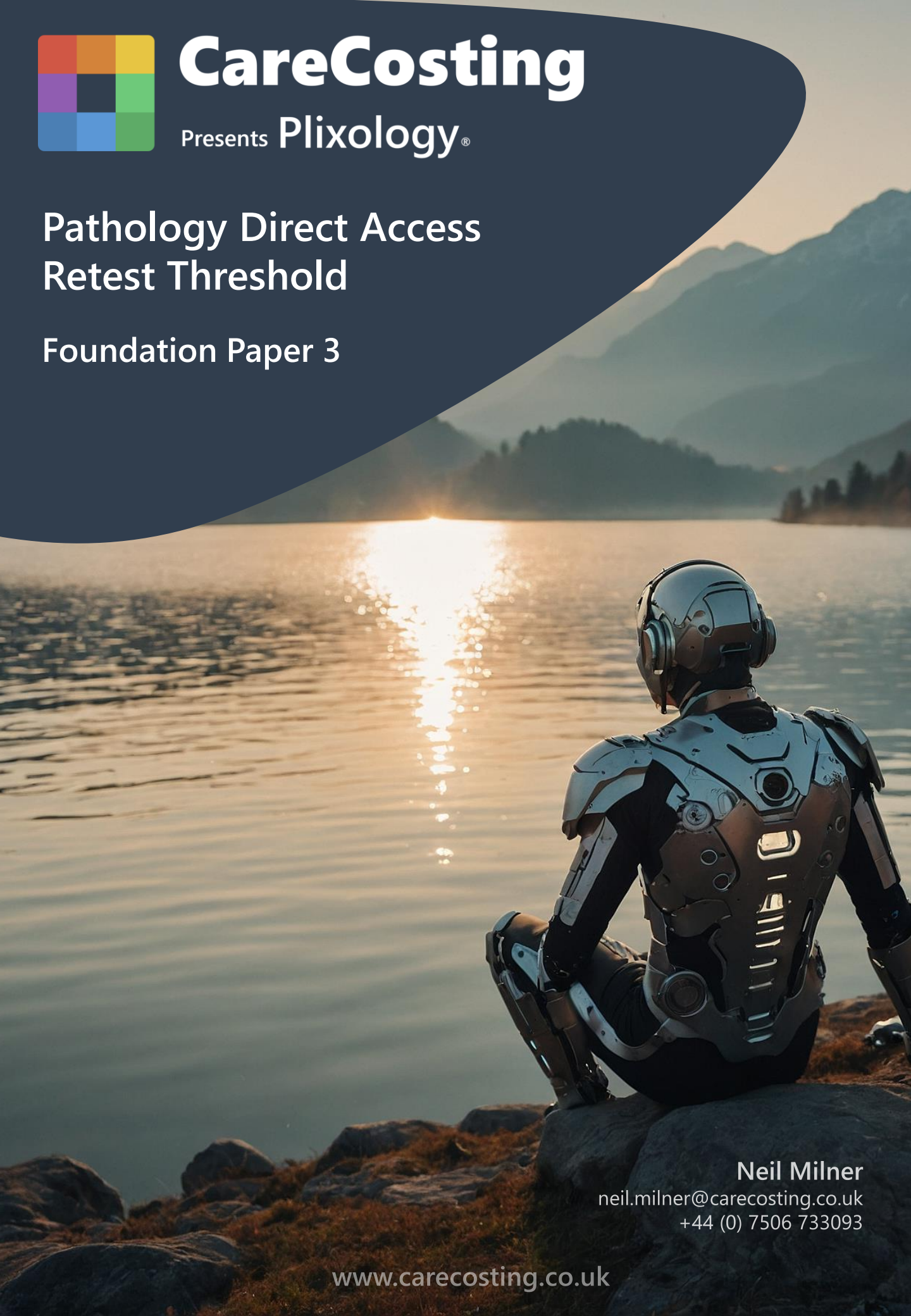
CareCosting

Presents Plixology®

Pathology Direct Access Retest Threshold

Foundation Paper 3



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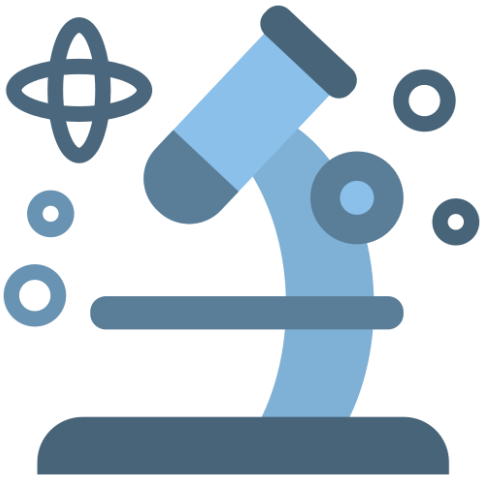
Understanding the problem

Direct Access Pathology brings together 3 datasets – 1 internal, 2 external

Introduction

Within healthcare data management, traditional Patient-Level Information and Costing Systems (PLICS) have been pivotal for financial oversight and resource distribution.



However, their conventional handling of Direct Access testing has been criticized for its limited capacity to provide actionable insights.

In contrast, the emergence of the Plixology approach offers a paradigm shift. With refined data management and enhanced analytical capabilities, Plixology stands as a beacon of innovation, promising to revolutionize healthcare delivery and elevate patient outcomes.

Through this exploration, we delve into the transformative potential of Plixology in reshaping the healthcare landscape for the better.

Traditional PLICS

The conventional PLICS approach to Direct Access involves consolidating all tests into a singular line item, primarily driven by the following.

Proponents argue that the vast amount of data generated by Direct Access tests can overwhelm Trusts. With numerous distinct tests, each with its own data points, aggregating simplifies data collection and reporting, easing the burden on resources.

Secondly, some believe that understanding Direct Access testing nuances might not notably enhance patient care or cost management. This view is rooted in the perception that these tests fall outside the traditional care pathway, reducing administrators' control over their utilization and costs.

Furthermore, Direct Access pathology tests are often considered peripheral to core encounters, which focus on primary activities like inpatient care and surgeries.

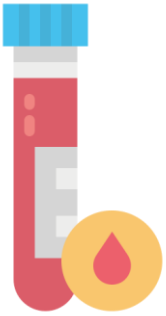
The traditional PLICS approach consolidates Direct Access tests to streamline data management, yet despite the significant cost incurred, often not recognized as core encounters, highlighting the need for automated data management with deeper analysis to optimise healthcare delivery.

The Plixology approach

The Plixology approach differs from traditional methods by adopting a more granular strategy, involving several key steps.

It identifies each Direct Access request and links them to the patient's record where possible.

Plixology enhances analytical capabilities, allowing healthcare professionals to delve deeper into data, identifying trends, patterns, and areas for improvement. This supports evidence-based decision-making and targeted interventions for positive outcomes.



Additionally, by meticulously cataloguing each request and linking it to the patient's record, Plixology builds a comprehensive view beyond individual encounters, enabling insights into health status, history, and ongoing needs crucial for personalized care planning and population health management.

In essence, the Plixology approach represents a paradigm shift in healthcare data management, leveraging meticulous categorization, timely linkage to patient records, advanced analytics, and comprehensive patient profiling to optimize care delivery, improve outcomes, and enhance overall healthcare quality.

Understanding the characteristics and cost of Direct Access tests

Introduction

Direct Access pathology data unveils substantial disparities in test requests among GP practices, with certain practices demonstrating higher rates.

While the data highlights variations, concerns regarding data quality do not diminish the significance of the findings. Population health metrics, such as GP Practice Deprivation, provide valuable insights into test utilization patterns, suggesting potential socioeconomic influences. Identified discrepancies between practices underscore the need for further investigation into underlying factors. Addressing these variations is paramount for optimizing resource allocation and enhancing the efficiency and effectiveness of patient care delivery within the healthcare system.

Direct Access Requests

Last GP Practice Name	No of Patients	No of Requests	No of Tests	Avg No of Requests	Cost	GP Practice Patients Registered	Patients Tested %	Avg Postcode deprivation
GP Practice	106,186	221,297	889,222	2.1	£2,926,273	0	-	18,172
	13,097	34,468	137,300	2.6	£488,715	58,150	22.5%	22,713
	9,180	23,581	99,488	2.6	£314,333	44,781	20.5%	22,189
	8,717	21,388	92,796	2.5	£297,972	33,339	26.1%	23,708
	6,554	18,114	79,305	2.8	£263,542	26,457	24.8%	12,912
	4,662	13,383	55,268	2.9	£205,253	21,026	22.2%	17,660
	4,903	12,917	51,026	2.6	£167,829	24,805	19.8%	22,656
	4,887	12,791	50,071	2.6	£160,119	19,131	25.5%	26,044
	4,322	12,756	54,862	3.0	£190,653	15,142	28.5%	15,224
	4,359	11,590	44,804	2.7	£146,946	18,388	23.7%	20,499
	4,150	11,110	50,523	2.7	£151,255	18,224	22.8%	23,940
	3,678	10,062	36,096	2.7	£119,036	16,202	22.7%	21,821
	2,994	9,520	37,665	3.2	£124,259	10,884	27.5%	20,025
	2,823	9,307	39,742	3.3	£136,521	8,929	31.6%	12,118
	2,780	8,647	35,519	3.1	£115,035	9,288	29.9%	21,002
	2,809	8,362	37,774	3.0	£134,750	20,445	13.7%	10,195
	2,557	8,214	34,956	3.2	£110,933	14,894	17.2%	10,937
	2,712	8,033	29,484	3.0	£95,849	11,239	24.1%	20,420
	2,635	7,974	31,851	3.0	£109,011	10,570	24.9%	12,463
Others	**46,234**	**129,350**	**549,064**	**2.8**	**£1,788,756**	**6,815,652**	**0.7%**	**19,066**
Total	240,239	592,864	2,436,816	2.5	£8,027,041	7,197,546	3.3%	20,056

Poor Data Quality

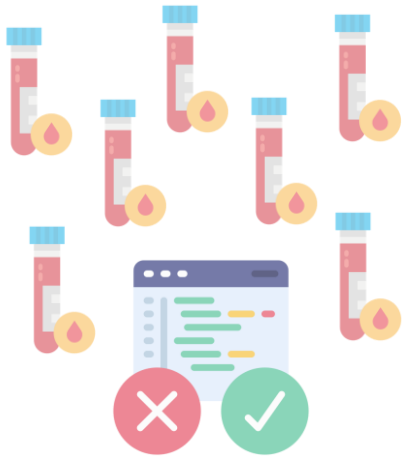
Population Health

2 Practices Requesting Differently

Potential reasons for disparity

Potential reasons for the observed disparities in test utilization rates among GP practices may include:

- **Clinical decision-making** processes vary widely, influenced by individual training, experience, and patient population characteristics.
- **Patient demographics**, such as age, gender, and socioeconomic status, play a significant role in shaping testing patterns.
- **Practice cultures and guidelines** contribute to variations, with some practices prioritizing proactive testing while others may adopt a more conservative approach.
- **Resource availability**, including access to diagnostic facilities and specialist consultations, influences testing frequency.
- **Healthcare providers' levels of experience**, confidence, and adherence to continuing medical education impact testing practices.
- **Patient preferences and expectations** regarding healthcare also drive differences in test utilization rates among practices.



These multifaceted factors collectively contribute to the observed variations in test utilization rates, highlighting the intricate dynamics within healthcare delivery systems and the importance of understanding and addressing them to optimize patient care.

Understanding the characteristics of Pathology retests

Investigations often take place within the 60/90 day threshold

Some medical tests have clear guidelines indicating that they should not be repeated within a certain timeframe, as retesting too soon may not yield meaningful results or may even pose risks to the patient. Integrating Direct Access data with patient records provides an opportunity for comprehensive analysis during the initial evaluation and at the time of retesting.

This integration allows healthcare providers to gain a deeper understanding of the patient's medical history, potential risk factors, and the appropriateness of retesting based on individual circumstances. By leveraging this integrated approach, healthcare professionals can make more informed decisions regarding patient care and treatment plans.

549k Tests

£2m Cost

89k Retests

22k Retested early

TSH Highest costing retest

£76k Cost of early retests

Investigation Code	Tests	Total Cost	Requested More than once?	Requested Early	Percentage	Early retest cost
B12	50,383	£299,202	6,112	1,592	3.16%	£9,454
BNP2	11,898	£147,168	802	284	2.39%	£3,513
FER	82,296	£141,385	16,456	5,135	6.24%	£8,822
FOL	49,505	£183,374	6,405	1,659	3.35%	£6,145
FT4	3,332	£6,990	535	256	7.68%	£537
HBA1CD	114,487	£400,669	12,263	3,336	2.91%	£11,675
IHBA1C	70,783	£247,718	16,302	3,887	5.49%	£13,603
TFT	8,337	£23,495	1,122	537	6.44%	£1,513
TSH	139,001	£391,729	27,098	4,931	3.55%	£13,896
VITD	18,939	£187,885	1,937	717	3.79%	£7,113
Total	548,961	£2,029,614	89,032	22,334	4.07%	£76,272

Top ten retest GP Practices by highest retest cost total

The analysis consisted of 70 trusts however, it's notable that a select group of 10 GP practices, representing 14% of the total, contribute to over 40% of the retest volume. This concentration highlights the significance of these practices in terms of retesting frequency.

By focusing efforts on these particular GP practices, healthcare organizations stand to achieve substantial cost reductions, amounting to over £31k. This underscores the potential impact of targeted interventions aimed at optimizing retesting practices within high-volume GP settings.

Practice code	Tests	Total cost	Requested more than once?	Requested early	Percentage	Early retest cost
B82005	46,260	£165,920	7,274	1,775	3.84%	£5,796
B82038	26,056	£98,805	4,222	1,158	4.44%	£4,173
B82083	32,236	£117,823	4,707	1,090	3.38%	£3,588
B82026	31,789	£115,045	4,578	916	2.88%	£3,022
RX3PM	5,474	£21,527	1,555	726	13.26%	£2,735
B82017	16,977	£61,044	3,117	737	4.34%	£2,651
B82054	16,327	£62,135	2,861	713	4.37%	£2,483
B81069	12,439	£51,277	2,159	564	4.53%	£2,264
B82033	15,483	£58,480	2,920	606	3.91%	£2,232
B82025	16,867	£62,008	2,685	624	3.70%	£2,137
	219,908	£814,062	36,078	8,909	4.05%	£31,080

220k Tests

£0.8m Cost

36k Retests

9k Retested early

B82005 Highest costing practice

£31k Cost of early retests

Recent CareCosting successes

Awards & accreditations

CareCosting were proud to be shortlisted for both regional and national HFMA awards

Recognition from outside of the NHS demonstrates our commitment to using the latest technology and principles

Industry recognition

CareCosting were delighted to have had the opportunity to present on the innovation platform of the HFMA Yorkshire & Humber Branch conference in September 2023

Recently we had a case study published by the Profitability Analytics Centre of Excellence. PACE, is an independent, non-profit, community of professionals dedicated to developing ways for organisations to strategically manage and improve revenue and cost, using causal analytic models to help make better, more informed decisions and drive greater value creation

PROFITABILITY ANALYTICS CENTER OF EXCELLENCE

Client testimonials (visit www.carecosting.co.uk for more)

"In an environment characterised by ambiguity and change CareCosting are enabling the Trust to follow a patient journey across primary and secondary care, this allows us to look at boundary spanning activity in a way we haven't been able to before.
We can now begin to look at the whole system and determine targeted interventions, align our strategic objectives in the trust, create programmes of change and use the data to open a dialog with Clinical staff in a way that truly gets them engaged as it starts with the patent but ultimately effects the bottom line. "

Andrew Bertram
Finance Director
York and Scarborough Teaching Hospitals NHS Foundation Trust

"CareCosting continually prove to be a trusted and knowledgeable source of guidance and support. Their team members are responsive and professional, and our relationship continues to grow based on these foundations. I would recommend engaging with them to all organisations looking to develop their costing operations and strategy."

Mahmoud Hassan
Director – OnPoint Advisory

I hope that lots of NHS organisations benefit from both your skills and experience - as I was very lucky to do during my "Stockport years".

Hayley Ringrose
Experienced NHS Finance Manager
Motivating people to overcome barriers

Contact CareCosting to claim your FREE Plixology Canvas

What is the Plixology Canvas?

The Plixology® Canvas, developed by CareCosting, allows a Trust to quickly review and identify how, where and what they should focus on to realise potential from PLICS

Developed over 2 years through research and drawing on over 30 years' experience with over 40 Trusts in all sectors, the Canvas provides the entry point into the Plixology® methodology which has one objective:

Help Trusts realise potential from PLICS

Why use it?

It provides a quick overview of PLICS in the Trust in a simple and straightforward way

- The visual format of the Canvas enhances accessibility and can be understood by everyone
- It's simple to update and can be easily shared with colleagues and stakeholders
- Clarifies how different aspects of PLICS are related to each other
- The Plixology Canvas template can help facilitate an ideas session to define your PLICS status & strategy

Who is it for?

- Any Trust wanting to reignite or build on their current PLICS solution
- Any Trust or ICS looking to maximise value from patient level data and cost
- Any Trust looking to understand and identify potential savings and improvements without impacting patient outcomes

Observations and context

- PLICS promised much, but has it delivered the expected value you were hoping for?
- Carecosting has witnessed the transformative potential of PLICS when implemented effectively
- Analytics and AI thrive on rich data and a robust model; PLICS can serve as the key source for operational understanding
- Before computers, there were products and services, but PLICS is both and neither - it's not software, but software enables it. PLICS is aptly described as an **Information Product**

The Plixology Canvas is inspired by the Business Model Canvas & the Gartner Quadrant principles and is the first step to towards realising the potential of PLICS within the organisation

Plixology fundamentals

- **Causality** and reflecting **reality** are essential in modelling to understand **why** the Trust spends money
- By reflecting reality, a PLICS model can become a **digital twin** of the Trust
- Both **demand and supply** should be costed to help inform operational change
- Understanding the **patient** and the **care activities** can deliver more benefit than understanding the cost of the episode or attendance alone
- PLICS is **not just software**. Software can enable but it is not a silver bullet
- PLICS can be **enriched** with additional and derived data to provide greater value. The I of PLICs is as important as the C
- A PLICS model should **continually improve**. It is not a financial reconciliation