

Kerry Oliver on behalf of PRIMIS

Please describe the work that you wish to be considered for the John Perry Prize

This nomination honours the PRIMIS team, a driving force in data use and information management in UK primary care for 25 years.

PRIMIS was originally established in 2000 to design and deliver a national data quality service. By empowering primary care teams with the tools and expertise to manage data with confidence and accuracy, PRIMIS laid the foundations for high-quality, data-driven healthcare across the sector. During this time, PRIMIS trained 1,000 data quality facilitators, building a nationwide network of expertise; engaged 97% of primary care organisations in data quality initiatives, achieving near-universal participation; delivered 11,500 training sessions to equip teams with the skills needed to improve data accuracy and reliability; and run, analysed, and fed back 21,000 query sets to 5,176 GP practices, driving measurable improvements in data quality. Through this national service, PRIMIS laid the foundations for high-quality, data-driven healthcare across the sector, earning the prestigious John Perry Prize in 2007.

This foundational work created the infrastructure and expertise that allowed the PRIMIS team to go on to support numerous national initiatives, including the Quality and Outcomes Framework, national RefSet maintenance, the National Diabetes Audit, and CVDPrevent. The team's involvement ensures that large-scale data collection is accurate, relevant, and actionable, driving meaningful insights and improvements in patient care.

In 2008, the PRIMIS team completed their work on the national Information Management and Technology Direct Enhanced Services (IM&T DES), creating innovative tools, guidance, and support that empowered general practices to achieve data accreditation. Through this programme, PRIMIS developed new national standards and benchmarks for coding quality and led the most comprehensive assessment of primary care data ever undertaken.

Key achievements include:

- Developed a robust suite of data quality indicators, setting national benchmarks for primary care.
- Trained over 400 GP assessors, building a network of expert evaluators across the country.
- Facilitated data sharing from more than 7,000 GP practices, enabling large-scale comparative analysis and driving improvements in data quality.

In 2012, PRIMIS successfully evolved into a commercially viable, self-sustaining service, reflecting the continued demand for and reliance on its expertise. This transition showcased PRIMIS's agility in adapting to shifting NHS priorities while consistently delivering high-quality, high-impact health informatics support. It also opened the door for PRIMIS to broaden its reach, extending its services to academia, industry, and the charitable sector.

PRIMIS developed the GRASP suite of tools to support the management of long-term conditions, including Atrial Fibrillation, Diabetes, COPD, Asthma, and CVD. By delivering actionable insights directly from electronic health records, these tools enhanced quality improvement, guideline adherence, and patient safety. Widely deployed across thousands of practices nationwide, the GRASP tools demonstrated the power of digital solutions to drive scalable, measurable improvements in primary care outcomes.

For over 15 years, PRIMIS has supported UKHSA and its predecessors with the national vaccination uptake survey, establishing the standards and requirements for collecting, recording, and managing vaccination data. This work includes providing data specifications for all national vaccination programmes and collaborating closely with GP system suppliers to ensure effective implementation. The team was immensely proud to have worked alongside national stakeholders by playing a vital role in advising on data requirements for the COVID-19 vaccination programme and supporting the national response.

Over the past decade, PRIMIS has played a pivotal role in bridging the gap between research and frontline practice, transforming academic insights into practical tools and interventions for primary care. By leveraging its deep expertise in health informatics, PRIMIS ensures that research is not only accessible but also actionable. This work extends beyond the University of Nottingham, where PRIMIS is hosted, to numerous academic institutions nationally and internationally.

This approach reached a major milestone in 2018 with the national rollout of the PINCER intervention - a pharmacist-led programme designed to reduce clinically significant medication errors in general practice. PINCER has delivered demonstrable improvements in prescribing safety and patient outcomes, standing as a flagship example of how, using a social franchise approach, robust research can be successfully embedded into routine clinical care.

Key achievements include:

- 2,296 individuals trained to deliver the PINCER intervention
- 27.04 million patient records searched for prescribing errors
- 220,981 at-risk patients identified across prescribing safety indicators
- Sustained reductions of 32.7% in prescribing errors associated with gastrointestinal bleeding, a common cause of medication-related hospital admissions
- Recognised as a 4-star REF impact case study, highlighting outstanding, world-leading research impact
- Advising international partners on the adoption and scale of PINCER implementation overseas (US and Australia)

More recently, the PRIMIS team has been working with research partners to deploy and integrate sophisticated, research-based clinical algorithms within GP IT systems, enabling their validation using real-world data. Beyond implementation, PRIMIS provides strategic expertise in optimising workflow

integration, adapting data models for practical use, and seamlessly translating advanced algorithms into everyday clinical practice. This work also involves navigating complex regulatory requirements, including medical device registration, to ensure innovations are introduced safely and effectively. In 2023, in collaboration with the University of Nottingham, PRIMIS developed the FAMCAT2 API for the early identification of familial hypercholesterolemia. The approach to implementation is designed to overcome key challenges in deploying algorithms at a national scale, and PRIMIS continues to innovate in this area.

More information on the projects PRIMIS has been involved in can be found <https://www.nottingham.ac.uk/primis/projects.aspx>

Today, PRIMIS remains a self-sustaining, trusted partner for the NHS, academia, industry, and the charitable sectors. Sustainable, innovative, and scalable, PRIMIS continues to develop tools, insights, and approaches that benefit millions of patients and set the benchmark for primary care informatics.

Please explain the relevance to primary care informatics of your submission (max 200 words).

The PRIMIS team has made a significant contribution to the advancement of primary care informatics.

- Raising data quality standards - empowering GP practices to manage data accurately and confidently. By supporting coding, audit, and practical use of primary care data, and upskilling Data Quality Facilitators, PRIMIS has strengthened workforce capacity and laid the foundation for reliable, high-quality informatics.
- Driving evidence-based care - by improving data quality and translating clinical guidelines into practical audit tools, PRIMIS has enabled clinicians, researchers, and policymakers to generate meaningful insights from electronic health records. This has supported safer, more effective patient care and informed service planning at local and national levels.
- Supporting national programmes and research - PRIMIS has played a central role in major NHS initiatives and has worked closely with academic and clinical research teams to translate findings into real-world practice.
- Uniting clinical insight with data science - by developing strong clinical informatics expertise within its team of Clinical Advisers, PRIMIS has bridged the gap between frontline care and digital innovation, ensuring solutions are clinically relevant and technically robust.
- Clinical coding transformations - PRIMIS supported the national transition to SNOMED CT, applying its coding expertise to ensure smooth migration and continuity in data monitoring, audit, and quality improvement.

Please explain the originality or innovation of your submission (max 200 words).

The PRIMIS team is unique in its longevity, expertise, and sustained impact on primary care informatics. Unlike many short-term projects, PRIMIS has consistently evolved alongside the changing NHS landscape, maintaining a continuous presence as a trusted partner for GP practices, policymakers, and researchers alike.

Its strength lies in being a multidisciplinary team that blends technical innovation, clinical insight, and educational expertise. This combination has allowed PRIMIS to create practical, user-friendly solutions that genuinely work for those delivering care on the ground.

By working collaboratively across the sector, PRIMIS has helped shape national initiatives, improve data quality, and support evidence-based decision-making at every level - from individual patient care to population health strategies.

This rare continuity, combined with a proven ability to adapt, innovate, and deliver, makes PRIMIS an exceptional team whose influence on primary care informatics is both enduring and transformative.

Please explain the impact or benefits of your submission (max 200 words).

With over 25 years of sustained contribution, PRIMIS is unique in combining deep clinical insight with advanced data science to transform primary care informatics. Its work enables accurate, actionable data use, drives evidence-based care, and supports national initiatives, while building sustainable workforce expertise. Scalable and influential, PRIMIS continues to shape the future of primary care and deliver measurable improvements in patient outcomes.

Please explain the scalability of your submission (max 200 words).

PRIMIS has proven its ability to expand and adapt its tools, training, and interventions across the NHS, supporting practices of all sizes and settings. Its solutions have been successfully scaled nationally, from individual GP practices to large-scale programmes, demonstrating that high-quality informatics and workforce upskilling can be applied widely without compromising effectiveness or impact.

Please describe the evidence base of your submission (max 200 words).

- Delivered a national data quality service for over 10 years and supported the wider upskilling of the NHS workforce in clinical coding, audit, and the effective use of primary care data and health informatics.
- Led the most comprehensive assessment of primary care data ever undertaken, setting national benchmarks for data quality and providing a comparative analysis service used by over 7,000 GP practices.
- Successfully scaled the PINCER intervention, reaching the majority of primary care organisations in the UK and significantly reducing prescribing errors.
- Implemented the GRASP quality improvement tools, helping more than 3,500 GP practices improve long-term condition care.

- Developed and mentored GPs as health informaticians, strengthening clinical informatics capacity across primary care.
- Delivered expert health informatics advice for over 25 years, contributing to numerous quality improvement, service evaluation, and research initiatives, demonstrating sustained impact and exceptional longevity.
- Made significant contributions to national programmes, advisory groups, and technical working parties, influencing the development of data standards, clinical coding guidance, and strategies to improve data quality and safety across general practice, including the Good Practice Guidelines.