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Editorial

From Glucose Control to Cardiometabolic Protection: Implications of the 2026 NICE Update for Clinical Practice

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1. Introduction

The updated National Institute for Health and Care Excellence guideline type 2 diabetes in adults: management (NG28) represents a significant shift in diabetes care in the UK [1]. Moving beyond a glucose-centred, stepwise model, the guidance adopts a comorbidity-stratified framework in which cardiovascular disease, renal function, obesity, early-onset disease and frailty determine initial pharmacological strategy [1]. Earlier versions were organised around glycaemic thresholds, with treatment driven by glycated haemoglobin (HbA1c) levels. In contrast, current guidance places cardiometabolic risk reduction at the centre of decision-making, directing treatment by long-term cardiovascular and renal outcomes rather than glycaemic control alone [1]. Early combination therapy, including modified-release metformin and a sodium-glucose cotransporter 2 (SGLT2) inhibitor, is recommended for many individuals at diagnosis, with further specification according to comorbidity profile [1]. This reflects a redefinition of type 2 diabetes as a cardiometabolic condition rather than solely a disorder of hyperglycaemia, aligning with international consensus prioritising outcome-based treatment selection [2].

For clinicians in primary and community care, these changes extend beyond prescribing to reshape the consultation. Greater emphasis is placed on comprehensive assessment, individualised risk stratification and proactive management of complications [1]. The guidance signals a transition from reactive glycaemic control to anticipatory, outcome-focused care aimed at reducing long-term cardiovascular morbidity and healthcare burden [1,3].

2. From Glycaemic Control to Cardiometabolic Risk Reduction

Type 2 diabetes management in UK primary care has traditionally followed a stepwise approach based on glycaemic thresholds, beginning with lifestyle modification, followed by metformin monotherapy, and escalation to additional therapies where HbA1c targets were not achieved [1]. In the 2026 update, the National Institute for Health and Care Excellence (NICE) positions type 2 diabetes more clearly as a cardiometabolic condition, where cardiovascular and renal risk reduction are central to decision-making. Sodium-glucose cotransporter 2 (SGLT2) inhibitors and glucagon-like peptide-1 (GLP-1) receptor agonists are recommended not only for glucose lowering but also for established cardiovascular and renal benefits [1], aligning with international consensus prioritising outcome-driven treatment selection over glycaemic thresholds alone [2].

For adults without relevant comorbidity, NICE recommends initial dual therapy with modified-release metformin plus an SGLT2 inhibitor [1]. Dual therapy at diagnosis therefore becomes standard, shifting the focus towards early risk modification. This reflects recognition that cardiovascular and renal complications develop early and are not adequately addressed through glycaemic control alone. Treatment selection is therefore informed by HbA1c, cardiovascular risk, renal function and weight, requiring comprehensive assessment at diagnosis. This emphasis aligns with the National Health Service (NHS) 10-year health plan, which prioritises prevention and community-based care [3]. NICE also specifies modified-release metformin as first-line due to improved tolerability and adherence [1]. Although dual therapy is recommended, gradual introduction is advised to assess tolerability and minimise adverse effects, reinforcing the need for structured follow-up and ongoing review [1].

3. Individualised Treatment Pathways Based on Comorbidity

Initial pharmacological management in the 2026 NICE update is determined by comorbidity rather than glycaemic thresholds alone [1]. This reflects a shift towards individualised, risk-informed prescribing, requiring assessment of cardiovascular status, renal function, frailty and weight at diagnosis. Treatment is guided by anticipated long-term cardiovascular and renal outcomes rather than short-term glycaemic response.

• Heart failure (any ejection fraction): modified-release metformin plus an SGLT2 inhibitor. This reflects the role of SGLT2 inhibitors in reducing hospitalisation and improving outcomes independent of glucose lowering [1],

supporting early disease-modifying therapy in high-risk individuals.

• Atherosclerotic cardiovascular disease (ASCVD): modified-release metformin, an SGLT2 inhibitor and subcutaneous semaglutide up to 1 mg weekly. ASCVD includes coronary, cerebrovascular and peripheral arterial disease [1], determining eligibility for early combination therapy. Use of SGLT2 inhibitors and GLP-1 receptor agonists reflects complementary mechanisms in reducing major adverse cardiovascular events.

• Early-onset type 2 diabetes: modified-release metformin plus an SGLT2 inhibitor, with consideration of a GLP-1 receptor agonist or tirzepatide. Early-onset disease (diagnosis <40 years) is associated with more aggressive progression and higher lifetime cardiovascular risk [1, 2]. NICE therefore recommends intensified early therapy, requiring an anticipatory approach and shared decision-making.

• Obesity: modified-release metformin plus an SGLT2 inhibitor, prioritising weight reduction alongside glycaemic control due to its role in metabolic dysfunction and cardiovascular risk [1].

• Chronic kidney disease (CKD): therapy stratified by estimated glomerular filtration rate (eGFR), with SGLT2 inhibitors prioritised where appropriate due to renoprotective effects and reduction in cardiovascular risk [1].

• Frailty: modified-release metformin initially, with cautious use of SGLT2 inhibitors. Treatment is guided by functional status and life expectancy, prioritising avoidance of harm over strict glycaemic targets [1].

In practice, overlapping comorbidities require prioritisation of dominant clinical risk. This shifts UK practice from uniform escalation to individualised pathways, reframing management towards modification of disease trajectory and long-term outcomes [1,2].

4. Renal Function–Guided Prescribing and Therapeutic Safety

Renal function is central to pharmacological strategy in the 2026 NICE update, with treatment selection aligned to estimated glomerular filtration rate (eGFR) thresholds [1]. Rather than acting solely as a safety parameter, renal function now shapes therapeutic choice, reflecting the dual role of several agents in glycaemic control and renal protection. For individuals with an eGFR above 30 mL/min/1.73 m^2, modified-release metformin with an SGLT2 inhibitor remains the preferred approach [1]. Within this range, SGLT2 inhibitors are prioritised not only for glucose lowering but for renoprotective effects, including slowing progression of chronic kidney disease and reducing cardiovascular risk.

As renal function declines, treatment options become more limited. When eGFR is between 20 and 30 mL/min/1.73 m^2, NICE recommends dapagliflozin or empagliflozin with a dipeptidyl peptidase-4 (DPP-4) inhibitor, balancing benefit and safety [1]. When eGFR falls below 20 mL/min/1.73 m^2, DPP-4 inhibitors are considered due to their favourable safety profile in advanced renal impairment [1]. This stratified approach emphasises ongoing renal monitoring as part of diabetes management. Regular review of eGFR is required to guide initiation, dose adjustment and continuation. Clinicians should also consider risks of volume depletion and hypotension, particularly with SGLT2 inhibitors, and the need to withhold therapy during acute illness. Monitoring should therefore include fluid status, blood pressure and overall clinical context.

5. Frailty-Informed Prescribing and Medicines Optimisation

In contrast to intensified cardiometabolic therapy, the 2026 NICE update adopts a cautious, individualised approach for people with frailty [1]. Management is guided by functional status, comorbidity burden and risk of treatment-related harm rather than glycaemic targets alone. For adults with type 2 diabetes and frailty, modified-release metformin is recommended as initial therapy [1]. An SGLT2 inhibitor should be considered only where frailty does not increase risk of adverse effects such as volume depletion and hypotension [1]. Where metformin is contraindicated or not tolerated, treatment choice should be guided by frailty-related risk, with consideration of an SGLT2 inhibitor or a DPP-4 inhibitor based on tolerability and safety [1]. This approach reflects proportional prescribing, prioritising minimisation of treatment burden and avoidance of harm. NICE recommends regular review to ensure individuals receive the smallest effective number of medications at the lowest effective dose [1]. Simplification of therapy and avoidance of polypharmacy may therefore take precedence over strict glycaemic control. Glycaemic targets may be relaxed, recognising that prevention of hypoglycaemia, falls and treatment-related complications is often of greater importance than achieving standard HbA1c thresholds [1]. In practice, this requires a holistic approach balancing treatment benefit against functional status, life expectancy and patient priorities.

6. Stepwise Initiation, Monitoring and Safety Considerations

Although initial therapy is more intensive in the 2026 NICE update, medicines should be introduced stepwise to assess tolerability and minimise adverse effects [1]. Modified-release metformin is initiated first, followed by an SGLT2 inhibitor once the maximum tolerated dose is reached. Where indicated, a GLP-1 receptor agonist or tirzepatide may be added during further intensification [1]. This approach enables early optimisation while maintaining safety. Structured follow-up is essential. Review should assess gastrointestinal tolerance, renal function, weight change, adverse effects, adherence and patient experience.

NICE emphasises ongoing review to ensure treatment remains appropriate as clinical status changes, particularly with renal function or emerging comorbidity [1]. SGLT2 inhibitors may be continued for cardiovascular and renal protection even when glycaemic targets are met [1].

Greater emphasis is placed on safety and patient education. Clinicians should provide sick day guidance, advising temporary discontinuation during acute illness to reduce dehydration and metabolic risk [1]. SGLT2 inhibitors carry a risk of diabetic ketoacidosis, including euglycaemic presentations, requiring monitoring of fluid status, blood pressure and renal function. NICE also highlights reproductive safety, recommending contraception counselling when prescribing GLP-1 receptor agonists or tirzepatide [1]. Overall, treatment initiation and review form a continuous process requiring monitoring, education and timely adjustment to maximise benefit and minimise risk.

7. Addressing Inequalities in Access and Outcomes

The 2026 NICE update places greater emphasis on addressing inequalities in access to evidence-based therapies, including SGLT2 inhibitors and continuous glucose monitoring [1]. This reflects concerns that advances in diabetes care are not experienced equitably, with variation in prescribing, access to technology and engagement contributing to disparities in outcomes. NICE highlights the need for active monitoring of prescribing patterns and service provision to identify inequities in access and uptake [1]. In practice, this extends beyond individual prescribing to population-level audit, service evaluation and targeted intervention to address gaps in care. Clinicians in leadership and advanced practice roles are well placed to contribute through audit of local prescribing data, identification of underserved groups and involvement in service redesign. This may include improving access pathways, supporting culturally appropriate care and addressing barriers related to health literacy, digital exclusion and socioeconomic disadvantage. Addressing inequalities therefore becomes an integral component of diabetes management rather than an adjunct, requiring coordinated action across clinical, organisational and system levels to ensure equitable care and improved long-term outcomes.

8. Implications for Clinical Practice

The 2026 NICE update reshapes the diabetes consultation, extending its scope beyond glycaemic assessment to a more comprehensive evaluation of cardiometabolic risk and individual patient context [1]. Initial consultations now require integration of cardiovascular and renal risk assessment, evaluation of weight and metabolic status, and consideration of factors such as reproductive health where relevant. Treatment decisions are increasingly informed by long-term outcome data rather than short-term glycaemic targets alone, requiring clinicians to engage in informed, shared decision-making with patients regarding the benefits and potential risks of therapy. Ongoing review also takes on greater complexity, with annual and interim assessments incorporating reassessment of comorbidity, renal function, frailty and overall treatment burden [1]. This reflects a move away from a singular focus on HbA1c towards a broader model of care in which treatment effectiveness is evaluated in relation to cardiovascular, renal and functional outcomes. Medicines optimisation therefore becomes a continuous process, requiring regular adjustment of therapy in response to changes in clinical status and patient priorities.

This shift increases the clinical and professional demands placed upon clinicians involved in diabetes care. Effective implementation requires detailed pharmacological knowledge, confidence in prescribing across multiple drug classes, and the ability to apply clinical judgement within the context of multimorbidity and uncertainty. It also necessitates a more proactive and anticipatory approach to care, in which clinicians support patients to engage with long-term risk management and navigate increasingly complex treatment pathways.

9. Conclusion

The 2026 NICE update represents a clear departure from a glucose-centred model of care towards a cardiometabolic framework that prioritises long-term outcomes. By embedding comorbidity-stratified initial therapy, emphasising cardiovascular and renal protection, recognising the significance of early-onset disease and integrating frailty into prescribing decisions, the guideline reframes type 2 diabetes as a condition requiring individualised, preventative management. For clinicians, this shift extends beyond treatment selection to a reconfiguration of clinical practice. Effective implementation requires integration of risk stratification, pharmacological expertise and ongoing treatment review within increasingly complex, multimorbid populations. It also necessitates a proactive and anticipatory approach to care, in which therapeutic decisions are guided by long-term benefit rather than short-term glycaemic targets. Successful adoption will depend upon advanced clinical reasoning, robust medicines optimisation and leadership in delivering equitable, high-quality cardiometabolic care.

Key Points

• The updated NICE guideline NG28 shifts type 2 diabetes management from a glucose-centred, stepwise model towards a comorbidity-stratified approach that prioritises cardiovascular and renal risk reduction from diagnosis.

• Early initiation of dual therapy with modified-release metformin and an SGLT2 inhibitor is recommended for many individuals, reflecting a move towards outcome-driven, cardiometabolic management.

• Initial pharmacological therapy is guided by comorbidity, including heart failure, ASCVD, early-onset type 2 diabetes, CKD and frailty, requiring structured and individualised clinical assessment.

• Renal function plays a central role in treatment selection and continuation, with defined eGFR thresholds informing safe and effective prescribing.

• Implementation of the guidance requires enhanced clinical reasoning, shared decision-making and leadership in addressing inequalities in access to therapies and outcomes.

Availability of Data and Materials

Not applicable.

Author Contributions

HHA was responsible for the conception, drafting, critical analysis, and overall development of the manuscript and led the preparation of the final version. KA and MSE contributed to the conception and interpretation of the work, drafting, and refinement. All authors contributed to revising the manuscript critically for important intellectual content. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

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Conflicts of Interest

The authors declare no conflicts of interest.

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