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Case Study

Better Together
United Kingdom

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This case study is part of the **Accountable Care in Practice: Global Perspectives** series produced by Duke University's Robert J. Margolis, MD, Center for Health Policy and supported by the Commonwealth Fund. The series explores how organizations across the world have taken steps to improve health outcomes by adopting accountable care policy reforms within diverse organizational and environmental contexts. The aim is to assist US stakeholders to apply the results of these reforms. We consider the critical success factors with each organization's

OVERVIEW

Mid Nottinghamshire Better Together Health and Social Care (referred to as Better Together) is an alliance of regional providers and stakeholders in central England that have integrated primary, acute, and social care systems to better serve an aging and overweight population with high rates of non-communicable diseases (NCDs, also known as chronic diseases in the United States).

Table 1: Overview of Better Together

Model	Health System	Innovations in Care	Key Outcomes
• Alliance of integrated primary, acute and social care systems • 1 year • 310,000 catchment size	• Universal healthcare • Primary care primarily delivered through private sector • Fragmented care between primary and secondary care • Weighted capitation with elements of FFS	• Hospital datasets used to identify at patients at risk of hospitalization • Capitated payments structure is used to share risks and rewards among providers	• Reduced inappropriate emergency attendance by 4% • Anticipated £31.9 million savings to the health economy by 2018/19

Program goals: Improve prevention and early detection of chronic disease, reduce hospital admissions and acute care spending, and encourage self-management practices developed to support high-risk patient groups.

How this is achieved: Providers in Better Together are experimenting with a capitated payment contract to deliver population-based care for a region with varying care needs. They use predictive modeling to identify patients who are at elevated risk for hospitalization and provides them with preventative care. The model includes strong stakeholder engagement, electronic integration across providers, patient involvement, and data-driven management.

Results: Although Better Together is in its first year of implementation, the program has reduced inappropriate visits to emergency departments by five percent, emergency department waiting times, length of hospital stay, and overall number of hospitalizations.

Factors that supported reforms:

- Financial and policy support from the government to experiment with accountable care
- Strong relationships between public and private sector officials to facilitate integration of care
- Alignment of payments with performance through multiple payment streams

Relevance for US context:

- The Better Together case study provides insights for how providers and public administrators in the United States (US) can form regional alliances to implement healthcare reforms that better manage chronic diseases, especially for high-need, high-cost populations.
- Notable payment reforms with immediate relevance to U.S. policymakers include shared savings programs for prescription drugs and shared risk programs for acute care and social services.

Figure 1: Translation Opportunities

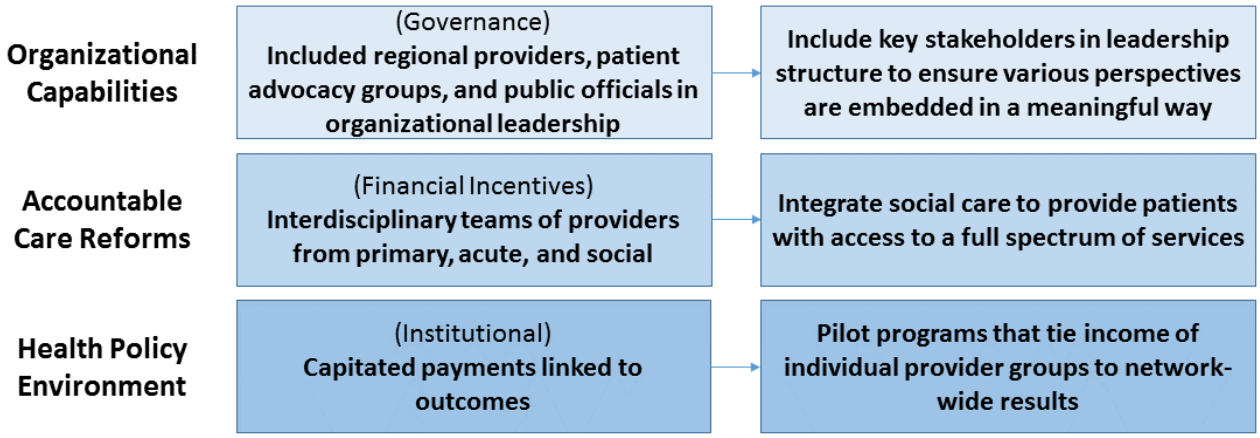


Figure 1 illustrates components of Better Together's accountable care implementation process that are relevant for US stakeholders. These include environmental factors (bottom tier) and organizational capabilities (top tier) that influence the success of Better Together's accountable care reforms (middle tier). The last column translates these lessons to a US context. Table 2 in Part IV presents additional translation opportunities.

Part 1 provides an overview of the United Kingdom (UK) health system context; Part II discusses Better Together's care plan using the Accountable Care Framework; Part III discusses the results of Better Together's reforms; Part IV analyzes the internal and organizational factors (in addition to those in Figure 1) that supported or hindered these reforms.

PART I: HEALTH SYSTEM CONTEXT

NATIONAL CONTEXT

The UK provides comprehensive universal health care to its 63 million citizens, funded mostly through general taxation (83.3 percent).[1,2] The UK system is centralized, with the National Health Service (NHS) managing the entire healthcare budget. Regional NHS groups known as Clinical Commissioning Groups (CCG) plan and commission healthcare services for their local areas.[3] Primary care is delivered by general practitioners (GPs) or family doctors, the majority of whom operate under government-negotiated contracts that apply capitated payments for basic services and fee-for-service charges for additional treatment.[4] All other health services (e.g. ambulatory care, mental health resources) are provided for by NHS Trusts, which are publicly-funded and publicly-run organizations responsible for a specific aspect of healthcare delivery.

While the NHS ranks highly in terms of access and delivery, an aging population and NCDs (89 percent of deaths) are key challenges to the UK's health system.[5-7] The formation of CCGs has facilitated the integration of primary and population-specific care. However, the institutional separation between primary care, hospital, and social care continues to pose technical and delivery challenges, which have been exacerbated by rising costs and static budgets.

BETTER TOGETHER BACKGROUND

To address the challenges described above, the NHS developed a strategic plan in 2014, known as the Five Year Forward View (FYFV), allowing regional groups to experiment with integrated care models.[8] The FYFV provided funding to establish pilot programs, known as "vanguards," across England to test new models. The vanguards may focus on the following areas: primary care, long-term care homes, and vertically integrated hospital and community care.[4]

Better Together is one of 50 vanguard programs that formed after the FYFV. Healthcare leaders in Nottinghamshire established a blueprint for Better Together in 2013, with input from providers, stakeholders and residents, to reduce fragmentation and inconsistencies across health services in the area and meet the needs of an aging, overweight population with high rates of NCDs and unplanned admissions. Inconsistencies included treatment outcomes across providers, quality ratings by the regulator, and referral rates to secondary care from primary care.

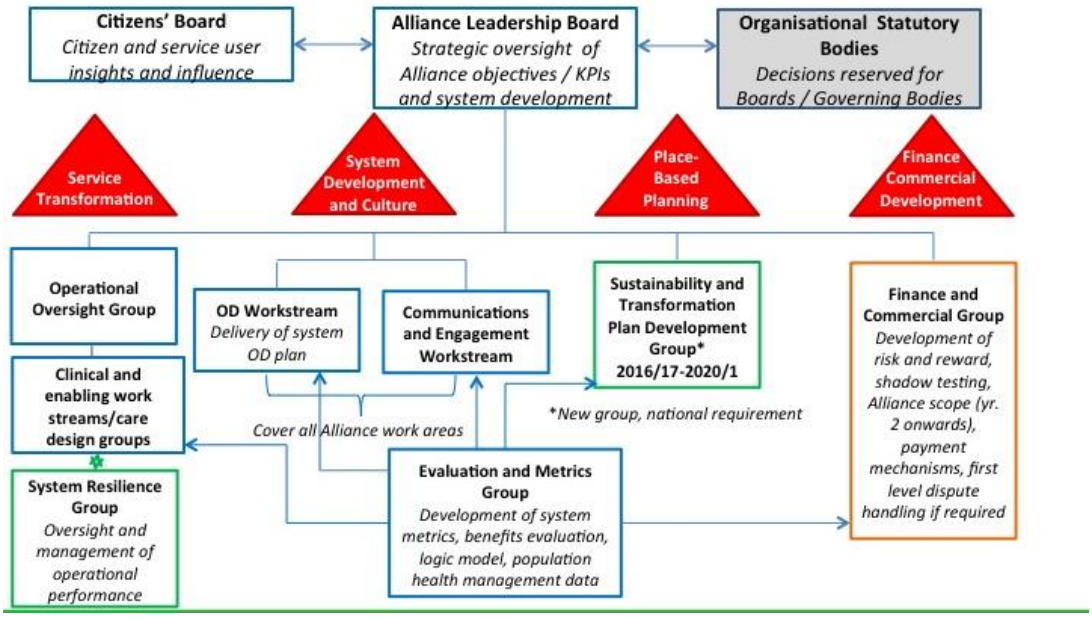
The Better Together model addresses these challenges using innovations such as the Profiling Risk Integration and Self-Management (PRISM) Model. PRISM brings together three care elements—risk stratification, care integration, and self-management—to provide proactive, preventative, and coordinated care to patients with long term conditions that are at high risk of future hospital admission.[9]

BETTER TOGETHER STRUCTURE

Better Together is an alliance between CCGs and providers in Nottinghamshire that deliver integrated services under a capitated contract. Partners include two NHS commissioners that represent Nottinghamshire's two CCGs, a local authority commissioner, and seven providers across care pathways such as primary, mental health, acute, ambulatory, after-hour service, and community-health services.

The governance structure consists of three separate groups, as illustrated in Figure 2. A "Strategic Board" governs the alliance, oversees operating divisions, and establishes performance measures for the system. Local stakeholders provide feedback through the Citizens' Board, while high-level decisions and collaboration with state institutions occurs through Organizational Statutory Bodies. Working groups institutionalize a focus on quality and performance improvements, with dedicated staff evaluating a range of features (e.g. system resilience, financial strategy).

Figure 2: Better Together Governance Structure



Source: Better Together. Mid Nottinghamshire IPACS approach to whole population budget. Presented at Healthcare Financial Management Association; May, 2016.

PART II: ACCOUNTABLE CARE REFORMS

This case study uses the accountable care framework to assess Better Together's reforms. The framework consists of five accountable care policy pillars: **identifying and stratifying target populations**, implementing **performance measures** related to quality and experience of care, providing data and other mechanisms to help providers identify opportunities to **continuously improve**, restructure **financial and non-financial incentives** to align payments with target outcomes, and **coordinating and transforming care** to improve delivery.

STRATIFICATION OF PATIENT POPULATION

Better Together identifies patients at risk of hospitalization with the Devon Risk Stratification Tool, a locally-developed technology that ranks patients according to their future risk of admission. Better Together uses demographic and clinical information from hospital datasets that cover the past two years of patient history, as well as data from GP Practices, out of hours, and ambulance services. The tool was piloted by another CCG with an 86.5 percent accuracy rate in predicting future

unscheduled admissions.[9,10] Once patients are identified, a multidisciplinary team provides targeted interventions using either case management, disease management, or supported self-care.

MEASURING HEALTH SYSTEM PERFORMANCE

To realign risk and reward within their system, Better Together adopted a variety of performance measures centered on end results rather than inputs. They achieved this by involving a range of stakeholders to develop an "outcome framework"—a collection of measures used to monitor and contract for services. A working group developed an outcome framework with representatives from the CCG, local authorities, GPs, secondary care clinicians, HealthWatch (a patient advocacy group) and CCG quality managers.[11]

The outcome framework spans four domains: population health, quality of life, quality of care, and care effectiveness. The working group developed indicators within each domain tailored to specific demographic groups. For example, an outcome for elderly populations is to remain independent. One way this is measured it to track the proportion of older people (65 and over) who remain at home 91 days after being discharged from a hospital into reablement or rehabilitation service. Individual providers then work with patients to set personal goals.[11]

The outcome framework is supplemented with transformational measures and nationally-set standards of care. Transformational measures are used to ensure that changes are being enacted and can include financial performance and resource use, like shifts in settings of care, and are informed by the current and future healthcare needs of the local population. Providers are also responsible for nationally-set standards of care such as workforce requirements or waiting times.[11] Combined, the standards of care, the transformational measures, and the outcome framework comprise Better Together's performance measures. Table 2 provides a summary of key performance measures, indicating whether they are linked to payments.

Table 2: Key Performance Measures for Better Together

Key Performance Measures	Linked to Payment
Patient and Caregiver Experience or Patient Satisfaction	
EOL: patients dying in their place of preference	Yes
Patient experience: involved in decision making	Yes
Patient experience of hospital care (composite measure, inpatients, outpatients, A&E)	No
Percent of people who were as involved as they wanted to be in their care planning	No
Preventive health	
Reduction in the prevalence of diabetes	Yes
Reduction in potential years life lost (PYLL) due to causes amenable to healthcare	No
Reduction in premature mortality from major causes of death (eg. Cardiovascular disease, respiratory)	No
At-risk population	
Unplanned hospitalisation for chronic ambulatory care sensitive conditions	Yes
Reduction in A&E attendances for primary care conditions	
Reduction in permanent admissions to residential and care homes	Yes
Reduction in falls in patients aged 65 and over	Yes

	Yes
IT system use Implementation of shared records and system inter-operability Patient consent for shared records	 No No
Resource use Referral rates to secondary care Prescribing spend within budget	 No Prescribing quality incentive scheme in place for GPs

MECHANISMS FOR CONTINUOUS IMPROVEMENT

Better Together uses data analytics to drive improvements in quality and outcomes. They routinely collect and report clinical data and survey patients to capture their experience. Clinical data are collected from providers using the Secondary Uses Service (SUS), which is the NHS' central database for health care. This information is supplemented by primary and community care data taken from SystmOne Enhanced Data Sharing Model (eDSM), a software system from TPP, a UK-based IT company. The system monitors chronic obstructive pulmonary disease, heart failure, end of life, highest two percent admissions avoidance, dementia, and stroke. The eDSM platform also provides nightly feeds from primary care clinics. Better Together synthesizes the performance measures from the provider and analyzes trends in clinical performance. Combined, the results are published on the commissioner's intranet site for internal performance management. Better Together also provides monthly dashboards detailing performance measures at the locality level.

Less formal mechanisms also exist that support program improvement. For example, clinicians regularly meet to share best practices to facilitate the referral pathway.

FINANCIAL AND NON-FINANCIAL SUPPORTS

The NHS payment system is predominantly fee-for-service, which has increased volume-based compensation for acute care. In response, Better Together developed a three-part capitated payment model supplemented by distribution of risk and reward across the system. The capitated payment model has three goals:

1. Transition from reactive to proactive delivery of care by shifting health services from acute care through a fixed budget for community care
2. Encourage efficient delivery of care by setting service rates and outcome goals across the system based on the budget's parameters; and
3. Promote collaboration across the alliance by tying the income of individual provider groups to results across the Better Together network

Better Together separates payments into three elements.

- A **fixed element** based on the benchmarked costs for each provider, requiring the alliance to deliver care for a pre-determined payment.
- An **outcomes element** tied to performance. Although the NHS currently offers performance-based incentives, these payments are isolated, compensating individual providers for meeting individual goals. In contrast, Better Together sought to integrate care by jointly compensating or penalizing providers based on the system-wide performance,

relative to local priorities (determined by Better Together's Alliance Leadership Board) and national priorities. Payments increase for each outcome that is achieved. Although providers receive an equal percentage from the same outcomes-based pool, payments may vary based on the size of an individual provider organization.

- Better Together also accounts for uncontrolled activity within the alliance through a **variable element**. Each provider operates with the same baseline that assumes a fixed number of patients, but patients are free to change providers. If an imbalance in patient activity arises within the alliance, a portion of the budget may be transferred between providers through the variable budget. Consequently, patient choice, system performance, and provider payments are tied to a pre-set budget formula that encourages continuous improvement.

Accompanying the three elements are shared risk and reward incentives to promote collaboration within the alliance. These incentives run in parallel with capitated payments, and are implemented incrementally to allow for adjustments in the health system. Examples of pilot incentive programs include:

- **Shared Reward: Distribution of Prescription Drug Costs**

  CCGs cover the cost of medication, which is delinked from prescribing practices and determined by providers. If a medication can be substituted for a cheaper drug without compromising efficacy for the patient, providers who prescribe the low-cost option share 50 percent of the savings with the CCG.

- **Shared Risk: Shifting from Acute to Community Care**

  Better Together is increasing its investment in community care and reducing its investment in acute care. If cases fail to transition from acute to community care providers, then all parties share the loss.

CARE COORDINATION AND TRANSFORMATION

Under the PRISM model, interdisciplinary teams of providers deliver care to high-risk patients in three phases. Better Together stratifies the population, delivers health services through an integrated health and social care team, and then provides systematic support for patients during the transition to self-care. Provider teams visit each GP on a monthly basis to discuss patients identified as having a high risk for admission. Co-location in the community allows provider teams to rapidly mobilize social services in addition to traditional clinical measures, preventing hospital admissions and facilitating the transition to self-management.

Better Together also leverages health technology to coordinate care. The Medical Interoperability Gateway (MIG) allows for the secure and safe sharing of GP patient records for all urgent and emergency care providers over a number of care settings, including out-of-hours, secondary care, ambulance and emergency

Care Coordination Examples

Discharge—An Intermediate Care Team identifies admitted patients who are likely to require community based services upon discharge. They oversee, coordinate, and support timely discharge.

Referral—GPs peer review referrals to reduce inappropriate referrals. A standard referral template provides a point of reference before a GP refers a patient. A consultant specialist reviews all referrals to reduce inappropriate referrals.

Care Navigator—Health and social care professionals can call the Care Navigator to arrange community alternatives to hospital admission or support a discharge from hospital or care home.

services. Real-time access to patient's GP record supports proactive consultations with providers, helping patients avoid unnecessary hospital admissions. Better Together actively encourages both out-of-hours providers and emergency departments to make use of the MIG by installing a common IT system in GP surgeries and emergency departments. This supports and feeds back into the underlying clinical systems that providers use to monitor and carry out patient case reviews.

Additionally, Better Together uses Florence Simple Telehealth (FLO), a telehealth system that enables providers and patients to communicate remotely to improve patient self-monitoring.[12] The system helps patients remain at home, alerting providers if a patient's condition starts to deteriorate. To date, over 2,400 patients have used the service. The FLO service also supports caseload reviews and follow-up arrangements in a number of key areas including hypertension, diabetes, and asthma. For example, FLO enables Better Together to analyze trends within individual patient data to plan the frequency of contacts and alert professionals when a patient may have an impending exacerbation of their condition.

PART III: RESULTS OF ACCOUNTABLE CARE INNOVATIONS

As Table 3 illustrates, Better Together reduced ED utilization across all age groups as compared to the previous period in which they were measured.

Table 3: Improvements in Clinical Outcomes

Measure	2014-2015 (Months 1-8)	2015-2016 (Months 1-8)	% Difference	% Difference Adjusted for Population Growth
Inappropriate ED Attendance (All Ages)	20,568	19,811	-4%	-5%
ED Attendances for Patients Aged 80+	7,795	7,709	-1%	-2%
ED Admissions for Patients Aged 80+	4,837	4,908	1%	0%

Note: Since Better Together is a new program, results are preliminary.

Better Together also anticipates that they will generate a gross financial benefit of £31.9 million to the health economy by 2018/19.[13]

PART IV: IMPLEMENTATION BARRIERS AND TRANSLATION OPPORTUNITIES

This section identifies key components of Better Together's reforms, including internal and external factors that facilitated Better Together's implementation of their model, and offers translation opportunities that could support further reforms in the US (provided in Table 4). This section also discusses some of the challenges that Better Together faced.

Table 4: Translation Opportunities

	Component	Success Factor	Translation Opportunity
Organizational Competencies (from provider perspective)	**Governance and Culture**	Included regional providers, patient advocacy groups, and public officials in organizational leadership. Strong working relationships across primary and secondary care facilitated the integration of health services	Include key stakeholders in leadership structure to ensure various perspectives are embedded in a meaningful way
	Health IT Management	Leveraged proven technology to enhance data capture and feedback	Incorporate digital care platforms and social media to expand provider bandwidth
	Patient Risk Assessment	Early investment in highly effective risk stratification algorithms	Work with PCPs in the surrounding region to access demographic and clinical data needed to assess risk
	Quality Improvement	Data shared in real-time across settings (e.g. home, hospital) using a Medical Interoperability Gateway	Collect, store, and share data on one platform to facilitate collaboration between providers and improve long-term monitoring of chronic disease
	Care Coordination	Formation of public health alliances and investments in non-medical services to shift to community care	Integrate health and social services into care to transition into "person" focused care
Accountable Care Policies (from payer perspective)	**Population**	Employs the Devon Risk Stratification Tool to identify patients with multiple co-morbidities who are most likely to be hospitalized	Invest in one, universal platform for identifying and tracking patients across the target region
	Performance Measures	A range of stakeholders, including providers, patients, and local authorities, developed performance measures	Incorporate input from key stakeholders in determining performance measures to ensure outcomes are relevant and meaningful
	Continuous Improvements	Publishes detailed performance results using data gathered across providers	Provide timely feedback reports drawing from comprehensive data sources to promote healthy competition and provider accountability
	Financial & Non-Financial Incentives	Three tiered capitated payment model, including a component that jointly compensates or penalizes providers based on the performance of the entire system	Use payment reforms to drive the shift from acute to community care
	Care Coordination and Transformation	Interdisciplinary teams of providers from primary, acute, and social care provide services to high-risk patients	Integrate social care to provide patients with access to a full spectrum of services

Health Policy Environment (from policymaker perspective)	**Institutional**	Established relationships with public health officials to access government and hospital databases	Reduce institutional barriers to information sharing and incentivize data transparency
	Political	Three-part organizational structure that includes the community, policymakers, physicians, and payers	Centralize decision-making process into clear administrative bodies to unify the vision for reform and prevent conflicting actions
	Regulatory	Capitated Payments linked to outcomes	Pilot programs that tie income of individual provider groups to network-wide results

CHALLENGES

Aligning Short-Term Priorities and Long-Term Strategies Across the Health System – While the vanguard program provided dedicated start-up funding, NHS' financial and operational pressures also created an urgency that undercuts strategies with long-term impacts. The ability of health systems to deliver care in accordance with long-term population needs is hindered by the absence of incentives and infrastructure to coordinate care across providers.

Perceived Risk of Capitation – Although budgetary constraints have expedited payment reform, providers have been reluctant to transition to a capitated model since there is limited experience with this type of payment approach in the NHS. This was partly mitigated by a strong working relationship between commissioners and providers and a track record of piloting service improvements in the Mid Notts area.

Data Quality and Information Governance – Although the NHS houses health information for individual regions within a central database, individual organizations must develop their own infrastructure to adapt and apply this data. However, increased investment in health IT has been limited by financial barriers, which increase the risk of experimenting with disruptive platforms. Better Together focused on developing interoperable systems rather than schemes that require significant new capital investment and infrastructure.

Better Together provided the source data for this document and is responsible for the accuracy of the content.

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