Supplementary file 1. Reimbursement models – key characteristics

	Block	Capitation	Case-based	Fee-for-service	Pay-for-performance
Definition	Provision of services for a specific time period	Provision of care for a specific patient population	Provision of fixed sum for episodes of care	Provision of specific services	Payment that rewards or penalises providers for aspects of their performance
Payment basis	Historical prices	Population characteristics and demographics	Episode of care	Delivery of specific service	Achievement of performance thresholds
Type	Prospective	Prospective	Retrospective	Retrospective	Retrospective
Advantages	Low transaction costs	Relatively low transaction costs, although higher than block contracts	Increased competition can boost care quality where tariffs are fixed	Increased competition can boost care quality where tariffs are fixed	Potential to enhance quality and efficiency of care delivered
	Budget is predictable, allowing for financial control	Budget is predictable, allowing for financial control	Providers incentivised to reduce cost per episode since 'currency' is fixed	No provider incentive to withhold care; they are paid for every service	Financial reward and penalties incentivises providers to comply with guidelines
	Flexibility for providers to change services offered without it having an impact on their finances	Budget is adjusted according to population characteristics and demographics	Quality improvement might be incentivised to attract patients	Quality improvement might be incentivised to attract patients	System that enables comparison between providers, increasing competition
		Takes into consideration social and health inequalities in target population	More transparency around cost allocation and activity	Full transparency around cost allocation and activity	Full transparency around cost allocation and activity
Disadvantages	Lack of transparency and accountability	Risk posed by increased activity and cost of care	Providers are incentivised to increase activity in what may not be the most effective care setting	Providers are incentivised to increase activity in what may not be the most effective care setting	Frequently rewards compliance with processes of care rather than outcomes

	Spending limit constrains volume of services provided	Risk posed by sudden changes in demographics	Incorrect coding can result in over or underpayment	Provider incentivised to offer more services, even if unnecessary	Risk of becoming a 'tick-box' exercise, rather than improving care for patients
	Risk posed by increased activity and cost of care	Incentive for provider to not deliver care that is complex/costly	Incentive to reduce cost per episode of care might compromise quality where prices	High transaction costs; requires complex administration of services	Attention shift: risk that unrewarded work may be sacrificed
	Pressure on 'good' providers that attract more activity		Higher transaction costs due to need of a more sophisticated billing system	No incentive for provider to focus on prevention, taking a population-level approach	Higher transaction costs due to need for a more sophisticated billing system
Impact on outcomes for patients	No specific focus on delivery of outcomes; providers may choose to 'under deliver' services if there are costs/activity pressures, impacting quality of care	No specific focus on delivery of outcomes; providers may choose to 'under deliver' services if there are costs/activity pressures, impacting quality of care	Incentive to reduce costs in order to improve profits may have a negative impact on patient outcomes	Incentive to increase activity without explicit considerations of outcomes for patients	As measurement is frequently related to care processes, model doesn't closely impact outcomes

Source: Outcomes Based Healthcare, *Contracting for Outcomes.* Adapted from: Marshall L, Charlesworth A and Hurst J. *The NHS payment system: evolving policy and emerging evidence*. Nuffield Trust, 2014.