



Community Diagnostics:

Scaling Point-of-Care Testing for Patient-Centred Outcomes

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Executive Summary:

Community diagnostics and point-of-care testing (POCT) are presenting opportunities to enhance primary care delivery, improve patient outcomes, and address unmet healthcare needs. However, realising their potential fully requires a strategic and collaborative approach that focuses on the following key areas:

- **National Strategy and Governance:** Establish a comprehensive national POCT within NHS England, aligning it to national priorities and strategies, and integrating it into health policies and frameworks. Develop clear governance structures, leadership roles, and standardised protocols at the Integrated Care System (ICS) level.
- **Clinical Integration and Evidence-Based Practice:** Use POCT to inform clinical decision-making, facilitate early diagnosis, enable timely interventions, and support chronic disease management. Adhere to evidence-based guidelines for POCT selection and interpretation.
- **Workforce Empowerment:** Implement extensive training programs for healthcare professionals, ensuring competency in POCT utilisation, result interpretation, and business case development. Integrate training into educational frameworks and certifications.
- **Technological Advancement and Interoperability:** Invest in robust digital infrastructure, data integration systems, and interoperability solutions to facilitate seamless information flow and POCT adoption, particularly in remote and underserved areas.
- **Sustainable Funding and Incentive Models:** Establish sustainable funding mechanisms and revise commissioning and tariff structures to incentivise appropriate POCT use, acknowledging its role in improving patient outcomes and reducing costs. Explore innovative funding models linked to demonstrated benefits.

By prioritising these critical areas, primary care can develop POCT to deliver more efficient, patient-centred care, particularly in underserved communities. This report offers a comprehensive roadmap with actionable recommendations for policymakers, healthcare organisations, and primary care providers to achieve this transformative vision.



Introduction

The landscape of healthcare delivery is undergoing a transformative shift, with a growing emphasis on bringing care closer to patients and empowering them to take an active role in managing their health. Community diagnostics, particularly point-of-care testing (POCT), offers a powerful tool to achieve these goals. By providing rapid diagnostic results at the point of patient interaction, POCT has significant potential to streamline care pathways, reduce unnecessary hospital visits, and improve patient outcomes.

In primary care settings, POCT can facilitate early diagnosis and prompt treatment initiation, leading to better disease management, reduced complications, and improved quality of life for patients. It has the potential to support the fight against AMR by supporting appropriate prescribing of antibiotics. Moreover, POCT can play a vital role in addressing unmet diagnostic needs in underserved communities, where access to traditional laboratory services may be limited due to geographic, socioeconomic, or logistical barriers.

However, the successful implementation and integration of POCT in primary care requires a comprehensive and multifaceted approach that addresses both clinical and system-level considerations. Effective strategies must be developed to ensure the judicious use of POCT, strike the appropriate balance with laboratory-based testing, and seamlessly integrate POCT results into electronic health records and clinical decision-making processes.

This report draws on insights from a recent roundtable discussion with key stakeholders, including healthcare providers, policymakers and industry representatives. The discussion highlighted the critical need for clear clinical guidelines, robust training programs, technological advancements, sustainable funding models, and a patient-centred approach to ensure the optimal utilisation of POCT and improve the health of our communities.

By addressing the strategic, clinical, operational, and patient-centred considerations outlined in this report, healthcare systems can unlock the full potential of POCT in primary care, driving improved access to diagnostics, enhanced care coordination, and better health outcomes for all.

Section 1: Clinical Considerations

Ensuring the appropriate and effective use of POCT in primary care requires careful consideration of clinical factors, including test selection, result interpretation, patient consent, and collaboration with pathology services. This section outlines key clinical considerations necessary for effective POCT utilisation.

Testing to Inform Clinical Management

POCT should be used to guide decision-making and improve patient care pathways. It is important to strike a balanced approach; over-testing, for example, can lead to unnecessary costs, patient anxiety, and potential misdiagnosis. It is essential to prioritise tests that address the patient's presenting complaint and guide treatment decisions, following the "testing to treat" principle, which focuses on diagnostics that identify and manage specific conditions.

- **Judicious Use:**
 - Establish clear clinical algorithms and decision-support tools to guide healthcare professionals in determining when POCT is appropriate and necessary for specific clinical scenarios.
 - Implement protocols and training programs to ensure that POCT is performed only when clinically indicated and to complement existing services.
 - Promote the use of POCT for time-sensitive conditions or situations where rapid test results can significantly impact clinical decision-making and patient outcomes, such as acute care settings or remote locations.
- **Balancing POCT and Lab-Based Testing:**
 - Recognise the complementary roles of POCT and laboratory-based testing, leveraging the strengths of each modality to optimise patient care.
 - Utilise POCT for rapid, preliminary testing and triage, while relying on laboratory-based testing for more complex, specialised, higher throughput or confirmatory analyses.
 - Develop integrated care pathways that seamlessly incorporate both POCT and laboratory-based testing, ensuring a coordinated and efficient diagnostic process.
 - Establish clear criteria and protocols for when to confirm POCT results with laboratory-based testing, particularly for critical or high-risk situations.

Key Message: By striking the right balance between the judicious use of POCT and the integration of laboratory-based testing, healthcare systems can maximise the benefits of community diagnostic services while ensuring accurate and reliable results, ultimately leading to improved clinical management and patient outcomes.

Actionable Results and Clear Pathways

To optimise the implementation of POCT, it is essential for healthcare providers to be proficient in interpreting results within the context of the patient's clinical presentation. This requires comprehensive training and the development of clear protocols to ensure effective management of both expected and unexpected findings.

- **Training in Result Interpretation:**

- Implement robust training programs to equip healthcare professionals, including those in primary care settings, with the knowledge and skills necessary to accurately interpret and act upon the results of community diagnostic tests.
- Provide ongoing education and support to ensure consistent and up-to-date understanding of test performance characteristics, potential sources of error, and clinical implications of test results.
- Foster collaboration between pathology services, diagnostic providers, and frontline clinicians to facilitate knowledge sharing and ensure a shared understanding of diagnostic test interpretation and clinical decision-making.

- **Clear Protocols:**

- Develop evidence-based, standardised protocols and clinical algorithms that outline the appropriate course of action based on the results of community diagnostic tests, ensuring consistent and timely management across all care settings.
- Establish clear referral pathways and communication channels between ICBs, community diagnostic providers, primary care, and secondary/tertiary care facilities to facilitate seamless transitions of care when further evaluation or specialised treatment is required.
- Regularly review and update protocols and pathways to incorporate the latest clinical guidelines, emerging evidence, and best practices in diagnostic testing and patient management.

Key Message: Clear protocols and pathways for acting on POCT results are crucial for optimal patient care.

Patient Consent and Shared Decision-Making

Patients have the right to understand the purpose, benefits and any risks of POCT. Engage in open communication with patients, explaining the rationale for testing and discussing potential outcomes. Consider patient preferences and values in the decision-making process.

- **Informed Consent:**

- Implement standardised protocols and procedures for obtaining informed consent from patients prior to conducting community diagnostic tests, ensuring that they understand the purpose, risks, benefits, and potential implications of the tests.
- Provide clear and accessible information materials, available in multiple languages and formats, to facilitate patient understanding of the diagnostic process and their rights regarding consent.
- Train healthcare professionals involved in POCT on effective communication techniques and strategies for explaining complex medical information in a clear and comprehensible manner.

- **Open Communication:**

- Encourage open and transparent dialogue between healthcare providers and patients, creating an environment where patients feel comfortable asking questions, expressing concerns, and actively participating in decisions about their care.
- Implement mechanisms for patients to provide feedback on their experiences with community diagnostic services, including the consent process and communication with healthcare professionals. This should include questions incorporating patient confidence in having definitive results at the point of test and additional reassurance that antibiotics for example are not needed.
- Foster a culture of active listening and empathy among healthcare professionals, ensuring that patients' values, preferences, and personal circumstances are considered when discussing diagnostic options and care pathways.
- Emphasise the importance of signposting based on test results. Provide clear guidance on next steps, especially when antibiotics are not required, or when test results, such as A1c levels, are close to outer ranges. Ensure patients understand their options and the recommended actions to manage their health effectively.

Key Message: Informed consent is essential for all POCT, respecting patient autonomy and promoting shared decision-making.

Addressing Unmet Needs and Access

POCT can significantly improve access to diagnostics, in underserved communities and hard-to-reach populations. Emphasising the importance of increasing risk tolerance for innovative diagnostic solutions can help address diverse healthcare needs and improve patient outcomes.

- **Improving Access and Diagnostic Solutions:**
 - Use the network of community diagnostic centres to increase the availability and accessibility of all forms of diagnostic testing, not just imaging, particularly in underserved areas or populations with limited access to healthcare facilities.
 - Implement mobile diagnostic units or home-based testing services more extensively to reach remote or isolated communities, enabling early detection and management of conditions in these populations. This has been done successfully in isolated instances. One such example is using mobile transportation to test for HbA1c levels to screen for diabetes and pre-diabetes - particularly in areas where the local population might be at greater risk. For example, this might be in communities with heavy representation of people of British South Asian background.
 - Collaborate with community organisations, pharmacies, and other local partners to establish convenient and familiar locations for diagnostic testing, reducing barriers to access and promoting greater utilisation of these services.

Key Message: POCT can bridge healthcare gaps for underserved populations by increasing access and facilitating early intervention.

Home Testing vs. Home Sampling

Define appropriate use cases for home testing and home sampling, addressing the risks associated with patient-purchased home tests. Ensuring proper guidance and oversight for home testing can enhance patient safety and diagnostic accuracy.

- **Clear Guidelines:**

- Establish clear and comprehensive guidelines that delineate the appropriate use cases for home testing versus home sampling, taking into account factors such as test complexity, patient demographics, and clinical indications.
 - Develop standardised protocols and training programs to ensure that healthcare professionals and patients understand the proper procedures for home testing and home sampling, including sample collection, handling, and transportation.
 - Implement decision support tools and algorithms to guide healthcare providers in determining when home testing or home sampling is appropriate and when in-person testing at a healthcare facility is recommended.
- **Risk Management:**
- Conduct thorough risk assessments to identify potential sources of error or variability in home testing and home sampling processes, such as improper sample collection, handling, or transportation.
 - Implement robust quality control measures, including proficiency testing and regular audits, to monitor the accuracy and reliability of home testing and home sampling results.
 - Establish clear communication channels and feedback mechanisms to promptly address any issues or concerns raised by patients or healthcare professionals regarding home testing or home sampling experiences.
 - Develop contingency plans and escalation pathways to ensure that patients who require further evaluation or treatment can seamlessly transition to appropriate healthcare facilities when necessary.

Key Message: Clear guidelines are needed for the safe and effective use of home testing and home sampling within community diagnostic models.

Section 2: Strategic Considerations

To fully harness the benefits of POCT in primary care, a well-defined strategic framework is essential. This section addresses the broader planning and governance aspects necessary for successful POCT integration. By establishing robust governance structures and fostering industry collaboration, we can ensure that POCT is seamlessly integrated into healthcare pathways, thereby enhancing patient outcomes and system-wide efficiency.

System-Wide Integration and Standardisation

Effective leadership and governance are crucial for the successful integration and standardisation of community diagnostic services across the healthcare system. A clear vision, robust governance structures, and strong collaboration between stakeholders are essential to ensure seamless coordination and consistent delivery of high-quality care.

- **Leadership and Governance:**
 - Establish clear leadership and governance structures for POCT, with pathology services playing a central role. This includes creating a single vision and strategy for pathology within the ICS to ensure cohesive implementation and oversight.
 - Develop a comprehensive governance framework that outlines roles, responsibilities, decision-making processes, and accountability measures for all parties involved in the delivery of community diagnostic services.
- **Scope of Community Testing:**
 - Conduct a thorough assessment of the local population's healthcare needs and existing diagnostic capabilities to determine the appropriate scope of community testing services.
 - Prioritise diagnostic tests and services that can be effectively and safely delivered in community settings, considering factors such as test complexity, equipment requirements, and workforce availability.
 - Develop a phased implementation plan that allows for gradual expansion of community diagnostic services based on demand, resource availability, and lessons learned from initial rollouts.
- **Standardised Protocols:**
 - Develop a phased implementation plan that allows for gradual expansion of community diagnostic services based on demand, resource availability, and lessons learned from initial rollouts.
 - Implement robust quality assurance and quality control measures, including regular audits, proficiency testing, and adherence to accreditation standards.

- Develop standardised training programs and competency assessments for healthcare professionals involved in community diagnostic testing to ensure consistent skill levels and adherence to best practices.

Key Message: POCT should be integrated into comprehensive diagnostic strategies at the ICS level with clear leadership from pathology services.

Sustainable Funding Models

Ensuring sustainable funding is crucial for the successful implementation and long-term viability of community diagnostic services. A multi-faceted approach that uses various funding sources and innovative models is essential to address the financial challenges associated with scaling up of POCT services.

- **ICS-Level Funding:**
 - Secure funding at the ICS level to support the implementation and maintenance of POCT services. Funding should be linked to the demonstrated benefits of POCT, including improved patient outcomes, reduced hospital referrals, and decreased healthcare utilisation. Along with patient satisfaction measures and appropriate prescribing.
- **Innovative Funding Models:**
 - Explore innovative funding models such as reimbursement strategies that incentivise the appropriate use of POCT. Consider including incentives for demonstrated clinical and economic benefits, such as reduced hospital admissions and better disease management.
- **Health Economic Evaluation:**
 - Conduct comprehensive health economic evaluations to quantify the potential cost savings and societal benefits of community diagnostic services, including reduced hospitalisations, improved productivity, and enhanced quality of life.
 - Use health economic modelling to demonstrate the long-term return on investment and cost-effectiveness of community diagnostic services, which can help secure funding from policymakers and service commissioners.
 - Develop standardised methodologies and frameworks for evaluating the economic impact of community diagnostic services, facilitating comparisons across different settings and enabling data-driven decision-making.

Key Message: POCT implementation should be financially sustainable, considering both the direct costs of devices and consumables and the potential for cost savings and wider societal measures such as AMR.

Industry Collaboration and Innovation

Fostering strategic collaborations with the diagnostics industry and embracing innovation can be pivotal to the successful scaling of community diagnostic services. Public-private partnerships and early industry involvement can unlock valuable expertise, resources, and cutting-edge technologies, ultimately enhancing patient outcomes and driving healthcare transformation.

- **Public-Private Partnerships:**

- Establish public-private partnerships (PPPs) with diagnostic manufacturers, technology companies, and other industry partners to use their expertise in developing, validating, and implementing innovative diagnostic solutions.
- Utilise PPPs to share risks, costs, and resources associated with the implementation of new diagnostic technologies, enabling more efficient and effective deployment of community diagnostic services.
- Collaborate with industry partners to co-develop and pilot novel diagnostic platforms, testing modalities, or care pathways tailored to the unique needs of community-based care.

- **Early Industry Involvement:**

- Engage diagnostic industry partners early in the planning and design phases of community diagnostic initiatives to ensure alignment with industry best practices, regulatory requirements, and technological advancements.
- Use industry insights and market intelligence to inform the prioritisation of diagnostic tests, services, and care pathways that address unmet needs and align with population health priorities.
- Foster open communication and knowledge exchange between healthcare providers, policymakers, and industry partners to facilitate the co-creation of innovative diagnostic solutions and accelerate their adoption in community settings.

Key Message: Partnerships with industry can accelerate the development and deployment of innovative POCT solutions.

Cultural Change and Leadership

Driving the successful implementation and scaling of community diagnostic services requires a concerted effort to foster a supportive organisational culture and strong leadership across the healthcare system. Effective cultural change and leadership are pivotal in building trust, promoting continuous improvement, and ensuring pathology services play a central role in this transformation.

- **Building Trust and Communication:**

- Encourage active participation and collaboration from all stakeholders, including frontline staff, patients, and community representatives, in the design and rollout of community diagnostic initiatives.
- Build trust and open communication between primary care providers, pathologists, and other stakeholders. This includes engaging professional bodies and organisations like NICE to disseminate best practices and advocate for timely policy changes.
- Implement robust feedback mechanisms to gather insights from patients, caregivers, and healthcare professionals, fostering a culture of active listening and responsiveness to their needs and concerns.

- **Promoting a Culture of Continuous Improvement:**

- Promote a culture of continuous improvement and learning to adapt to the rapidly evolving landscape of POCT, encouraging healthcare professionals to embrace new technologies, processes, and best practices in community diagnostic services.
- Implement regular training and professional development opportunities to equip healthcare workers with the necessary skills and knowledge to deliver high-quality community diagnostic services.
- Establish mechanisms for sharing best practices, lessons learned, and success stories across healthcare organisations, fostering a collaborative approach to improving community diagnostic services.

- **Leadership from Pathology Services:**

- Recognise the pivotal role of pathology services in driving the integration and standardisation of community diagnostic services, leveraging their expertise in diagnostic testing and quality assurance.
- Empower pathology leaders to champion the adoption of standardised protocols, quality control measures, and training programs for community diagnostic services, ensuring consistent and reliable testing across all sites.



- Foster collaboration between pathology services and other healthcare disciplines, such as primary care, radiology, and nursing, to develop comprehensive and patient-centred diagnostic pathways.

Key Message: Addressing cultural barriers and fostering collaboration are essential for successful POCT implementation.

Section 3: Operational Considerations

The practical implementation of POCT hinges on several operational factors that ensure its effective use in primary care settings. This section delves into the essential operational elements, including workforce training, technological infrastructure, data integration, and addressing healthcare access gaps.

By prioritising comprehensive training programs, investing in robust digital and physical infrastructure, and focusing on the unique needs of underserved populations, we can create a practical and efficient environment for POCT. These operational considerations are critical for translating strategic plans into actionable and sustainable practices that improve patient care and health outcomes.

Workforce Training and Competency

Ensuring a well-trained and competent workforce is crucial for the successful implementation and scaling of community diagnostic services. A comprehensive approach to workforce training and competency development is essential to deliver high-quality, patient-centred care and foster a culture of continuous learning and improvement.

- **Core Training for Healthcare Teams:**
 - Implement standardised core training programs for all healthcare professionals involved in POCT, covering topics such as point-of-care testing techniques, quality assurance, result interpretation, and patient communication (the IBMS already provides this [for Biomedical Scientists](#)).
 - Provide interdisciplinary training opportunities that bring together different healthcare teams (e.g., primary care, nursing, pathology) to promote collaboration, shared understanding, and consistent practices across community diagnostic settings.
- **Integration into Educational Programs:**
 - Integrate Collaborate with academic institutions and professional bodies to integrate community diagnostic training into existing educational curricula for healthcare professionals, ensuring a strong foundation from the outset of their careers.
 - Develop continuing professional development (CPD) programs and refresher courses to keep healthcare professionals up-to-date with the latest advancements in community diagnostic technologies, protocols, and best practices.
- **Future Workforce Needs:**

- Conduct regular workforce planning and forecasting exercises to identify future skill and competency gaps in community diagnostic services, considering factors such as population demographics, technological advancements, and evolving healthcare needs.
- Implement strategies to attract and retain a diverse and skilled workforce, such as offering competitive compensation, career development opportunities, and supportive work environments.
- **Defined Roles and Responsibilities:**
 - Clearly define the roles, responsibilities, and scope of practice for each healthcare professional involved in community diagnostic services, ensuring accountability and minimising the risk of errors or overlaps.
 - Establish robust competency assessment frameworks and credentialing processes to ensure that healthcare professionals possess the necessary knowledge, skills, and experience to perform their assigned duties safely and effectively.

Key Message: A well-trained workforce is essential for the safe and effective use of POCT. This requires comprehensive training programs and clear competency frameworks.

Technology and Infrastructure

Implementing robust technology and infrastructure is crucial for the successful scaling of community diagnostic services, particularly in the context of POCT. Careful selection of POCT devices, seamless digital integration, reliable infrastructure, and effective data integration and interoperability are essential to ensure accurate and timely diagnostic results, efficient data management, and effective care coordination.

- **Selection of POCT Devices:**
 - Establish a comprehensive and transparent evaluation process to select POCT devices that meet the specific clinical needs, operational requirements, and regulatory standards of community diagnostic services.
 - Assess factors such as test menu, analytical performance, ease of use, connectivity capabilities, and cost-effectiveness to identify devices that align with the intended use cases and patient populations.
 - Involve stakeholders from various disciplines, including clinicians, laboratory professionals, IT specialists, and patient representatives, in the device selection process to ensure a well-rounded and inclusive evaluation.
- **Digital Integration:**
 - Prioritise the adoption of POCT devices with robust data management capabilities and seamless integration with electronic health record (EHR)

systems, laboratory information management systems (LIMS), and other relevant healthcare IT platforms.

- Implement secure and interoperable data exchange protocols to enable real-time sharing of POCT results, facilitating timely clinical decision-making and care coordination across different healthcare settings.
- Use cloud-based technologies and mobile health solutions to enhance data accessibility, remote monitoring, and real-time communication between patients, healthcare providers, and diagnostic services.
- **Reliable Infrastructure:**
 - Invest in a robust and scalable IT infrastructure, including high-speed internet connectivity, secure data storage, and backup systems, to support the efficient operation of community diagnostic services and POCT devices.
 - Implement comprehensive cybersecurity measures, such as data encryption, access controls, and regular security audits, to protect sensitive patient information and ensure the integrity of diagnostic data.
 - Develop contingency plans and redundancy measures to mitigate the impact of potential infrastructure failures, power outages, or other disruptions, ensuring continuity of diagnostic services and patient care.
- **Data Integration and Interoperability:**
 - Ensure seamless integration of POCT results into electronic health records (EHRs) to enable informed decision-making and continuity of care across the entire healthcare pathway.
 - Invest in robust digital infrastructure and standardised data reporting formats to ensure efficient data flow, including integration with LIMS and other health information systems.
 - Foster collaboration between healthcare providers, technology vendors, and pathology services to achieve interoperability, and consider centralised data repositories to ensure that results are accessible across the entire healthcare pathway, enhancing patient care.

Key Message: Select appropriate technology and establish robust infrastructure for successful POCT implementation.

Addressing Unmet Needs and Access

Scaling community diagnostic services presents an opportunity to address longstanding unmet needs and improve access to timely and accurate testing for underserved populations. By bringing diagnostics closer to the community through innovative approaches such as mobile clinics and outreach programs, and fostering targeted funding and collaboration, healthcare systems can overcome barriers and enhance the delivery of patient-centred care.

- **Mobile Clinics and Outreach Programs:**
 - Use mobile clinics and outreach programs to increase the availability and accessibility of diagnostic testing, particularly in underserved areas or populations with limited access to healthcare facilities.
 - Implement mobile diagnostic units or home-based testing services to reach remote or isolated communities, enabling early detection and management of conditions in these populations.
 - Collaborate with community organisations, pharmacies, and other local partners to establish convenient and familiar locations for diagnostic testing, reducing barriers to access and promoting greater utilisation of these services.
- **Targeted Funding and Collaboration:**
 - Allocate dedicated funding streams and resources to support the implementation and operation of mobile clinics, outreach programs, and other initiatives aimed at improving access to community diagnostic services.
 - Foster partnerships and collaborations with community-based organisations, patient advocacy groups, and local stakeholders to identify and address unmet diagnostic needs within specific populations or geographic areas.
 - Use funding opportunities and grants from government agencies, non-profit organisations, or private entities to support the expansion of community diagnostic services in underserved regions or for specific target populations.

Key Message: POCT can significantly improve access to diagnostics for underserved and hard-to-reach populations, providing timely interventions and reducing healthcare disparities.

Health Economic Value and Evaluation

Assessing the health economic value and impact of community diagnostic services is crucial for informing resource allocation decisions and demonstrating the return on investment. A comprehensive evaluation framework that considers both the clinical and economic outcomes is essential for capturing the full value proposition of these services.

- **Comprehensive Evaluation Frameworks:**
 - Adopt a holistic evaluation approach that incorporates clinical outcomes, healthcare utilisation, costs, and patient-reported outcomes to provide a comprehensive understanding of the impact of community diagnostic services.
 - Use established health economic evaluation methods, such as cost-effectiveness analysis (CEA), cost-utility analysis (CUA), and budget impact analysis, to quantify the economic value and potential cost savings associated with community diagnostic services.
 - Collaborate with health economists, policymakers, and other stakeholders to develop standardised evaluation frameworks and methodologies tailored to the unique context of community diagnostic services.
- **Impact on Patient Satisfaction and Quality of Life:**
 - Incorporate patient-reported outcome measures (PROMs) and quality of life assessments into the evaluation framework to capture the impact of community diagnostic services on patient experience, satisfaction, and overall well-being.
 - Assess the potential for community diagnostic services to reduce patient anxiety, improve diagnostic confidence, and minimise the burden associated with traditional diagnostic pathways.
 - Evaluate the impact of timely and accurate diagnosis on patient empowerment, shared decision-making, and adherence to treatment plans, which can ultimately lead to improved health outcomes and quality of life.

Key Message: Robust data collection and analysis are essential to demonstrate the value of POCT and inform resource allocation.

Section 4: Recommendations and Future Directions

To fully realise the transformative potential of POCT in primary care, a collaborative effort is needed to implement evidence-based recommendations and address the challenges identified in this report. This section outlines key recommendations for policymakers, healthcare organisations, and primary care providers, as well as future directions for POCT.

For Policymakers

1. Establish a National POCT Strategy within NHS England:

- Develop a comprehensive national strategy for POCT implementation in primary care, outlining clear leadership, goals, timescales, priorities, and funding mechanisms.
- Integrate POCT into national health policies and frameworks.
- Clear and transparent demand signalling to industry partners.

2. Revise Commissioning and Tariff Structures:

- Reform commissioning and tariff structures to incentivise the appropriate use of POCT, reflecting its value in patient care and system-wide efficiency.
- Consider incentives for demonstrated clinical and economic benefits.

3. Invest in Research and Evaluation:

- Fund research to evaluate the clinical and cost-effectiveness of POCT in various primary care settings and patient populations.
- Develop clear metrics and evaluation frameworks to measure POCT's impact on patient outcomes, healthcare utilisation, and overall health system performance.

For Healthcare Organisations and Systems

1. Develop Integrated POCT Strategies:

- Create comprehensive POCT strategies at the Integrated Care System (ICS) level, aligned with the national strategy and addressing local needs.
- Define clear governance structures, leadership roles, and standardised protocols for implementation.

2. Invest in Workforce Training and Development:

- Provide comprehensive training and education for all healthcare professionals involved in POCT, ensuring competency in utilisation, interpretation, and the development of business cases.
- Integrate training into existing educational frameworks and certifications.

3. Establish Robust Governance and Collaboration:

- Implement clear governance frameworks for POCT, including quality control, data management, and standardised procedures.
- Foster collaboration between primary care, pathology services, industry partners, and other stakeholders to drive innovation and improve patient care.

4. Prioritise Data Integration and Interoperability:

- Ensure seamless integration of POCT results into electronic health records (EHRs) and other health information systems to enable informed decision-making and continuity of care across the entire healthcare pathway.

- Invest in robust digital infrastructure, standardised data reporting formats, and collaboration with technology vendors to achieve interoperability and data accessibility for all stakeholders involved in patient care.

For Primary Care Providers

1. Prioritise Patient-Centred Care:

- Engage patients in shared decision-making about POCT, ensuring they understand the purpose, risks, and benefits of testing.
- Tailor POCT use to individual patient needs and preferences.

2. Follow Evidence-Based Guidelines:

- Adhere to evidence-based guidelines for POCT selection and interpretation, considering the specific clinical context and patient population.

3. Engage in Continuous Professional Development:

- Actively participate in training and education programs to maintain competency in POCT utilisation and stay current with advancements.

4. Collaborate with Colleagues:

- Foster a collaborative approach with colleagues, including pathologists and other specialists, to ensure optimal patient care and effective use of resources.
- Clear communication and coordination are essential for successful POCT implementation.

5. Testing should be economical:

- Although there is an initial outlay for the cost of POCT machines, for most it is the cost of the testing strips/cartridges which are the bigger financial pressure. To be worthwhile, the cost of the testing must be offset by a benefit beyond just the speed of the result. This might be any of the following factors:
 1. Reduced prescribing costs (e.g., decision not to prescribe antibiotics).
 2. Reduced requirement for further expensive testing (e.g., no longer needs referral for scan to exclude clot).
 3. Reduced risk of clinical deterioration – when patients have potentially more serious conditions and a test can aid with rapid diagnostics/guide management.
 4. Preventing spread of contagion – through advice to isolate or commencement of appropriate treatment.
 5. Preventing unnecessary infirmity (e.g. reassurance that patient does not have communicable infection so can return to work / education).

Future Directions

1. Expand POCT Applications:

- Explore the potential of POCT in new clinical areas such as chronic disease management, preventive care, and home-based monitoring.
- Identify and validate new use cases to expand the impact of POCT.
- Align with national priorities and strategies where POCT has been identified as a key tool, such as the new five-year [National Action Plan to address Antimicrobial Resistance \(AMR\)](#).

2. Technological Advancements:

- Embrace emerging technologies such as artificial intelligence and machine learning to enhance the accuracy, efficiency, and accessibility of POCT.
- Invest in research and development to stay at the forefront of diagnostic innovation.

3. Address Health Disparities:

- Utilise POCT to improve access to care and reduce health disparities in underserved communities.
- Tailor POCT solutions to the specific needs of these populations to achieve equitable healthcare outcomes.

4. Promote Patient Empowerment:

- Empower patients to actively participate in their healthcare using POCT and self-monitoring tools.
- Provide education and support to help patients make informed decisions and manage their health effectively.

Conclusion

Point-of-care testing (POCT) offers a significant opportunity to enhance primary care delivery, improve patient access to diagnostics, and achieve better health outcomes across diverse populations. Realising the full potential of POCT requires a concerted effort from all stakeholders, including policymakers, healthcare organisations, providers, industry partners, and patients.

Implementing the recommendations in this report will pave the way for a more responsive, accessible, and patient-centred healthcare system. A comprehensive national POCT strategy, reformed commissioning and tariff structures, and sustained investment in research and evaluation are essential for policymakers to create an enabling environment that supports POCT adoption.

Healthcare organisations and systems must develop integrated POCT strategies that align with national priorities while addressing local needs. Robust governance frameworks and prioritising workforce training and development are crucial. Collaboration between primary care providers, pathology services, industry partners, and other stakeholders is vital for driving innovation, ensuring quality control, and optimising patient care pathways.

Primary care providers have a pivotal role in delivering patient-centred care, adhering to evidence-based guidelines, engaging in continuous professional development, and fostering a collaborative approach across disciplines. Involving patients in shared decision-making and tailoring POCT utilisation to individual needs empowers patients and enhances their healthcare experience.

Looking ahead, the future of POCT holds opportunities to expand applications in new clinical areas, utilise technological advancements, address health disparities, and promote patient empowerment through self-monitoring and active healthcare participation.

Adopting a strategic, collaborative, and patient-centred approach ensures that POCT is used appropriately, efficiently, and equitably. This will ultimately lead to better health outcomes, enhanced patient satisfaction, and a more sustainable and responsive healthcare system for all.



References:

[*Point of Care Testing: National Strategic Guidance for at Point of Need Testing*](#) – the Institute of Biomedical Science, Royal College of Pathologists and the Association for Clinical Biochemistry and Laboratory Medicine

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