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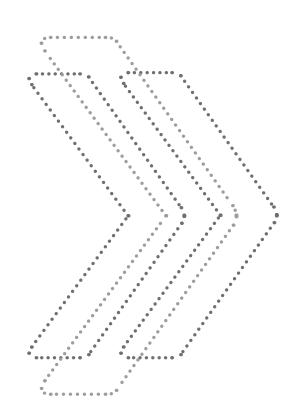
Ideas that change health care

# Intentional whole health system redesign

Southcentral Foundation's 'Nuka' system of care

Author

Ben Collins



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# Foreword

Champions of quality in health care often call for 'transformation.' Not satisfied with the familiar list of projects on, say, infection control, waiting times, medication safety, and so on, they call for broader change. The call becomes louder with the embrace of systemic aims, like lower total cost and unprecedented reliability. But that does not necessarily make the concept of 'transformation' accessible.

# What, after all, does it mean?

The scientific foundations of improvement in the middle of the 20th century lie in a set of disciplines that scholar-practitioners brought together to animate a new approach to the management of complex systems. I cannot venture a comprehensive listing here, but those disciplines include, for example, statistics, general systems theory, organisational and social psychology, epistemology, and a new economic theory, which asserts that the best route to job security, financial success, and organisational sustainability is an intense and never-ending focus on meeting the needs and expectations of 'customers' – the people the organisation serves.<sup>1</sup>

From these disciplines, the quality scholars of the 20th century shaped guidance for the leaders of organisations, equipping them to accelerate the pace of changes that make processes better able to meet customers' needs and reduce waste. Among the most famous of those formulations were the 'fourteen points for management' expounded by Dr W Edwards Deming in the mid-1980s (Deming 1986). On first encounter, they read a bit like a religious catechism, but in fact they are logical and comprehensive derivations from the scientific disciplines informing improvement.

Joseph Juran, Armand Feigenbaum, and Peter Senge in the United States, Kaoru Ishikawa and Taichi Ohno in Japan, and dozens of other experts – academics and practitioners – through the past 70 years or so cooked up their own sets of principles for improvement. Some became, in effect, brands, like Total Quality Management, Six Sigma, and Lean Production, with inevitable tribal arguments between their scions. In my view, almost all have added to our understanding of improvement, much as different approaches to teaching physics can each deepen the students' comprehension. But, just as in physics, I think that almost all effective, modern approaches to improving the capabilities of human organisations are rooted in a common set of sciences and understandings.

And (here is where 'transformation' comes in) those sciences, followed to their logical implications for organisations, imply methods of leadership and investments that don't just *supplement* many prevailing habits and beliefs, but violate them. For example, modern formulations:

- use measurement for learning, not judgement
- aim for continual improvement, everywhere, all the time

<sup>1</sup> Some in health care take offence at the term, 'customer'. If you are one such, please use whatever term you prefer – perhaps, 'patients, carers and communities'.

- respect and engage the workforce as valuable contributors of new ideas, not just 'hands' to follow orders
- remain relentlessly curious about the needs and experiences of customers
- employ empirical learning cycles pervasively to continually test and learn from changes
- value interdependency, team-work, and systems thinking
- trust intrinsic motivation far more than extrinsic incentives
- ...and more...

The adoption of and commitment to such a comprehensive, theorybased method of leadership and management is what the word 'transformation' means to me in the context of organisations, in general, and health care, in particular.

This is a daunting agenda, far more difficult than pasting a list of goals and projects into a customary strategic plan. Those who wish to understand transformation at this level will find specific, real-world models invaluable. The theory is not enough; we need examples to chew on.

Enter Southcentral Foundation. It is *rara avis* in the world of health care improvement. There, for reasons not easy to capture, the approach to leadership and management is thoroughly different from usual. Maybe that is in part because of the atypical balance of power at Southcentral, which is governed by the very same 'customer–owners' it serves. Maybe it is in part because the traditional cultures of Alaska Native people emphasise communitarian values and dialogue. This superb case study by The King's Fund explores those and other causal factors, and, even more important, explains in detail the components of Southcentral's novel model of care delivery and its relationships to the people served.

You may feel encouraged, as I do, by the numerous project-by-project improvement efforts in health care of the past two decades. But maybe also, like me, you long for change that is more pervasive and embedded in, not attached to, the work of healing – that is, 'transformation'. Read on. In examining Southcentral's journey, you are catching a glimpse of just that.

## Don Berwick

President Emeritus and Senior Fellow, Institute for Healthcare Improvement and Former Administrator, Centers for Medicare and Medicaid Service

# 1 Key messages

- When Southcentral Foundation in Anchorage, Alaska, assumed responsibility for primary, community and mental health services for Alaska Native people in the mid-1990s, the quality of care and outcomes for the population were among the worst in the United States.
- Seventeen years later, Southcentral is widely regarded as one of the most successful examples of health system redesign in the United States and internationally. Costs are down and quality is up, with health outcomes among the best in the United States based on a wide range of measures.
- Like the NHS, Southcentral is a state-funded health system, with a large proportion of its resources coming from taxation. In the mid-1990s, it faced many of the challenges that NHS organisations are currently seeking to address. It therefore seems to be a relevant case study for local NHS organsiations embarking on system-wide redesign.
- Southcentral's transformation began when it was given control of a single budget and responsibility for a broad range of services for its population. It delivered transformation entirely 'from within' rather than as a response to top-down performance management, competition or changes to payment systems.
- Southcentral provides an example of orderly and intentional whole health system redesign, starting with careful consultation with the community, and followed by the development of objectives and principles that inform the service delivery model and allocation of resources, rather than rushing to solutions or attempting simply to copy blueprints from other systems.
- Southcentral's leaders invested personally in defining their vision, mission and corporate goals, and in communicating these throughout the organisation. Employees across Southcentral genuinely understand its objectives and ethos and are able to use them as a frame of reference in their daily work.
- These initial investments helped Southcentral to develop a coherent model for how it delivers services, based on building sustained relationships between health care staff and their patients and delivering holistic, person-centred care.
- During the 1990s, it brought together general practitioners, nurses, mental health practitioners and other staff in generalist, multidisciplinary primary care teams responsible for delivering the vast majority of care for their panels. It ploughed all of its resources into this generalist model, closing specialist clinics and bringing specialists into the primary care teams where needed, rather than referring people out to other services.
- Southcentral also substantially redesigned the roles of doctors, nurses, health care assistants and other staff, so that each team member is able to spend most of their time on activities where

they can add greatest value. Doctors hand tasks to nurses, who hand tasks to medical assistants and administrators.

- These changes, coupled with better workflow design and better use of communication channels, allowed Southcentral to move from four-week waits to same-day appointments, while reducing the number of doctors per head of population.
- The benefits of redesigning primary and community services have cascaded throughout the local health system, leading in themselves to substantial reductions in accident and emergency attendance and hospital admissions.
- Southcentral has developed strong relationships with specialists in the local hospital within a clearly defined system of care. The primary care teams and hospital doctors work together to support patients in primary care, leading to fewer referrals and shorter waits for hospital specialists.
- The changes to Southcentral's supporting functions, systems and processes have been equally important. Throughout the 2000s, it invested heavily in its strategic planning, human resources, performance measurement and improvement systems, so that they support its vision and goals.
- These have included developing Southcentral's strategic planning and decision-making structures so that they direct resources at key priorities; innovation in hiring practices and career progression; and substantial investments in data, IT, benchmarking and supporting service improvement.
- Southcentral spends considerably more than comparable systems on training and development, developing and delivering training in-house rather than outsourcing, so that it is tailored to its ethos and operating model.
- Southcentral's leaders argue that its success cannot be attributed to a single part of the system. Instead, it requires continued effort across these multiple dimensions (vision, values, the operating model for services, supporting infrastructure, and workforce development) to sustain high performance at scale and over time.

# **2** Introduction

Southcentral Foundation (Southcentral) is a not-for-profit health system, owned and run by Alaska Native people for Alaska Native people, located in Anchorage, Alaska. It delivers a broad spectrum of services including primary care, dentistry, behavioural health (including residential and day treatment programmes), paediatrics, obstetrics, complementary medicine, traditional healing, domiciliary services and education. It also co-owns and co-manages a 150-bed hospital, the Alaska Native Medical Centre, providing inpatient, specialist and tertiary services. It delivers services to a population of 65,000 Alaska Native people in Anchorage, Alaska and across the Southcentral region, covering a landmass twice the size of England.

When Southcentral took over services for Alaska Native people in 1998, it inherited a health system in crisis. Since the mid-1950s, the Indian Health Service, a division of the US Department of Health and Human Services, had overseen services from Washington DC, 5,000 miles away. Patients waited weeks to get appointments or accessed the system through Accident and Emergency (A&E). Families would prepare to spend 12 to 24 hours waiting in the hospital to receive basic primary care or dental care. Waiting times, patient satisfaction and health care outcomes were among the worst in the United States.

Seventeen years later, Southcentral is widely regarded as one of the most successful examples of health system redesign in the United States and internationally. Southcentral delivers health outcomes in the top 25 per cent for health care providers across the United States (based on a wide range of measures), despite serving a population with significant health disparities, and despite funding per capita that is well below the United States average. In the first years of transformation, per capita accident and emergency use reduced by more than 45 per cent, hospital admissions by 53 per cent, referrals to hospital specialists by more than 60 per cent, and visits to primary care doctors by 36 per cent.

This transformation was achieved entirely 'from within' (*see* Ham 2014a), rather than as a response to external stimuli. Southcentral's improvement journey began with the decision to transfer funding and responsibilities for services entirely from government to local people. It was not subject to significant regulation or inspection, contract management by an insurer or commissioner, external financial incentives to improve performance, targets or, to any great extent, competition from other providers. Instead, transformation was driven by leaders, staff and the community when given the authority and freedom to act.

This case study has been written to offer inspiration for commissioners and providers in the English NHS, in particular the vanguards in the NHS's new care models programme, embarking on system redesign. It aims to provide a description of Southcentral's transformation journey as well as a snapshot of its service and organisational model, focusing on issues that are likely to be of most relevance to local NHS systems developing new care models. Southcentral provides a working example of integrated primary, community and mental health services, one iteration of the 'multispecialty community provider' model in the *NHS five year forward view* (NHS England *et al* 2014). At least to some extent, it is also an example of a 'primary and acute care system' based on shared ownership, with elements of benefit and risk-sharing across primary, community, mental health and hospital services.

There have already been a number of studies and articles on Southcentral's model. The majority focus on particular aspects of its approach, such as its efforts to redefine the doctor-patient relationship or to redesign the roles of doctors and nurses within primary care teams. In this study, we have attempted to provide an overview of the range of factors that allow Southcentral to sustain high performance, focusing as much on the supporting infrastructure as the clinical model. The case study falls into four main parts: a description of Southcentral's improvement journey; a discussion of the vision, values and principles that underpin Southcentral's approach; Southcentral's primary care operating model; and the data, information technology, human resources, and other systems and processes that support the model.

There appear to be significant similarities between the challenges Southcentral sought to address from the late 1990s and those faced by NHS systems today. However, there are substantial differences in context. For example, Southcentral receives an annual grant from a single payer, the federal government, to meet the needs of a defined population in a defined area. It is a good example of a place-based system of care (*see* Ham and Alderwick 2015). The leaders and staff at Southcentral, most of whom are Alaska Native people and service users as well as employees, have a unique relationship with the communities they serve.

Southcentral controls a much larger proportion of the health and care system than providers in the English NHS, though it also works in partnership with social services, housing, education and other services. Its funding per capita, at more than \$4,000 per year, is higher than in the NHS, albeit significantly lower than the US average (for a population with higher than average need) and is comparable to Canada and much of western Europe. It also faces substantial challenges that the NHS does not experience, such as recruiting clinicians to an isolated state without a teaching hospital and higher than average input costs. While most of its population lives in Anchorage, Southcentral also delivers care to 55 remote village communities, stretching 1,500 miles from the Canadian border to the Aleutian Islands, many of which are accessible only by air or sea.

NHS leaders will need to consider the lessons they can usefully draw from Southcentral's experience – both on how to lead transformation and on the service models they are developing. It is worth noting that Southcentral sought inspiration from external sources throughout its journey (the Institute for Healthcare Improvement, the Baldrige Excellence Framework (Baldrige Performance Excellence Program 2015), even a fast-food chain), taking what was most useful and making it its own. Southcentral's leaders would not recommend simply 'copying and pasting' their model, although aspects of Southcentral's approach have now been adapted successfully within a large number of other health systems including Cherokee Indian Hospital Authority in North Carolina, CareOregon and the Veterans Health Administration.

This case study draws on interviews with the majority of Southcentral's senior leadership team and meetings with a large number of managers and staff across its medical services, behavioural health and organisation development teams and support functions. The study also draws on site visits to observe teams in action and discussions with governors, patients and community representatives, as well as a number of existing articles and research on the model.

We are very grateful to Southcentral for providing access to its leadership team and staff across the organisation, and for its willingness to share its model with the NHS. We are also grateful to Cerner, one of The King's Fund's Corporate Supporters, for helping to build our relationship with Southcentral and for sponsoring this study. Cerner kindly provided funding to cover the costs of a site visit to Alaska and the costs of developing and producing this publication. Cerner is a longterm partner of Southcentral and provides its electronic patient record and new population health management tools. The findings are those of The King's Fund, though they draw heavily on our interviews and the information that Southcentral provided.

#### Figure 1 Southcentral at a glance

#### **Organisation structure**

- Private non-profit organisation with a social purpose to deliver health care to Alaska Native people in Southcentral
- A healthcare affiliate of Cook Inlet Region Inc, a corporation that promotes the economic and social wellbeing of Alaska Native people
- Provides services in Anchorage Service Unit, a geographic area of 107,000 square miles

#### **Customer base**

- 65,000 Alaska Native and American Indian people
- Approximately 55,000 of the population based in Anchorage
- Approximately 10,000 people in 55 smaller village communities

#### Funding

- \$241.5 million operating budget
- Funding from federal and state government, third party billing, donations

#### **Medical services**

- Primary medical care
- Women's clinic
- Paediatric clinic
- Physical therapy
- Antenatal support
- Dentistry
- Optometry

### **Behavioural health services**

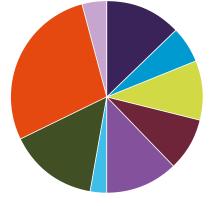
- Behavioural health advisers
- Mental health counselling
- Psychiatry
- Adolescent residential programmes
- Women's residential programme
- Domestic violence prevention
- Suicide prevention
- Substance abuse treatment

#### Source: Southcentral Foundation

#### Staffing

Approximately 1,600 staff including around:

- 200 leadership and management staff
- 102 medical doctors
- 154 nursing staff
- 143 allied health staff
- 183 behavioural health staff
- 47 dental services staff
- 239 staff with specialist professional or technical skills
- 434 clerical and administrative staff
- 70 contractors, students and volunteers



- Leadership and management staff (13%)
- Medical doctors (6%)
- Nursing staff (10%)
- Allied health staff (9%)
- Behavioural health staff (12%)
- Dental services staff (3%)
- Staff with specialist professional or technical skills (15%)
- Clerical and administrative staff (28%)
- Contractors, students and volunteers (4%)

#### Other services and programmes

- Health education
- Traditional healing
- Elder programmes
- Young people's internships
- Research programmes

# **3** A brief history of Southcentral

Southcentral's story begins with the discovery of oil in the Arctic Sea in the late 1960s and Alaska Native people's outstanding land claims. These had been recognised in legislation when Alaska became a US state in 1959 but remained unresolved for a decade. When the Atlantic Richfield Company struck oil in the north of Alaska in 1968, it needed to build a pipeline to the ports in the south. Tribal leaders argued that the pipeline would cross Native lands, and in 1970 a federal judge halted the construction until their claims had been resolved.

Oil spurred Congress into action. In 1971, President Nixon signed the Alaska Natives Claims Settlement Act, which created 12 Native regional economic development corporations, including Cook Inlet Region Inc for the Southcentral region, to promote the economic and social wellbeing of Alaska Native people. The corporations were responsible for managing land and other resources returned to them by the Act and for sharing profits with their Alaska Native shareholders.

Two further pieces of legislation laid the basis for Alaska Native people to take responsibility for their health system in time. First, the Indian Self-Determination and Education Assistance Act of 1975 allowed Native tribes to request to take over the delivery of public services for their peoples. Second, the Indian Healthcare Improvement Act of 1976 substantially increased the federal funding for state health services for Alaska Native and American Indian peoples.

By the mid-1970s, the Indian Health Service, a division of the US Department of Health and Human Services, was delivering a national health system for Alaska Native people that bore little resemblance to the private or public insurance models that we associate with the United States. Instead it looked increasingly similar to the English NHS: overseen by central government in Washington, free at the point of entry without co-payments, and funded through general taxation.

The challenges the Indian Health Service faced were significant. Like other indigenous peoples, Alaska Native communities had been devastated by the arrival of European settlers from the mid-19th century. A series of pandemics had decimated the population in the 19th and early 20th centuries, leaving a generation of orphans to be raised in state institutions. The arrival of Europeans also undermined Alaska Native industries, triggering their migration away from native communities to towns in search of work and a lower cost of living. A toxic combination of family, community and economic dislocation led, as it has elsewhere, to high levels of physical and mental ill health, substance dependency and neglect.

Despite increased funding, a state-run system directed from Washington proved unequal to the task. Alaska Native people waited an average of four weeks for routine appointments, followed by long waits in the clinics, seeing a different doctor each time. This was a system that was singularly ill-adapted to the needs of its population, with inadequate resourcing for primary and community services, and departments acting in silos rather than providing integrated care. Those we spoke to recalled clinics that resembled a military hospital, where they would wait in a corridor for hours, with no idea when they would be treated. Alaska Native people, who still face discrimination, remember the indignity of being `beneficiaries' of such a system as much as they remember the poor standards of care.

Clinicians who used to work for the Indian Health Service described their inability to deliver change within a system run from a distance of 5,000 miles. Policies devised in Washington had perverse consequences in Alaska. Kevin Gottlieb, Southcentral's current Vice President of Resource and Development and Chief of Staff, recalled the challenges of managing staffing under the old system: 'There was a tendency for some of our staff to leave Alaska over the winter. Meanwhile, the Indian Health Service imposed hiring freezes when it faced budgetary challenges. So the result was that we faced chronic staffing shortages.' Health statistics were bleak, staff referred to the Indian Health Service as a 'health system of last resort', and those Alaska Native people with a choice opted out of the system entirely.

By the 1980s, disillusionment with the system had reached a tipping point. Alaska Native people were eager to take greater control, and the federal government saw advantages in handing over the reins. In 1982, Cook Inlet Region Inc established Southcentral as a not-for-profit subsidiary under its tribal authority to deliver health and care services to Alaska Native people in the Southcentral region. Over the next 10 years, it gradually took over a range of smaller services, starting with dentistry, optometry and community health, followed by a broader range of mental health and preventive services. The organisation grew incrementally to 25 employees by 1987, and had 52 employees with five clinics by 1993.

Many of Southcentral's current leadership team joined in the late 1980s and 1990s. Kevin Gottlieb was the first doctor in Southcentral's first clinic (having joined the dental clinic in 1985). Katherine Gottlieb joined Southcentral as a receptionist in 1987, becoming a Deputy (then Executive) Director in 1991, and becoming President and Chief Executive Officer in 1996. Southcentral's current Vice President of Medical Services, Doug Eby, and its current Vice President of Executive and Tribal Services, Ileen Sylvester, joined in 1995. Its current Vice President of Organisation Development and Innovation, Michelle Tierney, and its current Vice President of Finance, Lee Olson, joined in 1996 and 1997 respectively. It is hard to overestimate the importance of having a stable senior leadership team working towards a shared long-term vision over decades. Southcentral has also had a stable board. Current nonexecutive board members have served for between 6 and 33 years.

Southcentral's big opportunity to redesign the care system came in the late 1990s with the chance to assume management of the full range of primary care services. In 1998, it took over primary care, paediatric and obstetric services from the Indian Health Service, incorporating its staff and ownership of its facilities. In 1999, it assumed co-ownership of the Alaska Native Medical Centre hospital, which delivers secondary and tertiary services to the Alaska Native population across the state.

By the early 2000s, Southcentral had grown to be an organisation of 700 staff and one with sufficient reach to make major changes to how services were delivered. It was now responsible for a single budget covering primary, community and mental health and it owned or co-owned the entire health system, from preventive health through to hospital services.

Even today, there is a palpable sense of anger among those Alaska Native people who can remember how they were treated in the old system. Those we met described the indignity of waiting overnight in corridors for rudimentary services, and the impression of being treated as second-class citizens by a second-class system. One arguable benefit was the willingness, when Alaska Native people took control, to make far-reaching changes to how care was delivered. As Katherine Gottlieb explained, they were no longer interested in tinkering around the edges. The ambition was to `rethink the business entirely' and then `change everything'.

Nevertheless, the initial changes started slowly. When it prepared to take on its first primary care services in 1996, Southcentral conducted a survey of its community to find out more about its values, priorities and needs. This was followed by more extensive engagement with staff and the community following the transfer of ownership in the late 1990s. Senior staff spent four months with clipboards in waiting rooms asking people what they wanted from the system. There were surveys, meetings with tribal leaders, discussions with more than 1,000 service users in small focus groups and more than 100 one-to-one interviews. People told Southcentral that they wanted a relationship with their primary care provider, rather than seeing different doctors every time. They wanted staff to treat them with courtesy, respect their opinions and understand their cultures. They also wanted to be able to access services when they needed them.

One outcome of this exercise was the decision to refer to service users as 'customer-owners' of the system rather than patients or passive beneficiaries of care. Another was a commitment to building long-term relationships between health care teams and their customer-owners as a basis for supporting their journey of wellbeing. The engagement exercises led to a set of 'requirements for an ideal health system' – a phrase that captures the degree of ambition for change and improvement – and these later formed the basis for Southcentral's operating principles and choices about its clinical and organisational model.

For Southcentral's leaders, it cannot have been easy to defer changing services for close to a year to listen to the community. But doing so proved a sound investment. The engagement gave Southcentral's leaders a cast-iron mandate to devise an entirely new system based on their Native community's values and needs. In the following years, the leadership could respond to opposition by referring to what the community had actually asked of them for their local health system.

Southcentral subsequently developed an operating model for its primary care services focused on relationships, bringing mental and physical

health back together, and supporting customer–owners in achieving wellness. In a first phase, it placed customer–owners with dedicated primary care teams and focused on improving access to services, going from long waits to same-day appointments in six months. In a second phase, it developed a multidisciplinary team model for delivering primary care services, with general practitioners, nurse case managers, medical assistants and administrators working together to manage their panels. In a third phase, it integrated dieticians, pharmacists, behavioural health consultants (Masters-level therapists), midwives, and other staff into the primary care teams to support whole-person wellness.

During the late 1990s and 2000s, Southcentral developed, tested and rolled out at least two dozen programmes to support public health, behavioural health and wellbeing, including residential and day programmes for victims of trauma and people with drug and alcohol dependency, and programmes for pregnant mothers and new families.

Southcentral also spent much of the late 1990s and 2000s developing its facilities, while putting into place infrastructure such as human resources, finance, organisation development and data systems. From 2000 to 2009, it redesigned and tripled the size of its primary care centre, established a new traditional healing clinic, built a new dental, optometry and behavioural health clinic, and built a new wellness centre. Over the same period, Southcentral and its partners in the Alaska Native Tribal Health Consortium also substantially remodelled the Alaska Native hospital.

Southcentral's mission and vision are as apparent in its facilities as in its service model. An explicit objective in the redesign was to promote customer-owners' pride and self-confidence, as well as to honour Alaska Native culture. The primary care centre has been designed to be light and welcoming, using traditional materials, with displays of Alaska Native art, information centres and places to congregate. There are local crafts fairs, and Alaska Native people use the centre as a meeting place and community hub as well as a health care clinic.

Another objective was to support Southcentral's relationship-based model of care. The facilities are designed to eliminate barriers between those giving and those receiving services, with consulting rooms renamed 'talking rooms' and designed to put the customer-owner on an equal footing with health care professionals, while the back office facilitates team working between doctors, nurses and other staff.

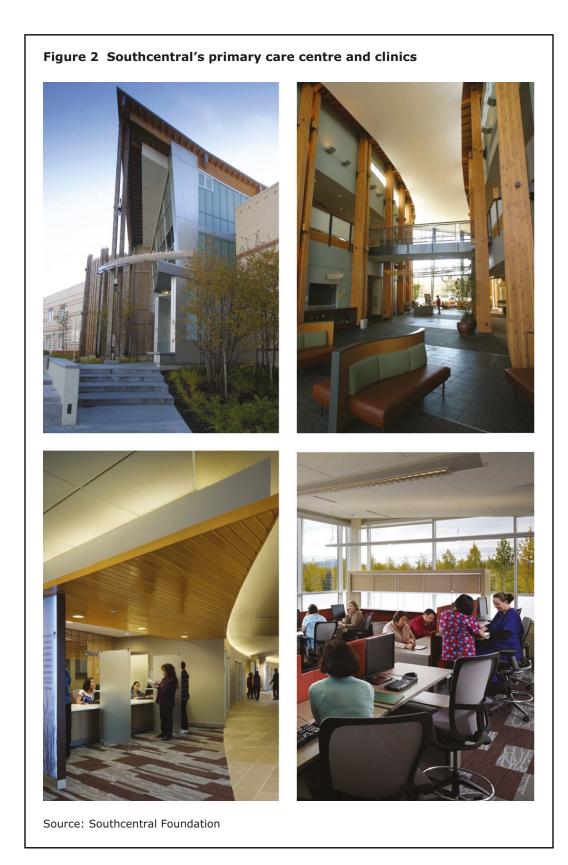
By 2015, Southcentral had become an organisation of 1,600 employees, with an annual budget of around \$240 million. Over a 30-year period, it had grown from an organisation delivering a small number of niche services to a provider offering a full range of primary, community and mental health services. It had succeeded in building and retaining a unique culture, despite incorporating hundreds of staff from the previous, very different, health system. Over that period, customer satisfaction, staff satisfaction and health care outcomes shifted from among the worst to among the best in the United States.

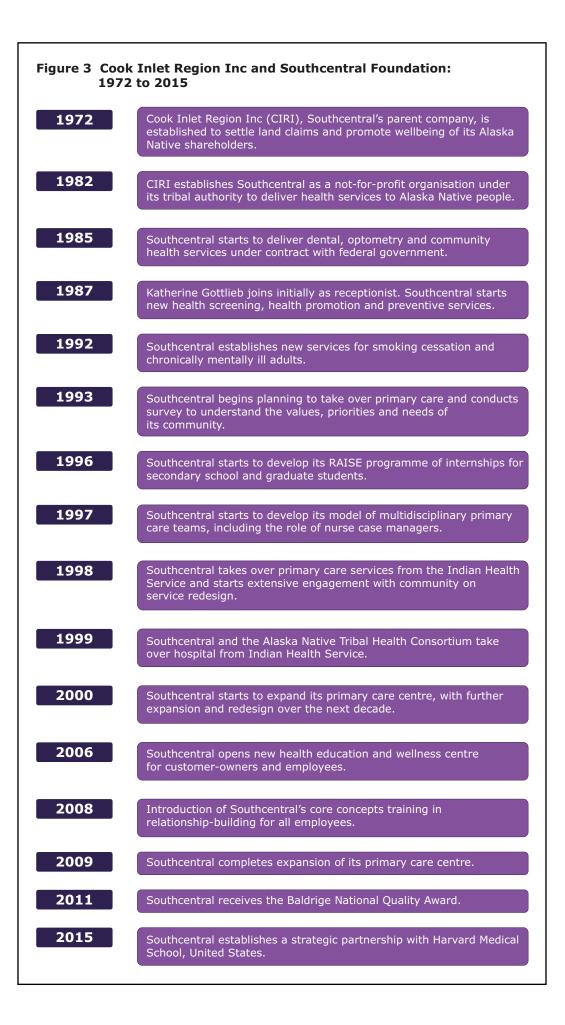
This overview has highlighted some of the key milestones in Southcentral's 30-year journey: engaging with customer-owners, setting long-term strategic direction, redefining the clinical model, reconfiguring teams, retraining staff to deliver the model, and rebuilding facilities so that they supported the model.

However, a brief chronology overlooks Southcentral's many other efforts to build a high-performing health system. These include the development of Southcentral's planning cycle; its investments in the skills and processes for improvement; its development of data systems to support benchmarking; and its attention to recruitment, training and development. Southcentral's leaders suggest that their primary care teams and integrated care teams would have had limited impact without these other pieces of the jigsaw in place.

In 2011, Southcentral became the 15th US health system to win the Malcolm Baldrige National Quality Award, an award from the US Department of Commerce, and perhaps the most important recognition in the United States for performance excellence in health care. The Baldrige assessors held interviews with almost a third of the organisation's staff and assessed Southcentral against seven criteria: leadership, planning, customer focus, information management, workforce development, system design and results. Southcentral was, arguably, the first health care provider to win the award following comprehensive redesign, and the first delivering health care to a minority population with high levels of need.

Further recognition has followed. In 2013, for example, Southcentral reached agreement with the Veterans Health Administration to deliver services to its members in Alaska. In 2015, Southcentral established a strategic partnership with Harvard Medical School that will allow the school's students and faculty to participate in Southcentral's training programmes.





# 4 Vision, mission and operating principles

Following its initial listening exercise with the community in the mid-1990s, Southcentral's senior leadership team retreated to a remote village for two days to develop its vision, mission and corporate goals. By this stage, it had already developed a coherent statement of the organisation's purpose, but not one that many of its staff could easily remember. The retreat delivered a vision of 'a Native Community that enjoys physical, mental, emotional and spiritual wellness' and a mission that committed to partnership-working with the Native Community to achieve wellness. It also established three corporate goals, which spell S-C-F (for Southcentral Foundation): shared responsibility, commitment to quality and family wellness.

One important feature of this early thinking was an expansive definition of Southcentral's role. It did not view itself as merely a health care provider, but as an organisation fulfilling a much broader social purpose. Its corporate goals commit to pursuing 'wellness that goes beyond the absence of illness or prevention of disease'. Southcentral's barometer for success is 'whether the community is able to experience multidimensional wellness, and if improvements in wellness are experienced from one generation to the next'. These objectives are reflected in a range of decisions, such as removing sugary and diet drinks from the primary care centre's café (in America of all places), and community initiatives such as a major intern programme to help Alaska Native youth make the transition from education to professional work.

Another key feature of this early work was to relate Southcentral's vision and goals very closely to Alaska Native values and traditions. The vision and mission speak directly to Alaska Native cultures, for example the concern for spiritual wellness as well as physical and mental health. Further concepts, developed in later phases, also draw on Alaska Native traditions, such as the description of Southcentral's approach as the 'Nuka' model of care ('Nuka' being an Alaska Native concept meaning strong, giant structures and living things) and its focus on storytelling as a means of building meaningful relationships.

## Developing operating principles

Southcentral has now retained the same vision, mission and goals for almost 20 years. However, it has added a small number of additional frameworks. According to Michelle Tierney, Vice President of Organisation Development and Innovation, staff took to the vision and mission, finding them easy to remember and relate to. But they wanted more granular principles to guide their work.

In the early 2000s, the leadership and employees developed a set of 13 operating principles – spelling out 'R-E-L-A-T-I-O-N-S-H-I-P-S' – to inform decisions about how to deliver services, reiterating the focus on relationships, family and wellness, and customer-focused care (*see* Figure 4).

In later phases, Southcentral developed a set of core concepts setting out the behaviours it expected of staff, with the focus on working together in relationships, building understanding and engaging compassionately with others. It also developed workforce competencies that emphasise customer care, communication and team-work, improvement and innovation, and employees' abilities to support and develop their colleagues.

## Embedding the vision and principles

Over the next decade, an objective was to weave the vision, principles and concepts through Southcentral's systems and processes, ensuring that every aspect of the design of the organisation helped to deliver its goals. The vision and corporate goals became the framework for making high-level decisions on priorities and the allocation of resources through the strategic planning process, which in turn determines divisions', work units' and individuals' annual objectives. For example, this led to an initial focus on responding to customer–owners' demands for better access, with primary care teams drawing up plans to improve the availability of appointments. The vision and corporate goals also provided a basis for setting priorities for data and analysis.

As it developed its HR processes, Southcentral incorporated the vision, mission and related frameworks into its approach to recruiting, developing and rewarding staff. The corporate goals and workforce competencies form the basis for job descriptions, adverts and interview questions for job applicants, as well as a framework for individuals' annual performance evaluations. In subsequent phases, Southcentral invested heavily in training and development as a means of embedding the vision and desired behaviours. These include its core concepts training, which focuses on building effective relationships between staff and the community.

# Constant communication with staff

Just as importantly, Southcentral has developed strategies for communicating constant reminders of the vision and goals to employees. Using acrostics, such as S-C-F, R-E-L-A-T-I-O-N-S-H-I-P-S and W-E-L-L-N-E-S-S (*see* Figure 4), appears to have helped staff assimilate the concepts. In the early years, Southcentral held quizzes and publicised the vision and mission on mouse mats and badges.

There are posters and banners reminding staff of the vision, mission and corporate goals throughout Southcentral's offices and the primary care centre. They are also included in most of Southcentral's corporate communications to staff and the community. The vision, mission and principles form the first orientation session for newly hired employees and are included in the annual re-orientation for all staff.

As with Southcentral's broader engagement with its community, the focus is on re-iterating a simple set of messages about the organisation, its purpose, its ethos, and how staff should go about their work (customer–ownership, relationships, commitment to quality, physical, mental and spiritual wellness) and to do so consistently, not over years but over decades.

# Creating a vision-based organisation

According to Jim Collins, `architects of visionary companies don't just trust in good intentions or "values statement"; they build cult-

like cultures around their core ideologies' (Collins 1994). From our interviews, it was clear that the senior leadership at Southcentral had invested deeply, first in developing the organisation's guiding principles – there was no question of delegating them to middle management or outsourcing them to a consultancy – and then in embedding them through communication, training and systems over 20 years.

Interviewees explained that the vision, mission, goals and concepts provide a framework for collective effort at multiple levels. This framework provides a basis for allocating resources to key priorities, for developing the operating model for services, for frontline teams to test innovations, and for staff to make day-to-day decisions. One interviewee argued that staff in most health systems were overwhelmed by change, in part because of the volume disconnected projects. Staff at Southcentral were more supportive of change and more resilient in the face of it, simply because they understood the direction of travel.

When the Baldrige assessors carried out their site visit in 2011, they interviewed 400 employees from across Southcentral. They reported that all of their interviewees were able not only to recall Southcentral's vision, goals and principles, but to talk passionately and persuasively about what they meant. The message is that Southcentral's vision does not just exist in a few people's heads, in corporate documents or even primarily in the organisation's processes; staff across the organisation genuinely understand the ethos and philosophy, and can use these as a frame of reference in their daily work.

#### Figure 4 Southcentral's vision, mission and operating principles

#### **Vision statement**

A Native Community that enjoys physical, mental, emotional and spiritual wellness

#### **Mission statement**

Working together with the Native Community to achieve wellness through health and related services

## **Corporate goals**

#### Shared responsibility

We value working together with the individual, the family and the community, we strive to honor the dignity of every individual. We see the journey to wellness being traveled in shared responsibility and partnership with those for whom we provide services.

#### Commitment to quality

We strive to provide the best services for the Native Community. We employ fully qualified staff in all positions and we commit ourselves to recruiting and training Native staff to meet this need. We structure our organisation to optimize the skills and contributions of our staff.

#### Family wellness

We value the family as the heart of the Native Community. We work to promote wellness that goes beyond absence of illness and prevention of disease. We encourage physical, mental, social, spiritual and economic wellness in the individual, the family, the community and the world in which we live.

#### **Operational principles**

**R**elationships between the customer-owner, the family, and provider must be fostered and supported.

Emphasis on wellness of the whole person, family and community including physical, mental, emotional, and spiritual wellness.

Locations that are convenient for the customer-owner and create minimal stops for the customer-owner.

Access is optimised and waiting times are limited.

**T**ogether with the customer-owner as an active partner.

International whole system design to maximize coordination and minimize duplication.

**O**utcome and process measures to continuously evaluate and improve.

Not complicated but simple and easy to use.

**S**ervices are financially sustainable and viable.

Hub of the system is the family.

Interests of the customer-owner drive the system to determine what we do and how we do it.

**P**opulation-based systems and services.

**S**ervices and systems build on the strengths of Alaska Native cultures.

#### **Core concepts**

**W**ork together in relationships to learn and grow.

Encourage understanding.

Listen with an open mind.

Laugh and enjoy humor throughout the day.

Notice the dignity and value of ourselves and others.

Engage others with compassion.

Share our stories and our hearts.

**S**trive to honor and respect ourselves and others.

# **5** Putting customer-owners in charge of the system

Soon after the transfer of ownership in 1998, Southcentral started to refer to its community as 'customer-owners' rather than patients or service users. Twenty years later, Southcentral's employees use the term 'customer-owners' with near-religious dedication. The concept has taken on multiple dimensions: it reminds staff that they should treat the community as customers rather than 'beneficiaries' of care; it signals the expectation that people should assume shared responsibility for their wellbeing; and it reminds the community of its role as shareholders in their health system, with a right to share pride in its success, and a responsibility to sustain it for future generations.

Empowering customer-owners to take control of their care When it took over the primary care system, Southcentral made a conscious decision to reject the established health care model where experts decide what's wrong with the patient and dictate what to do. Rather than being the recipients of tests, diagnoses and pills, Southcentral's message is that customer-owners should actively share responsibility for their and their families' health and wellness.

As Doug Eby explained, other health care organisations sometimes talk of developing 'patient-centred' care, 'by which they mean bringing together the professionals responsible for a patient to decide what's best for them'. Rather than 'patient-centred,' Southcentral uses the term 'customerdriven'. The clinical team provides expertise, explains options and makes recommendations. But the customer-owner makes the decisions.

Southcentral's measures of performance include a strong focus on whether the primary care teams support people in taking ownership of their care. The customer-owner should be able to say the following about their team.

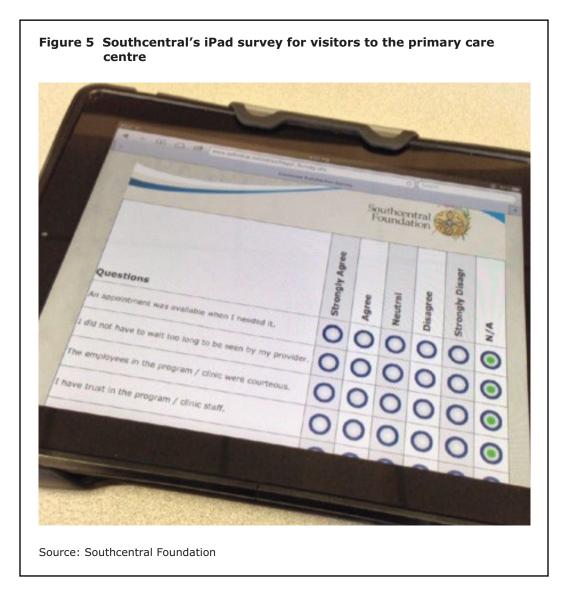
- I work with my team and have determined what I need and when, where and how I want it.
- I know the team and the team knows and cares about me.
- The team listens, provides advice and supports my health journey.
- My questions and concerns are answered.
- Care is co-ordinated.
- My values and goals drive care plans.

In 2015, 96 per cent of customer–owners indicated 'I was involved in the decisions about my care'.

# Gaining feedback and measuring satisfaction

From 1996 to 1998, Southcentral investigated how companies such as Disney and Ritz Carlton collected customer feedback and measured customer satisfaction. Since then, it has developed more than a dozen methods for gaining regular feedback from customer–owners on their experience of services. These include a simple online system for submitting feedback or raising concerns via Southcentral's website, optional online satisfaction surveys after every visit to a primary care clinic, and focus groups on particular issues.

On average, Southcentral receives approximately 10 comments from customer–owners every day through various channels. Its improvement staff review feedback within 24 hours and work with the frontline teams to resolve and respond to complaints within five days. The results are captured in Southcentral's customer-feedback recording system, and reviewed by its customer service committee on a monthly basis.



# Engaging customer–owners in running the system

At the governance level, Cook Inlet Region Inc, the tribal authority, appoints Southcentral's seven-member non-executive board on long-term tenures from the Alaska Native community, ensuring representatives from across the region's Native tribes, with current board members coming from business, government and health care. Most non-executives have been in post for more than a decade. The President/Chief Executive Officer and two of the executive vice-presidents are also Alaska Native.

Southcentral has developed a range of methods for engaging customer-owners in the strategic planning cycle, including discussing future priorities with the community through its annual gathering, its elders' council and planning sessions with village communities. Customer-owners also sit on a number of joint operating boards and advisory committees, which meet periodically with the senior leadership team to provide feedback to the organisation.

## Communicating with the community

As well as engaging with customer–owners, Southcentral has invested heavily in methods for communicating back to its community. It maintains an in-house public relations team to help communicate its story to the Alaska Native community. It communicates through a range of channels: the banners throughout the primary care centre, which remind customer–owners of the organisation's vision and values and their roles in promoting health and wellness; its bi-monthly newsletter, *Anchorage Native News*, which has been running since 2006; social media and email updates; its series of annual picnics and parties; and its annual gathering, first held in 1999, which brings together 2,000 to 2,700 community members each year.

Like Southcentral's strategy for communicating with employees, the focus is on repeating a consistent set of key messages to customerowners through all of these media over many years: the community's ownership of its healthy system; the role of customer-owners in driving the system and improving their own health; the importance of relationships; and the shared journey of wellness for individuals, families and communities.

Katherine Gottlieb emphasised the importance not just of listening to customer–owners and understanding their needs but of explaining the changes being made in response to their feedback, and then communicating the organisation's successes in delivering what the community asked of it: 'With this approach, it really is possible to build a trusting relationship with the community. Then transformation gets easier – because the community is more likely to believe in you, and give you the backing and breathing space to make changes in an orderly way'.

# Governance through community ownership

Over time, customer–ownership has become a key plank in Southcentral's philosophy: a concept that shapes how employees and the community engage with each other, and that provides a frame of reference for strategic and operational decisions. Customer–ownership also appears to offer powerful governance in a system that is not subject to comparable performance management by external bodies as in the English NHS. There are loose analogies with Elinor Olstrom's work on how local actors can sometimes provide effective governance of community resources, without reliance on government control or top-down regulation (Ostrom 1991).

Southcentral therefore appears to provide an alternative to the strategies that governments have typically pursued to ensure effective performance management of public health care providers, such as minimum standards, financial incentives, inspection or competition, all of which have well-documented costs or limitations. It also offers an alternative to devolution to local government, relying instead on direct links between the health system and its community.

Of course, there may be particular reasons why customer–ownership has provided such an effective motivating force in Southcentral. The relationships between Southcentral and its communities appear much stronger than in many other local health systems, in part because a large proportion (60 per cent) of Southcentral's employees are also customer– owners who rely, with their families and friends, on its health services. Southcentral is also the main provider of a broad range of services for a large proportion of its community, in what The King's Fund refers to as a place-based system of care (Ham and Alderwick 2015).

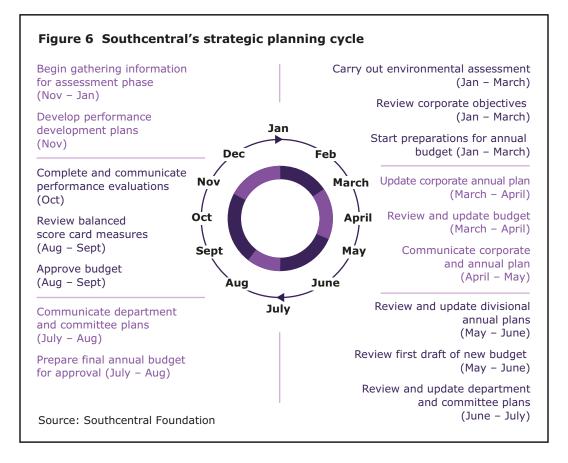
# **6** Strategic planning and decision-making

Having developed its vision and principles, Southcentral invested in the early 2000s in its planning and decision-making structures. At this stage it was still putting in place much of the infrastructure that NHS organisations might take for granted. It drew heavily on the Baldrige excellence framework (Baldrige Performance Excellence Program 2015), which emphasises the need for rigorous strategic planning cycles, robust processes to translate the strategy into action, purposeful, collective decision-making and accountability.

One output was Southcentral's annual strategic planning process, which reviews and updates its corporate objectives on a rolling basis, before translating those changes into plans for divisions and employees.

- From January, the leadership develops a strategic input document, based on the Baldrige excellence framework, that makes an assessment of the population's future needs, the current state of services, the strength of Southcentral and its operations, and opportunities and threats.
- In spring, the leadership team reviews its current corporate objectives and initiatives against the assessment, and decides on any changes to existing objectives or new corporate objectives for the following year.
- Southcentral's committees and divisions then have until summer to update their annual work plans, including how to put new initiatives into action.
- Individuals meet with their managers in the autumn to create personal development plans that explain how they will support the corporate plan.

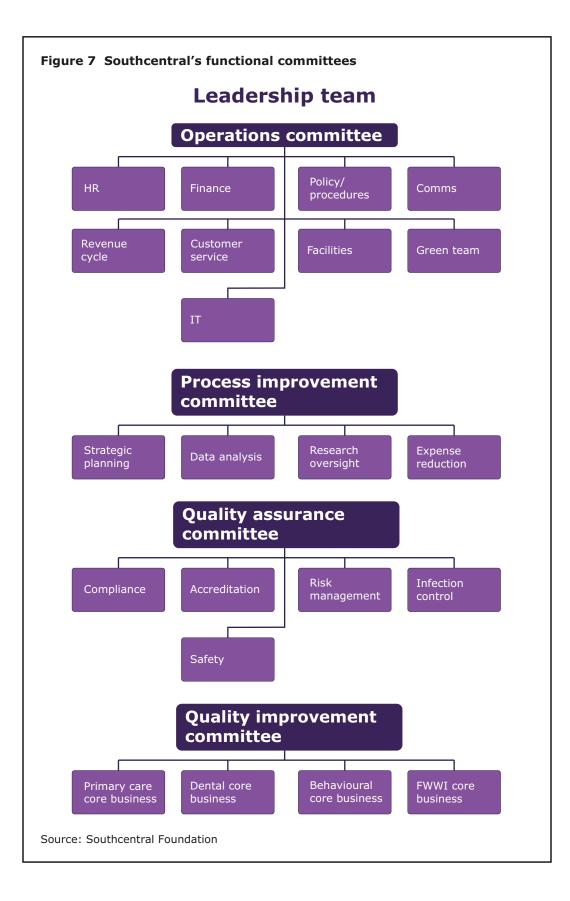
As part of the planning cycle, Southcentral also reviews its budget for the year and allocates available resources to corporate priorities. It identifies the available resources for the coming year, taking account of any increases in revenues or cost savings from improvement projects. It uses an agreed formula to allocate resources to the frontline teams and supporting functions so that they can retain existing services and training and development. It also returns to individual teams a proportion of the cost savings from their improvement initiatives. Southcentral then allocates the remainder to its priorities for the year, which typically include a combination of investments in health and care services and improvement projects that should release savings for future re-investment.



Over the same period, Southcentral also developed its current functional committee structure to support decision-making and communication across the organisation. There are four oversight committees: operations, quality assurance, process improvement and quality improvement, each with four to nine sub-committees, such as human resources, finance, safety and data analysis.

The committees bring together a chair and executive sponsor, improvement staff and employees from across the organisation. Employees can bring proposals to the committees, which provide a forum for discussion with colleagues from across the organisation, before they are put to the leadership team for approval. If the leadership team agrees, the committee is then responsible for refining the objectives, deciding who will participate, and overseeing the project.

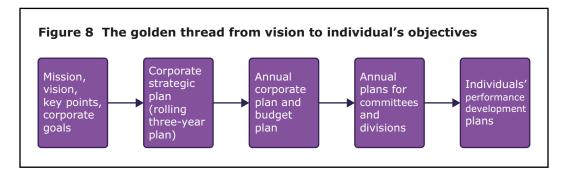
Southcentral uses an electronic 'annual planning tool' to catalogue documents and decisions in the planning cycle, committees' initiatives and the work plans connected to them. It also uses a 'committee manager' tool to file agendas, minutes and action points. All employees can access the tools so that they can follow progress in determining strategic direction and the committees' work.

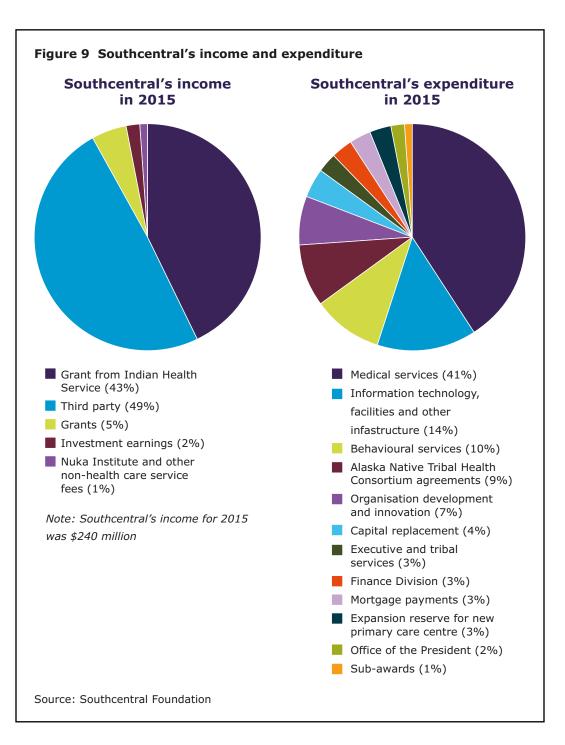


Many organisations have similar planning cycles and committee structures and can demonstrate, at least on paper, a clear process for translating the vision into divisional plans and individuals' objectives. Our impression was that Southcentral is particularly purposeful and disciplined in using its planning cycle and committees to determine strategic priorities and make decisions. Leaders make collective, consensual decisions through the planning and committee system on almost all significant issues, rather than acting unilaterally or securing agreement with colleagues through informal channels.

The planning cycle and committees also appear to have provided an effective mechanism for allocating resources to key priorities. For example, Southcentral is currently dedicating surplus resources to 17 priorities including projects to improve its preventive and behavioural health services and back-office functions. Over time, it has been able to re-allocate significant savings from medical services to other areas, notably behavioural services and training and development (*see* figure 9).

Finally, the planning cycle and committees appear to provide an effective mechanism for engaging staff across Southcentral in the process of setting direction and delivering service improvement. Staff are able to contribute to major strategic decisions through the planning cycle. They are able to make proposals for improvements to their services and gain resources to implement them through the functional committees. There are similarities with some mutuals and social enterprises in the NHS that give staff formal roles in the governance of their organisations (*see* Ham 2014b).





# **7** Redesigning primary and community services

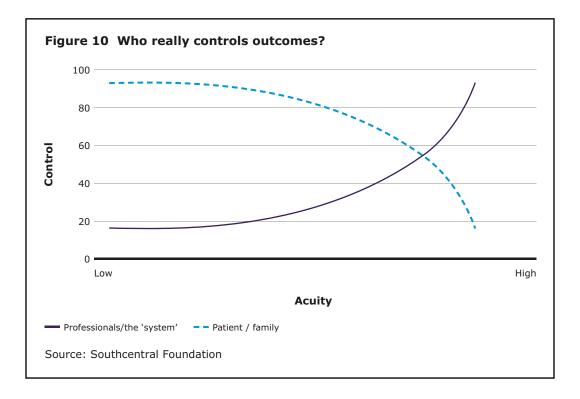
Our interviewees described a 'eureka moment' in the mid-1990s, as Southcentral started consulting with its customer–owners and preparing to take over primary care services. Like other health systems, the professionals in the primary care clinics saw their core products as being tests, diagnoses and medications. When people sought health services, doctors would assess their symptoms, perform examinations, order tests, produce a diagnosis and prescribe pills or other treatments. When the consultation was finished, they assumed their job was done. If people failed to follow the professionals' advice, they were branded `non-compliant'.

# Redefining Southcentral's core product

The problem was that a large proportion of the population, representing the vast majority of health care spending, suffered from chronic, long-term conditions. They decided whether to take the medications prescribed, whether to exercise, what to eat, whether to drink or smoke and so on. Moreover, they made those decisions as they went about their daily lives, the 99.99 per cent of their time spent away from the clinic and beyond the scrutiny of health care professionals.

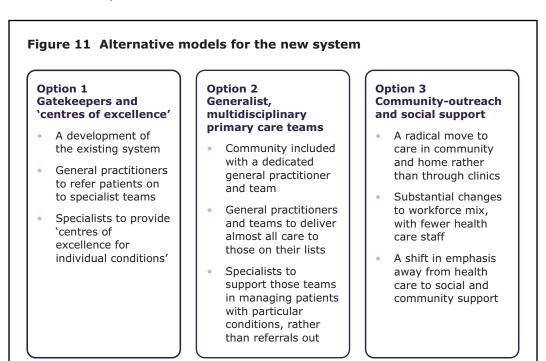
As Figure 10 illustrates, professionals and the health care system are able to exert a high degree of control over patients with high acuity needs. When the patient is anaesthetised on the operating table, it is possible to control every aspect of their care. But when the patient has a chronic condition, they and their families decide what to do and determine outcomes. As Doug Eby puts it: 'If your job is to throw a rock at a target then, with practice, you can hone your technique and learn to hit the target every time. If your job is to persuade a bird to fly to the target, hurling it in the right direction is unlikely to help. You'd better try to understand what motivates the bird.' (For a more detailed discussion, see Gottlieb *et al* 2008; Kelley and Tucci 2001.)

The insight was that Southcentral was not in the business of ordering tests and prescribing pills. It was in the business of building trusting, long-term relationships with its community, so that over time it could have a meaningful impact on how they lived their lives. This led to the focus on customer–ownership and the emphasis on building relationships in Southcentral's vision, corporate goals and operating principles, which in turn informed decisions about Southcentral's service model.



# Choosing between alternative models

Following the listening exercises in the mid-1990s, Katherine Gottlieb brought together the Southcentral board, senior leadership, the medical leaders of each department and managers to agree on the future operating model for primary care. She presented three models, and the group spent the day benchmarking them against their criteria for an 'ideal health system'.



Some medical professionals saw attractions in the gatekeeper model, where doctors would refer people to specialist centres of excellence for different long-term conditions. However, the model scored poorly against Southcentral's criteria for the new system. In particular, it would be much harder for general practitioners and their teams to develop trusting, long-term relationships with individuals and families if they regularly referred those most in need out to other services.

For people with a single long-term condition, there might be advantages in being referred to a 'centre of excellence' for specific conditions such as diabetes, asthma, cancer, HIV, or congestive heart failure. However, a large proportion of the population had, or would have, multiple long-term conditions. For them, a 'centres of excellence' model would mean numerous visits to different clinics, multiple care plans, dozens of medications and disjointed care.

Conversely, there were arguments in favour of the third model, one that would shift the focus to community outreach and social care. However, Southcentral had taken on hundreds of health care professionals who had been trained to deliver health care services within traditional medical settings. Despite the possible advantages, the leadership came to the conclusion that it would be too risky and challenging to seek to implement such a radically different approach.

The generalist, multidisciplinary model scored well against Southcentral's 'criteria for an ideal health system' and seemed practically achievable with the staff and resources at its disposal. It would allow customer–owners to develop strong relationships with a general practitioner and a small nursing and support team, who would co-ordinate and deliver the vast majority of their care. The model would also deliver holistic care, since the primary care teams would be responsible for the vast majority of care for individuals and families.

At the end of the day, Katherine Gottlieb went around the room asking each senior manager and medical leader publicly for their agreement to the generalist model. After that, Southcentral held a further 100 interviews with customer–owners who, despite some scepticism, also gave their support.

## Development of Southcentral's primary care model

If the focus was relationships, an immediate priority was to ensure that each customer–owner had a dedicated general practitioner. In the late 1990s, only 35 per cent of Alaska Native people in the region had a designated family doctor. Southcentral places its population with individual doctors. It encourages families to use the same team. However, people are free to choose and can change to another if they aren't happy. It opens and closes panels depending on whether space is available, and adjusts by age and gender, although it hasn't needed to make other adjustments to ensure an even population distribution. In a second phase, Southcentral developed its model of multidisciplinary primary care teams of doctors, nurses, assistants and administrators. From the late 1990s, it moved away from single disease clinics and approaches for chronic conditions, retraining its specialist immunisation, diabetes, asthma and other nurses to act as generalist case managers in the primary care teams. Over the following years, Southcentral increased the proportion of nurse case managers and added administrative support to the teams. It also developed protocols for how teams should work together, for example requiring teams to sit together in particular configurations, doctors to engage with their teams rather than each other, and regular huddles to plan for the day and review feedback on performance.

Over the same period, Southcentral made substantial changes to improve access to services, going from lengthy waiting lists for appointments to guaranteeing an appointment on the same day for anybody calling before 16.00. The teams keep 70 to 80 per cent of their available time for appointments free on any given day, so that they can respond to demand. In order to achieve this, Southcentral broadened its communications channels with service users, reducing its reliance on face-to-face consultations, and increasing use of phone, text and email. The teams set up face-to-face conversations for new problems or complications, use the phone for consultations on minor ailments, and use phone, email and text for routine monitoring and some preventative screening.

Southcentral subsequently achieved around a 35 per cent decrease in face-to-face appointments with general practitioners per capita, and about 25 per cent reduction in visits to the primary care centre per person from 2008 to 2015. They delivered this not through coercion but by persuading service users to interact with the system in different ways. Customer–owners can always have a face-to-face discussion with the doctor if they prefer. They achieved these reductions while at the same time offering same-day appointments – something that might be expected to increase demand.

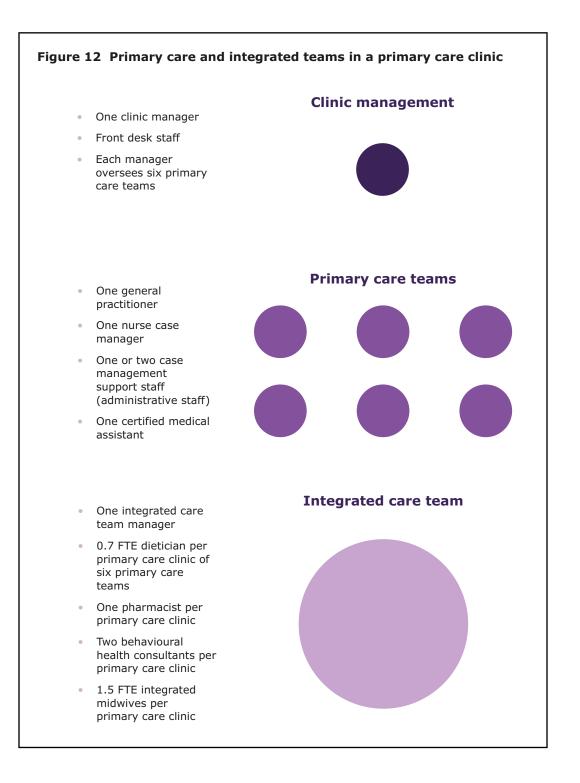
In a third phase, from the mid-2000s, Southcentral moved away from other remaining specialist teams, such as its midwifery unit and health education group, bringing these staff into its primary care clinics. Over time, it developed integrated teams of dieticians, pharmacists, midwives and other specialists who would sit within or rotate through the primary care clinics, supporting the primary care teams and providing rapid consultations to customer–owners on their panels. During this phase, Southcentral brought behavioural health consultants, masters-level therapists, into the primary care teams. The behavioural health consultants sit within the primary care teams, provide rapid advice and support for people with behavioural health challenges and join other team members in discussions with customers-owners with a combination of physical and mental health issues. Southcentral has also recently brought integrated psychiatry within the primary care clinics to establish joint working and faster handovers where people need more specialist advice or longer-term support.

The transition was evidently not painless. According to interviewees, employees fell into three predictable groupings, with a quarter enthusiastic, half undecided, and a quarter opposed to the changes. Southcentral invested heavily in communicating the changes, as well as in recruitment, settling new staff into the organisation and training so that it chose the right staff and helped them adapt to the new model. Interviewees explained that it takes six months for doctors used to working in more traditional clinics to adapt to the system.

Interviewees explained that the strategy was to communicate and persuade staff of the benefits of the new system, rather than pushing the changes through with brute force. Southcentral did not dismiss any doctors or nurses in the transition. Only a handful of doctors and nurses decided to leave of their own accord. Nevertheless, our impression is of a leadership team that requires a degree of corporate discipline and that would have used harder-edged methods if needed to deliver its commitments to the community and make the model a success.

## Multidisciplinary primary care teams

There are now six clinics in Southcentral's main primary care centre in Anchorage, each home to six primary care teams, as well as a paediatric clinic and a women's clinic. Each team typically has one general practitioner, one nurse case manager, one member of case management support staff and one certified medical assistant. Each team is responsible for around 1,400 people (in comparison with around 1,500 per general practitioner in England). There is also a manager who oversees each clinic, a front desk for each clinic, and a call centre.



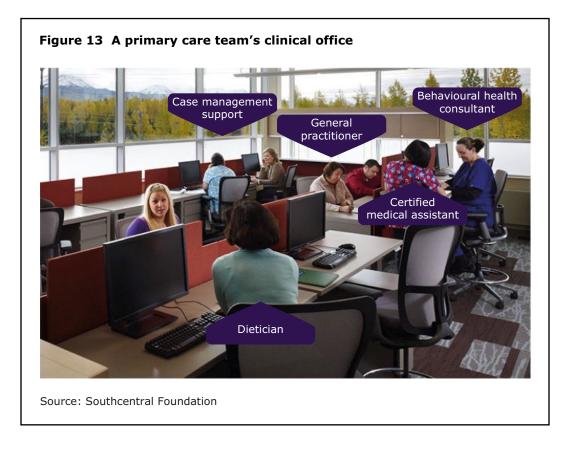
The general practitioner is primarily responsible for the initial assessment and diagnosis for customer–owners with new health care needs, overseeing the development of treatment plans for people where the diagnosis is stable, and advising and reviewing plans when there is a change in their conditions.

The nurse case manager advises on whether customer–owners should have a consultation with the general practitioner or another team member, or whether a phone consultation would be sufficient (though customer–owners can always see the general practitioner if they wish to). The nurse case manager also acts as a care co-ordinator for people with chronic diseases, helping to develop their care plans, and to monitor their conditions, and providing education on how to manage their conditions. The nurse case manager oversees the development of more detailed care plans for the 5 per cent of customer–owners with the greatest need. (He or she also plays an important role in prevention and population health.)

The case management support staff schedule appointments, build relationships with customer–owners (including sitting in on their discussions with the doctor or other team members when needed), help to update customer–owners' electronic health records after visits or calls, and manage repeat prescriptions. (They also work with the nurse case managers on prevention and population health.)

The certified medical assistant manages the daily schedule, greets customer–owners when they arrive, sets up examination rooms and works on the 'shop floor' with general practitioners, carrying out tests and screenings, giving immunisations and taking blood. Like other team members, they are expected to get to know and build relationships with customer–owners and their families.

All the team members sit together in the clinical office, with the general practitioner and nurse case managers at desks that face the support staff. There are no separate offices for general practitioners or nursing staff to retreat to. Instead, team members move to talking rooms or examination rooms for appointments with customer–owners. The aim is to facilitate communication and teamwork, as well as to break down hierarchy, encouraging doctors and other staff to see themselves as peers. Staff are able to observe and support each other, making it easier to delegate tasks.



### Integrated care teams

There is one full-time pharmacist for each clinic of six primary care teams. Pharmacists work with the teams and customer–owners to manage medication reconciliation, explain drug interactions, help customer–owners manage prescriptions for multiple conditions, and complete prescription refills. They also work with the primary care teams on managing the health of their populations and support the team in moving to more cost-effective medications.

There is one 0.7 full-time equivalent dietician for each clinic of six primary care teams. The dieticians carry pagers and rotate through the clinics, moving to a particular team when requested. The majority of their time is spent supporting service users with acute and chronic diseases, either face-to-face during their clinic visits or by phone. They also advise and run health education classes for young people and families.

There are 1.5 full-time equivalent midwives for each clinic of six primary care teams. They work with the nurse case managers to provide pre- and post-natal care for customer–owners on their panels, including advising on birthing options and carrying out six-weekly check-ups. They also advise on birth control options.

Finally, there are two full-time behavioural health consultants for each clinic of six primary care teams. The behavioural health consultants support the general practitioners and other team members in identifying behavioural health issues, carry out screening and assessment, join other team members in discussions and care conferences with customer–owners, provide brief behavioural interventions, make referrals to specialists for longer term interventions where needed, and support other clinical team members.

In addition, there is a bank of staff who join the primary care and integrated teams to fill temporary vacancies where needed. The primary care teams are expected to provide one late-night clinic each week for customer-owners who need later appointments. The primary care teams take it in turns to run a Saturday clinic for urgent appointments. (Southcentral emphasises the importance of very high-quality medical records so that these employees and teams can step in effectively where needed.)

### Key benefits of the redesigned system

Based on our visit, and the other literature on Southcentral, we identified six features of its primary care system that help to explain its success.

 The system enables small primary care teams to develop meaningful relationships with the individuals and families on their panels, much more so than if different doctors and nurses advised the same individuals, or if people were routinely referred out to specialist clinics. The teams are better placed to support their populations because they understand their motivations, their clinical history, their personal backgrounds and their families.

- The primary care teams are able to provide holistic care for their populations, by combining a range of generalist skills covering both physical and mental health in the teams and bringing specialist skills into the teams where needed, rather than referring people out to other teams. The model supports co-ordinated care for the entire population, in comparison with models where only higher-risk groups are referred out to care co-ordinators and multidisciplinary teams. Southcentral does still refer people to specialists, such as its paediatric and women's clinics, and to the hospital system, but the aim is to do so as little as possible, for the primary care team to retain a co-ordination role where referrals are needed, and to return people to the primary care team's care as soon as possible.
- The way Southcentral's teams are structured means that there are opportunities for substitution between staff. Employees are able to work at the top of their licence, with doctors handing tasks to nurses, who hand tasks to the medical assistants and administrators. Doctors and nurses can spend more time supporting those most in need, because they aren't spending time on routine activities. There have also been efforts to automate routine tasks such as medications refills, disease monitoring and screenings. In the old system, doctors spent 30 per cent of their time advising customer-owners with a new problem. At least 50 per cent of their time was spent advising customer-owners on diseases with known pathways and protocols. They now spend more of their time with people with new conditions and much less of their time with people with complex needs, transferring that work to other team members, the customer-owner, and the family or caregivers.
- The model circumvents the general practitioner as the bottleneck that limits throughput in a primary care clinic. In traditional models, the doctor holds consultations with almost everybody who contacts the clinic. In Southcentral, people are sent directly to the right person: the doctor for a new problem; the nurse case manager for monitoring or test results; the administrators or pharmacist for a repeat prescription. It is this combination of teamworking, removing the doctor as bottleneck, and use of different communications channels that has allowed Southcentral to increase the average time for consultations with doctors and move from a four-week wait for an appointment to same-day access, despite falling numbers of doctors and reduced funding per person.
- The model supports closer joint working between the more specialist staff in the integrated teams and the generalists in the primary care teams. The specialists spend more time supporting the primary care teams than if they operated in separate units. The system also allows primary care staff to make rapid referrals and 'warm' handovers of service users to specialists where needed. They can act opportunistically when they see the chance to connect people with a specialist, and attendance rates are much higher.

• Small teams are fully responsible and can therefore be held fully accountable for the care of people on their panels, something that would not be possible if they were responsible for only part of the jigsaw. Teams take responsibility for managing their schedules, reaping the rewards if they do so effectively, and staying late if they don't. If one team's outcomes are worse than others, it cannot blame other staff or services as an alternative to investigating and improving its performance. (We discuss below how Southcentral supports benchmarking and performance improvement across the teams.)

### Enablers of the model

There is now reasonably widespread understanding of the composition and mechanics of multi-disciplinary primary care teams. Southcentral provides one iteration of the 'patient-centred medical home' model, which has now been implemented in many primary care systems internationally. However, few systems appear to have achieved comparable improvements in access, outcomes or efficiency. Others have achieved success but were unable to sustain the benefits over time or extend successful pilots to a large number of clinics.

One particular reason for Southcentral's success may be the tenacity with which it has pursued a single, clear business model. According to Doug Eby: 'We don't have the resources to fund competitive systems. We can't afford a generalist primary care system alongside specialist clinics and community-based teams.' Southcentral picked a side in the debate between generalists and specialists in primary care, choosing relationships and holistic care from generalist teams over the technical expertise offered by specialists in individual diseases. Then it ploughed all of its resources into delivering the generalist model, without riding two horses or making compromises that undermined its effectiveness.

Finally, Southcentral invested heavily in the physical infrastructure, workforce and systems needed to support the model. Southcentral clearly believes that co-locating doctors, nurses and other staff in appropriately designed offices is essential for effective multi-disciplinary team-working. We discuss in the following sections the substantial investments it has made in information technology, recruitment, training and other areas to make the model work.

# 8 Integration with the hospital system

After the federal government transferred the region's primary care services to Southcentral in 1998, Southcentral signed a co-ownership and co-management agreement with the Alaska Native Tribal Health Consortium in 1999 to take over the Alaska Native Medical Center, which delivers hospital services to Alaska Native people. Southcentral and the Consortium established a joint operating board to ensure unified operation of services provided by the Alaska Native Medical Center. The board brings together Southcentral representation along with other Alaska Native leaders representing regions from across the state.

While Southcentral primarily delivers care to the 65,000 Alaska Native people residing in the Southcentral region of Alaska, the hospital serves the state's entire Alaska Native population of 148,000. The hospital provides services comparable to a district general hospital in the United Kingdom, including urgent care services, specialist outpatient services and elective surgery. It is only one of two level II trauma centres in Alaska with 24-hour coverage for general surgery, emergency medicine, other specialties and intensive care.

### Ownership

As Southcentral's President and Chief Executive Officer, Katherine Gottlieb is one of the board members on the Alaska Native Medical Center's joint operating board. Tribes from within the Southcentral region are also represented. This provides the region with a degree of influence over the hospital. However, it falls some way short of direct control. Interviewees described Southcentral and the Alaska Native Tribal Health Consortium as collaborators within an integrated system rather than being akin to a single organisation.

### Financing and budget pooling

Southcentral and the Consortium receive annual block grants from the federal government to provide health care services for Alaska Native people in the Southcentral region who do not have other health care insurance. This accounts for around 45 per cent of Southcentral's budget for its population, with other funding coming from Medicare, Medicaid, private insurance, other grants and donations.

This means that the primary care leadership and hospital leadership have a reasonably effective incentive to work together efficiently within an integrated system. Under a block grant, the hospital has no incentive to increase the volume of hospital activity, at least for a large proportion of the population, since this will increase its costs without increasing revenues. Instead, it has an incentive to work with Southcentral to help it treat people in primary care rather than referring them to hospital. (Both the primary care and hospital doctors are salaried rather than contractors receiving fees per service. So, like their employers, they have no personal incentive to increase the volume of activity in their clinics.)

In addition, Southcentral and the Consortium have agreed to a simple mechanism for sharing third-party revenues. Third-party payments

include a mixture of daily rates, episode-of-care payments, and volumebased activity payments. By agreement, and in part due to these complex payments methods, both parties agree to share all third-party revenues and split them by agreed-upon formulas. The result is that financial risk and the benefits from efficiencies, better co-ordination or better population management are shared across the system.

Overall, the financing arrangements appear uncomplicated in comparison with some other systems. However, as Lee Olson, Vice President of Finance, explained, 'They help us to run primary care and the hospital as a single system. We aim to use funds efficiently across primary and secondary care and push work to the most appropriate settings.' One of the most significant effects of the financing arrangements appears to be dampening incentives for one part of the system to increase or reduce activity purely because of the impact on its revenues. The arrangements also appear to encourage system-wide planning.

### Getting the 'front end' right

According to interviewees, Southcentral is largely an example of the system-wide benefits of reforming primary and community care, irrespective of the degree of integration between primary care and hospital services. According to Doug Eby, it primarily demonstrates that 'if you get the front end right, the benefits will cascade throughout the system'.

As discussed above, Southcentral introduced same-day appointments with its primary care teams in the early 2000s. It also offers evening and weekend primary care appointments. Interviewees argued that improving access and better management of people with chronic conditions were the main reasons for the more than 45 per cent reduction in accident and emergency attendances and a 53 per cent reduction in hospital admissions per capita from 2000 to 2015.

Interviewees argued that building strong, trusting relationships between primary care teams and their populations also helped to avoid unnecessary procedures and referrals to specialists. Southcentral does not operate a gatekeeper model: if service users wish to see hospital specialists they may do so. However, it has found that people who trust their primary care teams are more willing to take their advice and wait and see before seeing a specialist. They are also less likely to insist on unnecessary tests.

### Reducing specialist referrals

Alongside these improvements to access and the quality of primary care, Southcentral has also built effective working relationships between the primary care teams and hospital specialists, as a strategy for retaining people in primary care where possible and reducing pressure on hospital services.

For example, the primary care teams have built strong relationships with the cardiologists and pulmonologists in the hospital. The hospital doctors also tend to know most of the people with fragile cardiology and fragile pulmonology cases on the primary care teams' panels. When they see service users with complex conditions, the primary care doctors and nurses are able to phone the specialists for rapid consultations. The specialists spend a greater proportion of their time supporting and educating the primary care teams instead of treating people themselves. (As discussed above, the primary care doctors are, in turn, able to spend more time with people with complex needs, and to take on more demanding roles, because they are themselves pushing more routine work down to the nurses and other staff in their teams.)

For their part, the specialists understand that it is in their interests to respond quickly to the primary care teams when they ask for support. If they can respond in five minutes, they can help the general practitioners to manage the person's condition in primary care. If they can't, they will receive a referral for which, as explained above, there is often no additional reimbursement.

These strategies have contributed to huge reductions in referrals to hospital specialists, with referrals per person falling by more than 60 per cent between 2000 and 2009. The specialists in many of the hospital's clinics have in turn been able to reduce the waiting times for outpatient appointments, in some cases moving from long waits to same-day appointments.

The changes have also helped to reduce the costs of the hospital system. Southcentral and the Consortium have been able to keep the numbers of hospital specialists in some disciplines and the number of hospital beds roughly constant over the past 17 years, despite an approximate tripling of Southcentral's regional Alaskan Native population. For example, the Medical Center has retained three cardiologists since the late 1990s, while other systems have an average of eight or nine cardiologists for equivalent populations.

### Observations on integration so far

Southcentral's story is, first and foremost, one of radically redesigning primary and community care. However, it also provides a model for integrating primary care with hospital services, based on shared ownership and simple budget pooling. It is notable that both the primary care teams and the hospital specialists have benefited from closer joint working, while improving quality and releasing savings.

Our impression is that shared governance and clarity of vision provide the foundations for Southcentral and the Consortium to work together. The two organisations appear to collaborate primarily because of a shared concern for their population and the sustainability of the system rather than because one or the other will benefit financially from doing so. However, simple funding arrangements that facilitate, rather than undermine, collaboration and allow for investment in the primary care system also play an important supporting role. Perhaps most importantly, Southcentral and the hospital operate in a system that does not actively discourage system-wide co-operation, as would be the case if activity-based fee-for-service played a larger role.

Southcentral and the Consortium also appear to benefit from working in a close bilateral relationship within what The King's Fund calls a place-

based system of care. Southcentral's primary care centre is just a few minutes' walk away from its main hospital. This appears to provide much greater opportunities than in other systems for primary care and hospital staff to build sustained relationships and develop effective teamworking, even in the absence of formal projects to redefine the treatment pathways across primary and secondary services. This appears to add weight to the arguments that accountable care organisations are more effective if general practitioners work closely with one or a small number of hospitals in a coherent local system (Fisher *et al* 2007).

Nevertheless, interviewees recognised that Southcentral had made faster progress in redesigning its primary care teams than in re-designing how primary care interacted with the hospital system. Although co-ownership gives a degree of influence, it is clear that Southcentral and the Consortium remain separate organisations with their own corporate cultures and, to some extent, their own priorities. Despite considerable progress, there are still unexploited opportunities for integration.

## **9** Informatics, data and analysis

In the early 2000s, Southcentral's data analytics staff comprised a small number of analysts working within individual departments, who brought together historic data on performance on an ad hoc basis. Over the following decade, Southcentral made substantial investments in informatics, data and analysis so that it could support its service model. This has included bringing together a large, dedicated, analytics, research and evaluation team, putting in place new information technology infrastructure, and improving how Southcentral presents data as a basis for making operational decisions. According to Doug Eby, Southcentral now has a more comprehensive database than most comparable primary and community providers in the United States.

### Development of Southcentral's data services team

From 2003, Southcentral established a separate 18-person data services department and established four 'integrated information teams' that are paired with and work in partnership with the medical services, behavioural services, resource and development, and organisational development divisions. The teams are led by a programme analyst, who typically brings specific training and experience in managing information for their work area. They also bring together senior researchers who are able to support the teams in turning questions into analytical methodologies, and data analysts who are able to write code or queries to pull data out of Southcentral's datasets and systems.

### Electronic patient records

Southcentral's strategy has been to invest primarily in people with the necessary skills to bring together data from multiple sources and transform data into knowledge as a basis for improvement. However, it also made a small number of significant investments to improve its data management and IT infrastructure.

One of the most important has been Southcentral's and the Consortium's investment in 2011 in Cerner's electronic patient record. According to interviewees, Southcentral chose the system in part because it wanted a system would work well across all care platforms, from primary care to hospital services, and in part because it saw it as well designed to track use of resources in a meaningful way.

Interviewees explained that the new system makes it easier to complete patient records quickly to a high standard, for example, auto-filling vital signs, and past medical and social history. Doctors and nurses are able to use the system on their laptops, avoiding the need for any paper records even during home or office visits. The system also brings the data for primary care teams' populations into a single system, rather than having to pull data from multiple sources.

### Online health management tool

As part of the electronic record, Southcentral and the Consortium also introduced Cerner's online health management tool for service users. This allows service users to book and cancel primary care and hospital appointments online, see test results and communicate securely with their health care team. It also allows individuals to view their patient records.

### Southcentral's data mall

In 2008, the Data Services Department created Southcentral's 'data mall', an online portal that provides employees with access to a data warehouse showing a broad range of clinical and performance measures. The data mall presents clinical data extracted from Cerner's system and a small number of other systems for behavioural health and dentistry.

Through the data mall, the data services team provides reports for Southcentral at three levels: a set of monthly reports for the senior leadership team including a balanced scorecard, data on performance trends and data on variation between teams and individuals; a dashboard for individual primary care teams on their performance on key measures and how they compare to other teams; and displays for individuals showing how they compare to peers.

Most recently, Southcentral has invested in Cerner's population health management tool, HealtheIntent. Like the previous system, this brings together data on individuals' health and care from multiple sources. However, it makes it easier to manage individuals' and the population's health because it provides near real-time data rather than relying on the analysis of historical information.

### Figure 14 Southcentral's balanced scorecard – FY2015

Objectives	Measure	FY2015	(%)	Below Minimum (%)	Annual (%)	Stretch (%)
SR2	Overall rating of care (customer-owner satisfaction)	Q2	95	<92	92	95
SR1	Culturally respectful (customer-owner satisfaction)	Q2	94	<92	92	95
SR2	Recommended provider (customer–owner satisfaction)	Q2	95	<94	94	96
SR2	Input into my care decisions (customer-owner satisfaction)	Q2	96	<94	94	97
Operationa	l Effectiveness					
FMW2	Cervical cancer screening rate (with new HPV screen considered)	Q2	72	<72	72	77
FMW2	Colorectal cancer screening rate	Q2	63	<70	70	4
FMW3	PRIME-MD depression screening rate	Q2	85	<75	75	n/a
FMW5	Sbirt screening rate	Q2	77	<75	75	n/a
FMW6	Diabetics with A1C in poor control (lower is better)	Q2	24	>37	37	30
FMW6	Diabetics with LDL in control	Q2	44	<40	40	46
FMW6	Diabetics annual hba1c screening rate	Q2	93	<88	88	92
Workforce	Development					
CQ3	Percent of Alaska Native/ American Indian employees	Q2	56	<55	55	60
CQ3	Percent of Alaska Native/ American Indian hire	Q2	69	<59	60	62
CQ1	Total turnover rate (lower is better)	Q2	14	>14	14	10

#### Perspective: Customer-owner

### Proactive intervention and population health

The data mall provides a range of action lists for teams to help them manage population health and manage chronic conditions. There are specific listings showing the individuals who are due for screenings or tests, people who have been hospitalised in the last month, and people who are high users of particular services or medications. The system helps the primary care teams to engage proactively with their populations, for example, inviting customer–owners to complete any overdue tests when they visit the doctor for other matters, rather than calling them back to the clinic on a separate occasion.

Southcentral's data systems also allow it to identify at an earlier stage those service users who account for a large proportion of health care expenditure and require more intensive support. It updates its list of service users with the greatest health care needs on a weekly basis, using a range of metrics on their use of health care services and information on their conditions. Based on these lists, the primary care teams develop more detailed wellness care plans for customer–owners with high need.

Interviewees explained that high-quality data on high-risk groups and population health made it easier for general practitioners to delegate more routine tasks to nurses and other team members. For example, Southcentral's data systems make it easier for general practitioners to maintain a high-level overview of their populations, and to delegate routine screenings and chronic condition monitoring to colleagues.

HRCN	Patient	New Diabetic (< 90 Days)	Sex	Age	HBA1C Result	HBA1C Date	Most Recent LDL Result	LDL Date
Ko, Pa	tricia A Total	Diabetic F	Patient	:s: 47				
72048	Abbasi Darren	No	М	71	5.8	2009/01/13	67	2009/01/13
42457	Abell, Frederick	No	М	67	6.3	2009/03/06	86	2009/03/06
12916	Allen, Marcus	No	М	81	6.4	2008/06/03	129	2008/06/03
72098	Ar in eorge	10			JS	200 /12 01	90	0 8/12/01
1192	Bark, Samuel	No	М	85	6.9	2009/01/22	110	2009/01/22
45979	Bevis, Michael	No	М	76	5.7	2009/03/03	79	2009/03/09
32158	Black, Lewis	No	М	36	6.3	2009/03/09	116	2008/11/15
19202	Caldwell, Charlotte	No	F	80	5.8	2009/02/23	93	2009/02/23
84893	Evarza, Wallace	No	М	40	5.7	2008/06/24	113	2008/06/24
61328	Ferris, Adam	No	М	40	6.8	2009/02/12	86	2009/02/12
19492	Gafford, Joseph	No	М	41	6.3	2008/03/31	64	2008/03/31

### Use of data for benchmarking

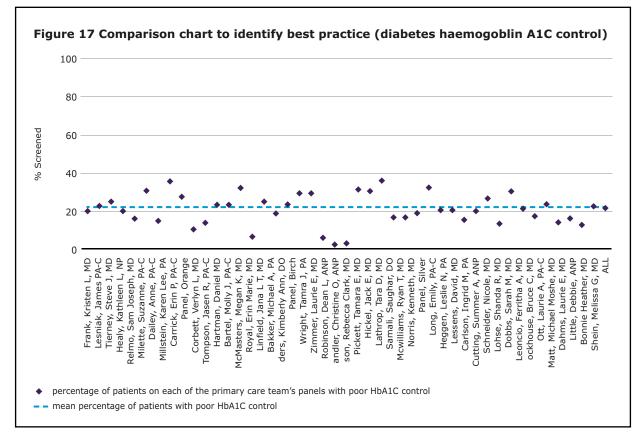
The dashboard for individual primary care teams shows their scores for a broad range of measures including screening and prevention for particular medical and behavioural health conditions, the effectiveness of the team's management of long-term conditions, and how it scores on measures of customer service such as the availability of appointments and whether customer–owners saw their designated doctor or team during recent visits. The dashboards show how the teams' scores compare to the Southcentral average, other US health systems and Southcentral's targets for each measure.

PROVIDER: Leonicio, Ferritha A, MD	Customers in panel: 973			ercentile marks			
HEDIS Measure Name	Provider Score	Below 50th	50th – 74th	75th – 90th	90th or above	Measure denominator	SCF score
Screening – breast cancer	73.2	<57.42	57.42	65.12	71.35	112	65.80
Screening – cervical cancer	79.7	<66.38	66.38	71.91	76.64	349	71.20
Screening – colorectal cancer	71.8	<64.36	64.36	69.65	74.39	149	64.00
Condition management – diabetes annual HbA1c	93.1	<83.87	83.87	87.59	91.73	29	92.90
Condition management – paediatric diabetes poor control	13.8	>44.77	44.77	36.52	30.28	29	21.60
Condition management – diabetes LDL<100mg/dL	48.3	>33.94	33.94	40.39	45.59	29	46.40
Condition management – diabetes LDL screening	100	<81.45	81.45	84.91	87.84	5	87.50
Condition management – cvd control <100mg/dL	60	<41.36	41.36	47.50	53.04	5	56.40

# Figure 16 Performance dashboard for individual primary care teams

PROVIDER: Leonicio, Ferritha A, MD	Customers in			
Non-HEDIS Measure Name	Provider Score	SCF Goal	Measure	SCF score
Screening – SBIRT	79.5	75.00	127	74.50
Screening – depression	85.8	75.00	127	82.10
Screening – ASQ less than 1 year	100	75.00	8	88.00
Screening – ASQ less than 2 years	100	75.00	5	76.80
Screening – paediatric BMI	75.5	73.72	102	79.40

In addition, the data mall provides charts for the primary care teams showing their performance in population health management and managing individual conditions. As shown below, these charts include snapshot comparisons between teams, with those to the left managing the largest volumes of customer–owners requiring the intervention, and those towards the top achieving the highest scores (*see* Figure 17). There are also charts showing performance over time against benchmarks. The primary care teams review how their performance compares with other teams on a weekly basis, and contact other teams to identify strategies to improve their performance where needed.



### A foundation for continuous improvement

As in other areas, Southcentral has invested heavily in employees, processes and systems to improve how it measures performance. Like its investments in human resources and improvement capability, the aim is to develop approaches that are consistent with its broader operating model and directly support it in delivering its mission and vision, for example through performance measures focusing on access, whether customer–owners are able to drive their own care and whether they are treated with dignity and respect as well as clinical outcomes.

Interviewees explained that one of the main benefits of the data mall was generating real-time data on performance. Southcentral can track performance on many measures on a daily or weekly basis. For example, it will know immediately whether a particular doctor or team has a low number of free appointments or received a large number of critical survey responses. This means that teams and individuals can take immediate action to improve performance, unlike many systems where the data is insufficiently granular or timely to do so.

Another main benefit is that Southcentral's staff can make clear comparisons between their performance and other teams and clinics. Given that the primary care teams are almost entirely responsible for care for their panels, it is possible to hold them directly responsible and accountable for performance. The teams display the main performance charts on the walls of their offices and review how they compare to others on a weekly basis. It is clear that being among the weakest performers provides a strong incentive to improve. The data also allows those who are doing less well to connect with the stronger performers and adopt good practice.

Southcentral's doctors and primary care teams receive an annual evaluation, which may adjust their merit pay by a percentage point or two. However, our impression was that good data, transparency and team members' desire to be strong performers, rather than financial incentives were the main reasons for improvement.

# **10** Recruitment, training and development

In the early 2000s, Southcentral's employee turnover was close to 30 per cent per year, and in some frontline roles as high as 40 per cent. It was probably reasonable to blame the weather, and Alaska's boom-and-bust seasonal economy, for at least some of this. It is much more common for people to move in and out of Anchorage and Alaska in summer and winter than in other parts of the United States. But the most common reason for leaving was to seek better career opportunities elsewhere.

### Improving hiring practices

Rapid staff turnover imposes huge costs for almost any organisation. For Southcentral, it risked undermining its efforts to establish new models of care. If the focus was on building lasting relationships between employees and the community, Southcentral needed to get much better at identifying people who might stay for the long haul – those who would enjoy working in its system and the lifestyle Alaska offers.

Over the last decade, Southcentral has made substantial changes to its recruitment practices, drawing in part on collaborations with the Institute for Healthcare Improvement to test alternative hiring processes and interviewing techniques. It rewrote its job descriptions so that they emphasised the vision and principles. It also introduced behaviourbased interviews focused on its workforce competencies: customer care and relationships; communication and teamwork; improvement and innovation; and workforce development skills.

Southcentral also rigorously checks candidates' backgrounds and accreditations. But interviewees explained that it spends more time understanding candidates' personalities and behaviours than technical skills, on the basis that it is harder to change employees' personal styles than to fill a gap in their technical skill sets.

In the early stages, individual departments advertised and interviewed candidates separately for new opportunities when vacancies arose. Candidates might apply for several different positions. Staff across Southcentral would race to interview candidates for different posts and the manager who reached a hiring decision first typically secured the employee. The strategy of filling vacancies when they arose contributed to staff shortages and a reliance on agency staff.

Southcentral replaced this with a committee-based interviewing model. Managers from different divisions are trained in behavioural interviewing and interview candidates together for categories of jobs that require similar skill sets. The interviewers make a broad assessment of the candidate's fit with Southcentral, his or her competencies and the roles for which he or she might be most suitable before making an offer. (Staff across the organisation need to have a lot of confidence in the recruitment system, since they don't meet the new recruits to their teams until they arrive for their orientation.)

Rather than recruiting to fill vacancies, Southcentral also now recruits on a rolling basis, irrespective of whether there are positions open, for positions with high numbers and predictable turnover. The aim is to over-hire by defined numbers for positions with high turnover such as administrative support and front desk roles. If there isn't a vacancy, Southcentral places recruits in temporary roles until a permanent opening arises. This has allowed it to ensure full staffing despite the time it takes to hire new recruits and the lengthy on-boarding processes discussed below.

### Career ladders

Southcentral introduced a second important set of changes in the mid-2000s to improve employee retention and manage workforce shortages. Over the period, it introduced structured career paths, or career ladders for employees across its frontline teams and supporting divisions, with a developmental process to help staff progress to the next stage. For example, general practitioners and nurse case managers can add skills and responsibilities in mentoring, quality assurance, and quality improvement, or take on leadership roles where they work with a number of primary care teams. The strategy helps Southcentral to motivate its employees and retain talent by offering structured opportunities for development and promotion.

The strategy supports Southcentral's objective of supporting the Alaska Native workforce. In addition, it makes it easier to manage staffing where there are national workforce shortages. If it is hard to find qualified candidates, Southcentral hires people with appropriate competencies and trains them through its career ladders to fill these roles.

### Training and development

Alongside these changes, Southcentral started to invest heavily from the early 2000s in training to help staff adapt to their new team-based roles. In the early days, the message from staff was that they were being thrown in at the deep end to sink or swim. So Southcentral invested in new training, for example for nurses to learn how to deliver their new care co-ordination functions.

Over time, however, it started to question whether resources spent on external training delivered value for money. First, the courses did not train employees to work within its model. For example, training for nurse case managers focused more on utilisation reviews and cost reduction than holistic care or population health. Second, they weren't designed to reinforce Southcentral's values and ethos. The courses brought together employees in their professional groups, reinforcing distinctions between groups and the stereotype of doctor as the driving force in healthcare teams, rather than promoting teamwork.

In light of this, Southcentral pooled all the small pots of money being spent on external courses and brought training in-house. Over time, it built a learning and development centre of 13 trainers and curriculum developers. Small teams from the centre partner with other divisions to identify their training needs and develop courses. Most of the training is now led by subject matter experts from within these divisions, with support from the development team. For example, the most successful doctors and nurse case managers lead training on how to work within the multidisciplinary primary care teams, typically keeping those teams together for training rather than separating out the professional groups.

As part of these changes, Southcentral has developed major internal training programmes for new employees to help them adapt to its model. Every new hire goes through a week-long orientation to learn about Southcentral's philosophy, ways of working, systems and processes, customer service and improvement methods, as well as Alaska Native people and their cultures. New staff spend time learning how to work in teams in a mock clinic and treatment rooms in the development centre. As part of Southcentral's Administrative Support Training programme, front desk staff spend a total of seven weeks in orientation and training before they start work in customer-facing roles. Once orientation is complete, these new hires then spend six to nine months in mentoring programmes to support their transition.

Southcentral has also now developed an annual re-orientation for all staff with online and manager-facilitated modules, ongoing training for its primary care and behavioural health teams, leadership and coaching programmes and courses on improvement methodologies, use of data and evaluation. Although in the minority, there is still a small number of courses targeted at individual professions such as nurse case managers and dental assistants, as well as technical training on clinical procedures.

It was clear from our interviewees that the most important component is Southcentral's three-day Core Concepts training, which reinforces its organisational philosophy, and focuses on developing the behaviours needed to deliver its mission and care model. Katherine Gottlieb leads this training every three months, highlighting its importance for Southcentral.

The inspiration came, perhaps surprisingly, from Southcentral's Family Wellness Warriors Initiative, which helps Alaska Native people to break patterns of domestic violence, child sexual abuse, and child neglect by telling their stories, learning how to establish healthier relationships and building community. Core Concepts applies a similar methodology to help employees build strong relationships with colleagues and customerowners through sharing their personal stories. It includes activities to help employees share and respond to stories and understand their motivations, have more meaningful conversations and manage conflict.

#### Growing leaders from within

When we asked Southcentral's leaders what kept them awake at night, almost all responded that a key concern was succession planning. A large number of Southcentral's current leadership joined the organisation in the mid to late 1990s, raising the possibility of a difficult transition when they start to move on. As we have suggested, Southcentral's success depends as much on its ethos and culture as the configuration of its primary care teams. So bringing in a new leadership team with a different value set might undermine the model.

Southcentral's investments in its human capital therefore include a number of leadership development programmes to help it grow leaders from within. There are: a foundations programme to help entry-level staff move into management positions; special programmes for

particular categories of staff to move into leadership roles, and an executive leadership experience programme, which aims to help Alaska Native employees prepare for vice president positions.

Southcentral's commitment to 'growing its own,' as well as its sense of its broader social purpose, is reflected in its RAISE programme of youth internships. It offers approximately 80 internship places each year that allow young people to explore careers in health care. There are summer and winter programmes for younger students from 14 to 18, which supports them in completing their high school education. There is also a programme for graduate interns with a focus on personal and professional skills for the workplace.

Both programmes help bring Alaska Native youth into Southcentral's workforce, and many are now longstanding employees in leadership roles. They also contribute to Southcentral's broader social objectives. According to Southcentral's Vice President of Executive and Tribal Services, Ileen Sylvester, the programmes provide a way of building young people's self-confidence and ambition, while pulling them into their community. On our visit, we overheard interns discussing the programme with clinicians from the hospital over lunch. One explained that she might be CEO of Southcentral one day.

According to interviewees, Southcentral now spends much more than comparable primary care organisations in the United States on recruitment, training and development. In some cases, it is possible to demonstrate a clear return on investment, for example a drop in employee turnover from 30 per cent in the early 2000s to 13 per cent in 2015. However, many of the benefits are less easy to measure. Michelle Tierney explained that the investments in employee development had helped to create a common language throughout the organisation, as well as reinforcing the behaviours and ways of working that make Southcentral's team-based model a success.

# **11** Creating an improvement culture

As part of its investments in its workforce, Southcentral has focused on developing capabilities and a culture across the organisation that support continuous improvement. The focus on improvement and innovation is evident in job descriptions, the behavioural interviewing questions for new hires, teams' and individuals' objectives, and performance appraisal.

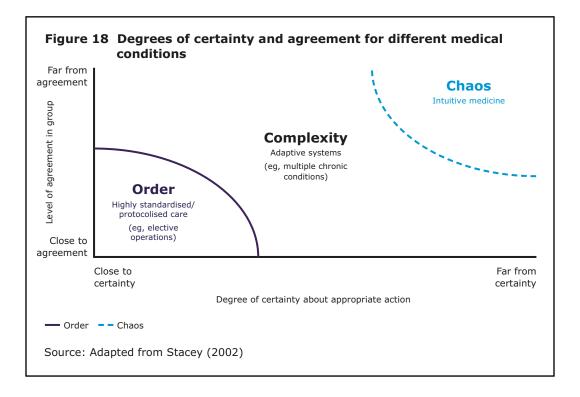
As discussed above, improvement and innovation is one of the four competencies that employees across Southcentral are expected to demonstrate. Every employee is required to be familiar with basic quality improvement methods and to apply them in their work. The aim is to ensure that staff at all levels are committed to and participate in improvement, rather than relying on a small number of people with quality improvement skills to deliver change.

Southcentral provides an initial introduction to improvement methods and processes in its new-hire orientation and reinforces its importance in its annual re-orientation for all staff. There are also a number of in-house training workshops on improvement tools, quality management and use of data.

Over the past decade, Southcentral developed an improvement team of 20 improvement advisers and improvement specialists, placed within the Organizational and Innovation Division, whose role is to sit within and support the frontline teams in delivering improvement projects.

Rather than leading improvement efforts, the team spends most of its time supporting other divisions in delivering improvement projects. For example, it helps divisions to monitor performance and identify improvement opportunities, define objectives and present proposals for projects to Southcentral's functional committees. It also helps the divisions carry out Plan-Do-Study-Act cycles, use particular improvement methods and measure the impact of initiatives.

It was clear from our interviews that Southcentral has adopted a different approach to improvement to other high-performing health systems, in particular hospital systems that have focused on standardising treatment pathways. Southcentral has Lean experts. However, interviewees emphasised their interest in Complex Adaptive System Theory, including the roles of conversation, curiosity, and adaptation in improving quality within complex environments.



At its heart, this reflects a difference of view on the nature of the chronic diseases that account for most primary care activity, including the degree of consensus about how to treat them, the degree of certainty about appropriate treatments and the degree of variation between people with these diseases.

Outside Southcentral, a prevailing view is that chronic conditions such as diabetes or asthma join simple operations in the bucket of wellunderstood, highly predictable diseases that are amenable to highly standardised care.

Southcentral questions both the degree of certainty and the level of agreement among the key decision-makers about the appropriate course of action. Even if doctors agree on the treatment, the real challenge is to persuade individuals, each with different priorities and perspectives, to make different choices in their daily lives. If opinions diverge and there is little certainty about the preferred approach, the focus should be on developing adaptive systems rather than a carefully calibrated production line (*see* Figure 11 and Plsek and Wilson 2001).

Reflecting this philosophy, Southcentral focuses less than other wellknown health care systems, most of which are hospital-based, on standardising treatment pathways. It establishes clinical guidelines to help doctors and nurses act as good advisers, but part of its approach is not to encourage teams to be rigid in how they respond to individuals' needs.

Instead, its approach has focused more on training its doctors, nurses, behavioural health consultants and other staff to solve problems together within an 'adaptive system', accepting that individuals are different even if their conditions are the same. The emphasis is on experimentation, dialogue, teamwork and multidisciplinary problem-solving rather than standardisation.

A second significant difference between Southcentral and some other systems is the improvement effort applied to its internal systems, processes and supporting infrastructure, as well as to how frontline care is delivered. In our interviews, employees gave examples of improvements to HR processes, projects to redesign directorate structures, changes to internal planning processes and new methods of measuring employee satisfaction.

# **12** Reflections for the English NHS

Over three decades, Southcentral has transformed health care for Alaska Native people from among the worst in the United States to among the best in the world. It now scores within the 75th percentile for US providers for 75 per cent of the Healthcare Effectiveness Data and Information Set (HEDIS) measures, despite serving a population with high complexity, social challenges and overall need. It is in the 90th or the 95th percentile for many measures such as diabetes testing, asthma-appropriate medications, tobacco screening and quit rates.

Southcentral's redesign of primary care has allowed it to move from fourweek waits to same-day appointments while reducing the proportion of doctors and nurses per head of population. It succeeded in eliminating a backlog of more than 1,000 patients for behavioural health programmes in a year. Customer and employee satisfaction is above 90 per cent.

Southcentral achieved these improvements under the same funding arrangements as the previous government-run system and has sustained them. The benefits have cascaded through the system: for example, a 23 per cent decrease in accident and emergency attendance and urgent care visits between 2008 and 2015. Quality is up, and costs are down, customer and staff satisfaction are high, while staff turnover is low: the 'holy grail' for the NHS and most other health systems.

### Freedom to redesign

For policy-makers in the NHS, Southcentral provides an example of the benefits of bringing the funding for a broad range of primary, community and mental health services within a single budget, so that resources can be targeted where they will have the greatest impact.

Southcentral would argue that it demonstrates the advantages of bringing primary, community and mental health services within a single organisation. It is difficult to envisage Southcentral achieving such close integration of services, including substantial changes to the roles of doctors and nurses in its primary care teams, if each of those groups sat within separate organisations with their own management structures, service specifications and employment contracts.

Southcentral is largely an illustration of the benefits of redesigning primary and community care. However, it also highlights the benefits of developing close partnerships between primary care teams and hospital specialists within a clearly defined, place-based system of care, supported by common governance and simple arrangements to pool budgets and share cost savings.

### Local governance

Southcentral provides a powerful illustration of what local leaders and communities can achieve when given the freedom to redesign services, unencumbered by payment systems, targets or inspection regimes that determine priorities and limit their discretion. Of course, we have tried 'trusting the professionals' before in the NHS. Block grants without performance management delivered, arguably, worse outcomes than 'targets and terror'. Southcentral's success appears to hinge on the commitment of its leadership team and the strong links they have built with their community. These arrangements now appear able to provide effective governance without the need for central or local government, commissioners or regulators to act as patients' intermediaries.

It remains unclear whether we could engineer comparable relationships between local NHS systems and their communities. There are particular reasons why Southcentral has been able to build such strong links with its population. The NHS's experiments in strengthening patients' influence over foundation trusts may have delivered some benefits, but far from comparable success. Nevertheless, a small number of commissioners and foundation trusts have succeeded in building a higher degree of trust within their communities. Some of the new NHS social enterprises have built a strong sense of shared ownership among staff and the community (Ham 2014b).

### Intentional whole health system redesign

Southcentral is still probably best known for a small number of initiatives: in particular its approach to changing the doctor-patient relationship and its redesign of the roles of doctors, nurses and other staff within a variant of the 'patient-centred medical home'. A temptation might be to attempt to 'drag and drop' these or other attractive features of Southcentral's system into our projects for new NHS care models and hope for comparable results.

This case study has implicitly argued that NHS leaders need to view Southcentral's transformation in the round, reflecting on its transformation journey as much as the end state, and the importance of its vision, principles, planning processes and supporting infrastructure as much as the operating model for delivering frontline services.

Southcentral's leaders present a particularly orderly process for, as they put it, 'intentional whole-system redesign': engagement with the community leading to a clear set of objectives and principles for transformation, which in turn informs the development of a compelling operating model, and then drives all further decisions.

For NHS leaders, the notion that they might take a year or more to consult with their communities, and then more time refining objectives and reflecting on operating principles, might seem fanciful. Never before have we been so hungry for quick results. Southcentral would argue that these investments establish the foundation for successful transformation and that skimping is a recipe for failure. Other research consistently highlights the importance of investing in a shared vision, clear objectives and a 'constitution' to support collective action and resolve conflicts within local systems (Ostrom 1991, Ham and Alderwick 2015).

These upfront investments, coupled with stable senior leadership, appear to have helped Southcentral develop a highly coherent operating model. Drawing on its operating principles, it developed a model for primary care services based on facilitating access, building relationships, and generalist, multidisciplinary primary care teams. Over time, it has extended the model to other services and functions. It introduced sameday decision-making within internal processes, mirroring same-day access in primary care. It emphasises relationships and has established multidisciplinary teams in its behavioural health, dental, human resources, data services and improvement departments, among others, mirroring the model developed in primary care.

The result is a peculiarly consistent organisation, with a single operating model that runs through its frontline services and supporting functions. Staff have a clear sense of how they do things, drawing on the same principles and behaviours in a coherent system. This is in stark contrast with many health care providers that, at least according to some observers, attempt to hold together multiple, discordant models, leading to confused institutions (Christensen 2009).

### Establishing partnerships and seeking inspiration

Like other highly innovative organisations, Southcentral sought inspiration from a broad range of sources throughout its improvement journey. Southcentral's leaders emphasise the importance of listening carefully to tribal elders and the Alaska Native community and the influence this has had on its model. Southcentral has maintained a longstanding partnership with the Institute for Healthcare Improvement over the past 20 years, participating in collaboratives and learning communities, and establishing closer links, through the Institute, with leading health care organisations. In particular, interviewees highlighted the value of working with a community of sister organisations as part of the Institute's triple aim initiative. Southcentral's leaders also emphasise the importance of participating in the Baldrige Excellence Program, which provided a framework for its improvement efforts and has helped to raise health care organisations' understanding of the system-wide investment needed to sustain high performance.

#### Sustained effort across multiple dimensions

An underlying point is that Southcentral's success cannot be attributed to a single part of the system. According to Southcentral, modern medicine makes the same mistakes in pursuing excellence as it makes in delivering health services: assuming that carefully designed delivery systems coupled with data and measurement will in themselves deliver substantial improvements. For Southcentral, this is why so many attempts to replicate successful models, typically by copying the most obvious elements, fail to have the expected impact, peter out over time, or collapse when applied at scale.

Instead, Southcentral's message is that it requires continued effort across multiple dimensions to sustain a high-performing health care organisation at scale and over time: vision, values, culture and behaviours, listening to the customer, the operating model for services, supporting infrastructure and investment in the workforce.

Southcentral demonstrates the benefits of developing a compelling vision and principles to guide an organisation. Staff across Southcentral work together towards a clear set of objectives, drawing on established

principles that provide a frame of reference for their daily work. However, it also illustrates the senior leadership time, workforce development and communication needed to establish vision, values and principles in a meaningful way – as opposed to merely devising a vision statement or publicising a set of desired behaviours.

Southcentral also shows the importance of substantial investments in the supporting functions, systems and processes that underpin the delivery of health care services. Over 17 years, Southcentral has built substantial capability in human resources, data analytics, performance benchmarking, training and development, and service improvement. Its improvement efforts have focused as much on these supporting functions as on frontline care, for example, its initiatives to redesign recruitment practices, establish career ladders and collect real-time data on customer satisfaction.

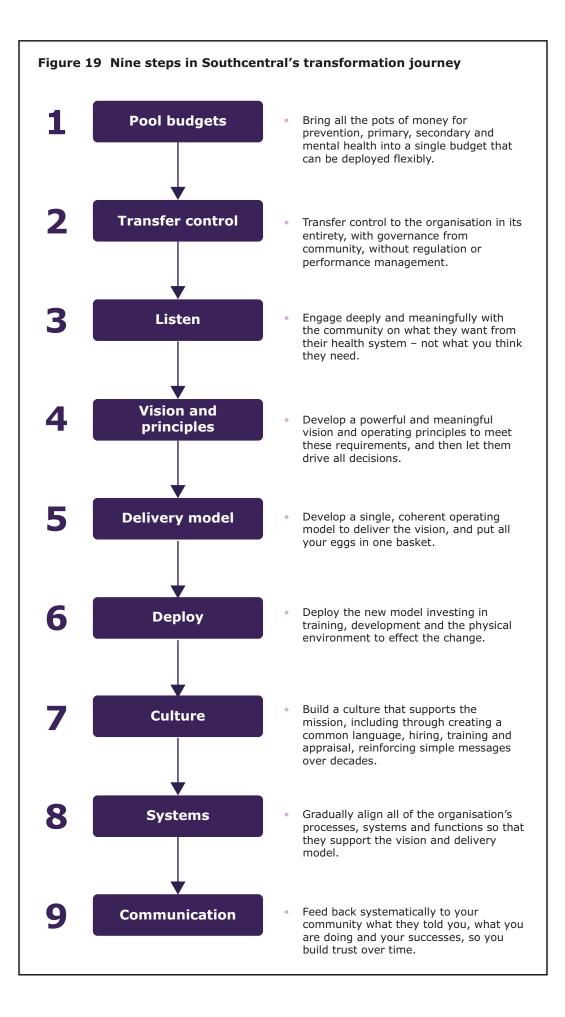
### Investment in the workforce

One result of these investments is an organisation that brings together a range of capabilities that could not easily be found in primary or community care in the NHS: large human resources and data analytics teams; experts in running improvement projects; staff with expertise in designing systems and processes; curriculum developers for in-house training; and graphic designers and a videographer to help tell the story to staff and the community. The message is that it takes more than doctors and nurses to sustain a high-performing health system. For Southcentral, these are core competencies that need to be developed in-house, rather than peripheral activities that can be outsourced to external suppliers.

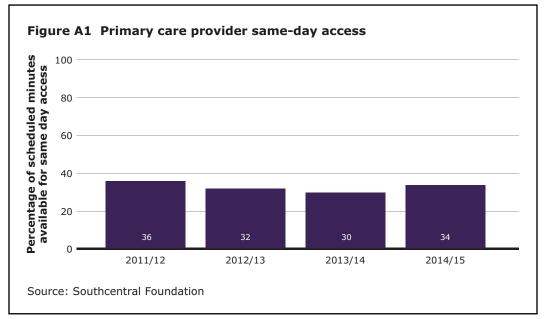
Like many other high-performing health care systems – Jönköping in Sweden, Canterbury in New Zealand, Intermountain in the United States and others – Southcentral demonstrates the benefits of significant and sustained investments in the workforce. According to interviewees, Southcentral spends much more than comparable US primary or community care providers on workforce development, so that staff across the organisation have the tools to work within the model and are able to contribute to continuous improvement.

Finally, Southcentral has adopted a set of management practices that help to maintain a highly engaged workforce. Other research has shown that employees are more committed to their organisations and engaged in their roles if they trust their leaders, have a clear sense of direction, have a voice in the organisation, can contribute to improvement and see opportunities for development (Ham 2014b).

For doctors, nurses and other staff in the NHS, it is worth noting that – despite some challenges during the transition – employees at Southcentral now appear to be universally happier working in the reformed system. None of the many doctors and nurses we spoke to would contemplate returning to siloed working within small, separate practices and clinics. Communities also appear to be healthier and happier when health care professionals work together in well-structured teams and within a coherent system of care.



# Appendix: Outcomes for patients and staff



Access to primary care services

	Combined 's	trongly agree' an	d `slightly agre	e' for the followi	ng questions
	'The employees in the programme / clinic were courteous' (%)	'I was involved in the decisions about my care' (%)	'I would recommend my provider to family and friends' (%)		'Overall, I am satisfied with my visit' (%)
2014/15	98	96	95	94	96
2013/14	98	96	95	94	97
2012/13	97	95	94	92	95

	scored from 1 to 5*		
Year	Workforce engagement indicator	`I get the training I need to do a good job'	'I understand the mission and values'
2003	3.83	3.63	4.31
2005	3.91	3.74	4.32
2007	3.92	3.77	3.87
2009	4.07	3.91	4.43
2010	4.07	3.92	4.33
2011	4.17	3.99	4.47
2012	4.18	4.04	4.60
2013	4.14	4.05	4.54
2014	4.11	4.01	4.50
2015	4.22	4.03	4.49

# Table A2 Employee engagement and satisfaction,scored from 1 to 5\*

\*Southcentral asks employees to give scores from 1 to 5 in its employee satisfaction survey, with higher scores indicating higher levels of satisfaction or engagement. Southcentral creates its workforce engagement indicator by averaging employees' scores in response to six statements:

'I am proud to tell people I work for this organisation.'

'I would stay with this organisation if offered a similar job elsewhere.'

'I would recommend this organisation to family and friends who need care.'

'I would like to be working at this organisation three years from now.'

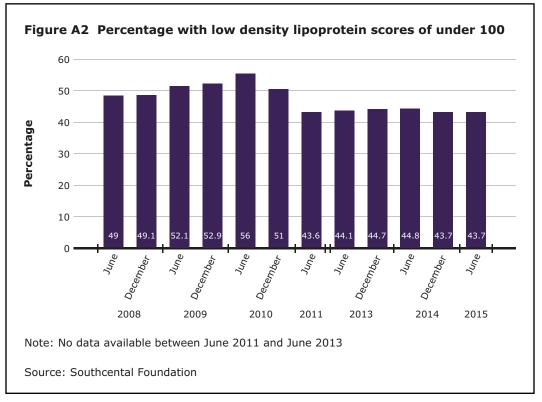
'I would recommend this organisation as a good place to work.'

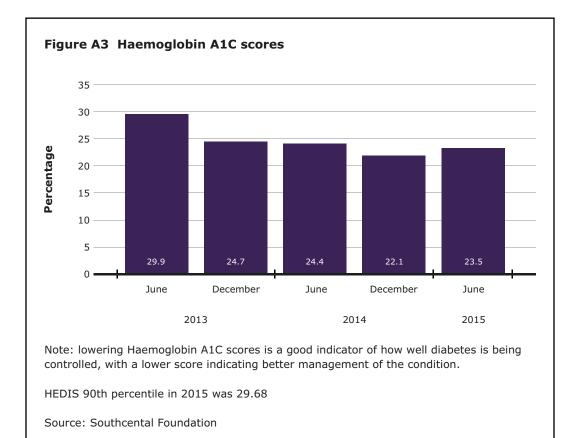
'Overall, I am a satisfied employee.'

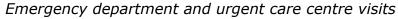
Source: Southcentral Foundation

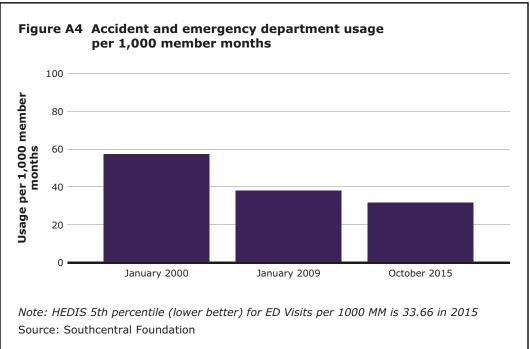
## Table A3 Employee turnover

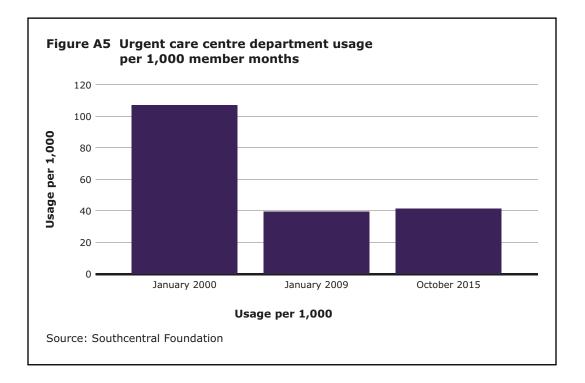
28.2 26.2 19.6
19.6
17.4
13.9
11.6
13.8
14.0
13.5

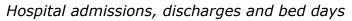


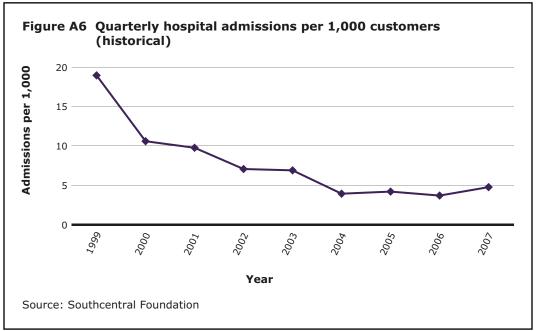


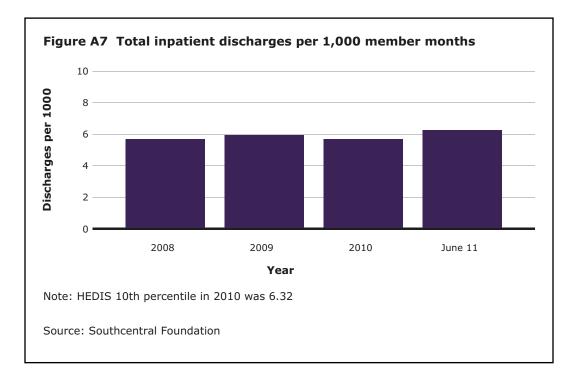


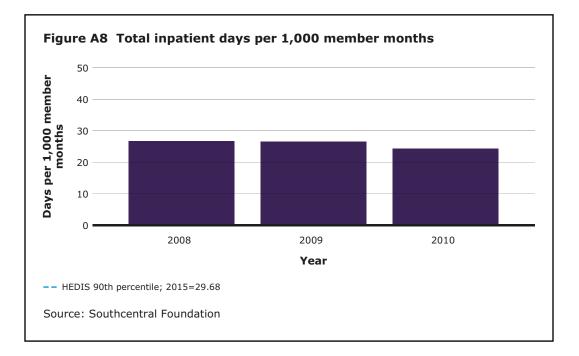


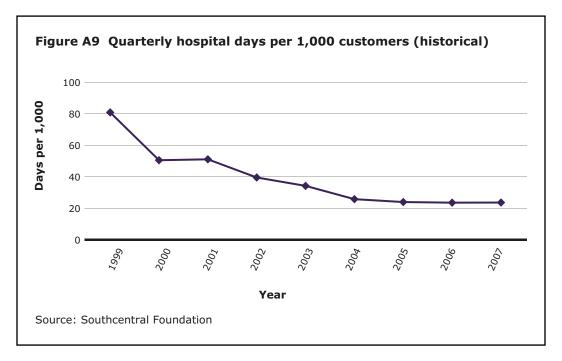












### References

Baldrige Performance Excellence Program (2015). *Baldrige Excellence Framework: a systems approach to improving your organization's performance.* National Institute of Standards and Technology, United States Department of Commerce.

Christensen C (2009). *The innovator's prescription: A disruptive solution for healthcare*. New York: McGraw-Hill.

Collins J (1994). *Built to last: successful habits of visionary companies.* Harper Business.

Deming WE (1986). *Out of the crisis*. Cambridge, MA: Massuchusetts Institute of Technology, Center for Applied Engineering Study.

Fisher E, Staiger D, Bynum J, Gottlieb C (2007). '*Creating an accountable care organization: the extended hospital medical staff*'. *Health Affairs*, vol 26. Available at: http://content.healthaffairs.org/ content/26/1/w44.abstract (accessed on 13 October 2015).

Gottlieb K (2013). 'The Nuka System of Care: improving health through ownership and relationships'. *Journal of Circumpolar Health,* vol 72. Available at: www.circumpolarhealthjournal.net/index.php/ijch/article/ view/21118 (accessed on 13 October 2015).

Gottlieb K, Sylvester I, Eby D (2008). 'Transforming your practice: what matters most'. *Family Practice Management*, vol 15, no 1, pp 32–8.

Ham C (2014a). *Reforming the NHS from within: beyond hierarchy, inspection and markets.* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/reforming-nhs-within (accessed on 8 October 2015).

Ham C (2014b). *Review of staff engagement and empowerment in the NHS: improving NHS care by engaging staff and devolving decisionmaking.* London: The King's Fund. Available at: www.kingsfund.org.uk/ publications/articles/improving-nhs-care-engaging-staff-and-devolvingdecision-making (accessed on 8 October 2015).

Ham C, Alderwick H (2015). *Place-based systems of care: a way forward for the NHS in England*. London: The King's Fund. Available at: www. kingsfund.org.uk/publications/place-based-systems-care (accessed on 13 November 2015).

Kelley M, Tucci J (2001). 'Bridging the quality chasm: to improve health care we need to understand the motivations of those who work in it'. *British Medical Journal*, vol 323, no 7315. Available at: www.ncbi.nlm. nih.gov/pmc/articles/PMC1121291/ (accessed on 6 October 2015).

NHS England, Care Quality Commission, Health Education England, Monitor, NHS Trust Development Authority, Public Health England (2014). *NHS five year forward view* [online]. London: NHS England. Available at: www.england.nhs.uk/ourwork/futurenhs/ (accessed on 8 October 2015).

Ostrom E (1991). *Governing the commons: the evolution of institutions for collective action.* Cambridge: Cambridge University Press.

Plsek P, Wilson T (2001). 'Complexity, leadership and management in healthcare organisations'. *British Medical Journal*, vol 323, no 7315, pp 746–9. Available at: www.ncbi.nlm.nih.gov/pmc/articles/PMC1121291/ (accessed on 6 October 2015).

Stacey R (2002). *Strategic management and organisational dynamics: the challenge of complexity*. Harlow: Prentice Hall.