

Allan Brooking NHS Travel Fellowship

Report to the Board of Trustees

Above and Beyond Charities

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1. Background and Proposal

East Lancashire PCT serves the residents of 5 boroughs of Burnley, Hyndburn, Pendle, Ribbles Valley and Rossendale, a population of 382,000 in total. With the exception of the Ribbles Valley, the other areas have substantial elements of urban deprivation with generally poor health experiences. These areas tend to have some of the greatest health needs, plus social and economic deprivation in the North West of England and the Country. East Lancashire has a stable but increasingly diverse society with an average BEM of 8 / 10% ranging from 0% to 70%.

Two key values of the PCT are to deliver high quality services effectively and equitably and engage with local populations to improve health and well being. This month, the results of the national Patient Satisfaction survey clearly show that patients who were young, from deprived areas, from black or minority groups or from urban areas were less satisfied with GP access.

The USA's reputation for quality of service is legendary and customer service is ingrained in their culture. The standard of clinical care offered by primary care physicians is enhanced by their impressive clinical knowledge achieved through quality management and training.

The **Institute of Healthcare Improvement (IHI)**, based in Cambridge, Massachusetts, is a not-for-profit organization leading the improvement of health care throughout the world. IHI undertakes programmes to improve the lives of patients and the health of communities.

Cambridge Health Alliance (CHA) is an innovative, award-winning health system that provides high quality care in Cambridge, Somerville, and Boston's metro-north communities. It includes three hospital campuses and more than 20 primary care facilities. They have been heavily involved with the Pursuing Perfection initiative run by the IHI.

The **Bureau of Primary Health Care (BPHC)**, based in Rockville, Maryland, funds programs to help provide high quality, comprehensive primary care developed and implemented at the community level through strengthened community partnerships. The Quality Center, part of the BPHC, provides a co-ordinating point for quality orientated activities aiming to improve individual patient health and improve the health status of the entire community. BPHC run health centres which are community based providers of comprehensive primary and preventative health care for the medically underserved and vulnerable populations.

The BPHC is part of Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services.

1.1 Learning Objectives

1. To visit the Institute of Healthcare Improvement and the Cambridge Health Alliance to discuss and examine the quality improvement and management programmes they are running and determine reasons for their continued success.
2. To visit the Bureau of Primary Health Care to discuss and examine the quality improvement and management systems they have in place to ensure quality primary health care to vulnerable or disadvantaged people. Also to examine how they ensure equitable accessibility to primary care services.
3. To visit primary health centres to see the quality improvement and management systems in place and to talk to staff about how they view the quality of services provided. The chosen health centres provide quality health services for disadvantaged people or are recognised as excelling in providing high quality health services and who are or have been involved in quality improvement programmes.
4. Examine how quality improvement schemes underpin governance processes that can 'measure' what is being delivered, and then demonstrate what is being achieved as outcomes from that delivery.

1.2 Intended Outcomes

1. To enhance my knowledge of primary health care facilities in the USA.
2. To gather information on implementing quality improvement and management programmes and improving access to primary health care facilities.
3. To contribute to improvements in quality and management programmes within the PCT.
4. To share this information within the Fellowship and the wider NHS arena.

2. Outcomes

2.1 Institute of Healthcare Improvement (IHI)

The IHI helps to lead the improvement of healthcare throughout the world. It works to accelerate improvement by building the will for change, cultivating promising concepts for improving patient care, and helping health care systems put those ideas into action.

The IHI aim to improve the lives patients, the health of communities, and the joy of the healthcare workforce by focusing on an ambitious set of goals adapted from the Institute of Medicine (IOM) six improvement aims for the health care system – care is safe, effective, patient-centred, timely, efficient, and equitable.

During my stay in Boston, I visited the IHI for two days, participating in a variety of interviews, conference calls and meetings. There were six main programmes of work that I was introduced to during my stay.

2.1.1. Redesigning Office Practice – link to primary care access

Clinical office practice should be the primary point of connection to the health care system for most patients, but it can be a challenge for some practices to provide well-coordinated care that addresses patients needs and wants. Patient experience must be put at the centre of any redesign effort. This means that every patient:

- Receives safe and reliable care based on clinical evidence
- Knows their physician and care team and vice versa
- Has a plan for their care that is based on what is important from their perspective, supported in the self-management of their health conditions
- Can request an appointment or service without delay
- Can easily obtain information when needed
- Knows that someone from their care team will be their guide when they need care from multiple providers and settings.

This system focuses on the following ‘tracks’ that will bring together teams who are working on common changes in their practice:

- Improving access to appointments, information and speciality care without delays
- Reducing waste and improving efficiency
- Improving the delivery of patient centred, planned care (care that meets the needs of the patients in a proactive way) by focusing on patients with multiple and / or complex chronic conditions such as heart failure, chronic obstructive pulmonary disease (COPD), depression and diabetes, etc.

The overall goal of the community is that the patients will receive the care they want and need, when and how they want and need it. Progress toward aims will be measured using indicators such as:

- Increase by 50% the percentage of patients who are confident that they can manage their health own condition
- Reduce delays for an appointment in primary care to within one day, as measured by the third next available appointment

- Reduce delays for an appointment with specialists to within 7 days, as measured by third next available appointment
- Increase by 50% the percentage of patients receiving evidence based care for their health or condition.

Three strategies for improving patient access are:

- **Shape Demand:** Improving access is all about increasing the ability of the system to predict and absorb demand (patients' requests for care). Reducing the amount of demand makes it easier for the system to absorb current or future levels of demand.
- **Match Supply and Demand:** To improve access, clinics should balance supply and demand. If the demand is greater than supply, there is a delay in providing care. If the supply is greater than demand, then resources are being wasted. When supply and demand are matched, there is no delay in providing care.
- **Redesign the System:** One way to increase a clinic's ability to absorb more demand is to make the clinic more efficient. If an appointment now takes 45 minutes, but can be redesigned to take 20 minutes, then more patients can be seen on a given day. This doesn't necessarily mean working faster, but working smarter. It doesn't mean less time with patients; it means more quality time with patients.

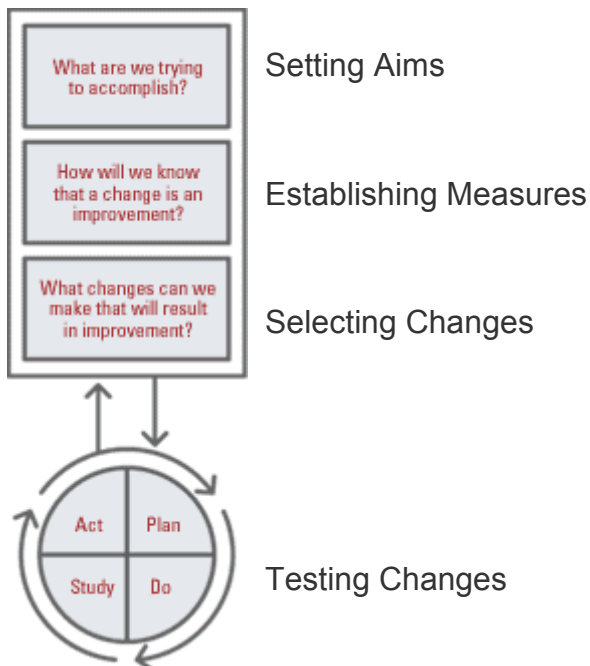
Although the strategies are not arranged in a sequential order, most clinics find it useful to do the following:

- Know the extent of access delays
- Begin working down the backlog of appointments
- Match supply and demand by reducing or shaping demand and redesigning the system to increase supply.

Many health care organizations have used the 'Model for Improvement'. It does not replace change models that are already being used but accelerates improvements.

The model has two parts:

- Three fundamental questions, which can be addressed in any order:
What are we trying to accomplish?
How will we know what change is an improvement?
What changes can we make that will result in improvement?
- The Plan-Do-Study-Act (PDSA) cycle to test and implement changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement.



Including the right people on a process improvement team is critical to a successful improvement effort. Teams vary in size and composition and each organization should build teams to suit its own needs.

Moving towards a system of improved access in a health care organization is not just the job of a physician, nurse, or medical staff — it is everyone's job. And "everyone" does not mean only clinical personnel, but anyone who interacts with patients or has a role in any medication process. It is therefore absolutely essential that these efforts be led by a multidisciplinary core team.

Examples of Effective Teams

Effective teams include members representing three different kinds of expertise within the organization: system leadership, technical expertise, and day-to-day leadership. There may be one or more individuals on the team with each kind of expertise, or one individual may have expertise in more than one area, but all three areas should be represented in order to drive improvement successfully.

System Leadership

Teams need someone with enough authority in the organization to institute a change that has been suggested and to overcome barriers that arise. The team's system leader understands both the implications of the proposed change for various parts of the system and the more remote consequences such a change might trigger. It is important that this person have authority in all of the areas that are affected by the change. This person must have the authority to allocate the time and resources the team needs to achieve its aim.

Clinical Technical Expertise

A technical expert is someone who knows the subject intimately and who understands the processes of care. An expert on improvement methods can provide additional technical support by helping the team determine what to measure, assisting in design of simple, effective measurement tools, and providing guidance on collection, interpretation, and display of data.

Day-to-Day Leadership

A day-to-day leader is the driver of the project, assuring that tests are implemented and overseeing data collection. It is important that this person understands not only the details of the system, but also the various effects of making change(s) in the system. This person also needs to be able to work effectively with the physician champion(s).

Redesigning office practice must be driven from the top down and bottom up and will only be sustained if leadership driven. There must be good communications and a mutual desire to achieve goals. Identify strong leadership and 'get rid' of those not on board.

2.1.2. IHI and the Indian Health Service – Chronic Conditions Initiative – Innovations in Planned Care (IPC)

The aim of this project is to implement strategies within the Indian health system (federal, tribal and urban health programs) that support community and individual wellness, beyond outcomes, and strength. This initiative supports other innovative efforts that address prevention and treatment of chronic illness. Focussing on prevention and management of chronic conditions, health status will be improved and the prevalence of such conditions will be reduced. This will be measured through patient experience, costs, management of chronic conditions and clinical prevention.

The Innovations in Planned Care (IPC) for the Indian health system is the strategy of organised performance improvement to be used to test and implement innovative changes in the delivery of chronic illness care. Initially tested at pilot sites, the expectation was that they would share lessons learned throughout the Indian health system. Leadership was activated at all levels of the Indian health service to support the redesign of chronic illness care using chronic care management.

IPC measures include a variety of areas of focus for each domain, with an identified core measure and goal. E.g. Management and Prevention of Chronic Conditions, Obesity, nutrition education for at risk populations, goal = 60%. One measure examined patient experience and access to primary care. The core measure was the third next available appointment with the goal of getting an appointment the same week. In some areas, patients were having to wait three to four months for an appointment and as a result attended the emergency room rather than wait. Supply and demand was assessed and the IHI worked with primary care facilities to identify waste in systems to improve access to appointments. This included identifying the roles of practitioners, rooms and facilities available, appointment schedules and also at the option of 'max-packing'.

Max-packing aims to co-ordinate care for each individual so that on one visit they can receive the necessary screening, immunisations, assessments and treatments so that they are not having to book or wait for another appointment.

Fourteen IPC sites were initially identified and in phase II, 40 sites were identified. The IHI has facilitated the program, with the ultimate aim of putting systems and processes in place to enable the sites to support themselves.

To enhance improvement capability within these sites, the IHI sought to build the infrastructure to learn how to improve and execute change and to ensure that the sites were prepared to take the program forward once the IHI 'step out'. This included establishing regional Improvement Support Teams.

Progress towards improvement is supported through oversight and support structures, training and skills development for leaders and staff supporting the initiative and ongoing transfer of knowledge, skills, mentoring and role modelling in partnership with IHI staff. A plan has been developed to rapidly spread learning from pilot sites to all the desired sites in the Indian health service. By 2010, it is anticipated that this national collaborative will be for over 200 plus sites supported by a regional infrastructure, and extended to remaining sites by 2011.

Success of the initiative will be measured through:

- Chronic Conditions Initiative : functional status, improvement in patient and family experience
- Spread : number of sites participating, percentage of patients empowered, leadership engagement and involvement
- Innovations in Planned Care measures : to be expanded to include bundled outcomes, medication and other chronic conditions and expansion of screening to include follow-up and treatment.

2.1.3. *The Triple Aim Initiative*

This is a model to achieve transformational results that achieve the optimal balance of good health, positive patient experience of care, and low per capital cost for a population.

Operational definitions:

- Patient experience: from patient survey
- Population health: physical health status score and mental health status score of a system's patient population. Functional health is assessed e.g. by functional health survey (see www.ihl.org)
- Per capita cost: total of health care expenditures for a group of people who live in a defined geographic area or are part of a defined population.

The three dimensions of care pull on the health care system from different directions. Changing any one of the three has consequences for the other two, either in the same or different directions e.g. improving health can raise costs. The goal of Triple Aim is to optimise performance on all three dimensions of care, recognising the dynamics of each dimension while seeking the intersection of best performance on all three.

The Primary Care Trust (PCT) must act as a macro-integrator. This is an entity whose purpose is to achieve high level of performance in all three components and 'has an organisation structure and management process which ensures care and services can be delivered'. The simplest such form has fully integrated financing and either full ownership or of exclusive relationships with delivery structures. The integrator is a single organisation that can induce coordinative behaviour among health service suppliers to work as a system for a defined population.

The five components of a system that would fulfil the Triple Aim are:

1. Partnership with individuals and families

- For medically and socially complex patients, establish partnerships among individuals, families and caregivers, including identifying a family member or friend who will be supported and developed to coordinate services among multiple providers of care.
- Jointly plan and customize care at the level of the individual targeted to the best feasible outcomes.
- Actively learn from the patient and family to inform work for the population.
- Enable individuals and families to better manage their own health.

Pursuit of the Triple Aim requires that the population served become better informed about determinants of their own health status and the benefits and limitations of individual health care practices and procedures. An effective integrator should work persistently to change the 'more is better' culture through transparency, systematic education, communication, and shared decision making with patients and communities. Many members of the population, especially those with chronic illnesses, will need someone who can work with them to establish a plan for their ongoing care, guide them through the technological jungle of acute care and advocate and interpret for them.

2. Redesign of "primary care" services and structures

- Deliberately build an access platform for maximum flexibility to provide customized health care for the needs of patients, families, and providers.
- Cooperate and coordinate with other specialties, hospitals, and community services related to health.

The expanded role of the physicians include establishing long term relationships between patients and their primary care team, developing shared plans of care, co-ordinating care including sub-specialists and hospitals, and provide innovative access to services through improved scheduling, connection to community resources and new means of communications among individuals, families, and the primary care team facilitated by a patient controlled personalised health care record. The integrator would assume responsibility for building the capacity and infrastructure to enable primary care practices to function in this expanded role.

3. Population health management

- Efficiently customize services based on appropriate segmentation of the population using a health risk assessment tool or equivalent.
- Use predictive models that take into account situational factors and medical history to deploy resources to high-risk individuals.
- Work with the community to strongly advocate for smoking prevention, healthy eating, exercise, and reduction of substance abuse.
- Set and execute strategic initiatives related to reducing inequitable variation in outcomes or undesirable variation in practice.

Efficient and equitable resource allocation will be achieved through segmentation of the population. The actual causes of mortality lie in behaviour that the health care system addresses unreliably or not at all, such as smoking, violence, physical inactivity, and unsafe choices etc. The integrator would increase preventative efforts.

4. Cost control platform – financial management

- Achieve 1-3% inflation yearly for per capita cost by developing a strong relationship with a group of specialists committed to reducing overuse of unnecessary health care and who focus on care coordination with families and the rest of the health care team.
- Reward health care providers, hospitals, and health care systems for their contribution to producing better health for the population and not just producing more health care.

The first step to a systems approach to cost control is to define, measure and make transparent the per capita cost of care for a defined population. A mainstay of reduction and control of per capita costs would be yearly incentives to reduce waste in all forms – procedures, tests, visits that represent re-work, errors or otherwise valueless services. An indication of progress would be doctors leading and energetically participating in such efforts. Ensure that best practice and evidence based interventions do not conflict as this can be costly. Consider disrupting cash flows that support the wrong thing happening – a lot of cash is flowing in health care for the wrong thing. The most powerful needed change is to disrupt the dynamics of supply-driven care and instead match supply better to needs thinking across boundaries.

5. System integration at a macro-level

- Match capacity and demand for health care and social services across suppliers.
- Ensure that strategic planning and execution with all suppliers including hospitals and physician practices are informed by the needs of the population.
- Develop a system for ongoing learning and improvement.

Aspire to produce or contract for individual care and population-based interventions that are evidence based and highly reliable. Everyone would need access to up-to-date medical knowledge, standardised definitions of quality and cost, and evidence and measurement collected and distributed by a thoroughly trustworthy body. In effect, patients, caregivers, organisations and managers would know the state of the system with respect to its reliability, adherence to evidence, cost and progress in improvement.

The five main responsibilities for Primary Care Trust (PCT) are to:

- Identify needs of the population and secure and co-ordinate services to meet the needs
- Manage the total population budget
- Partner with local authorities for social care services that overlap e.g. learning / physically disabled people
- Provide public health service e.g. surveillance
- Manage contracts with primary care practices.

It is important to understand the health needs of a population as services are organised around these.

One approach is to divide the population into segments. E.g.

1. Prevention
2. Pregnancy and childbirth
3. Acute life-threatening conditions
4. Acute non-life threatening, self-limiting conditions
5. Catastrophic conditions
6. Chronic life-threatening conditions
7. Chronic non-life threatening conditions
8. End of life
9. Rehabilitation
10. Elective conditions.

Establish priorities among the categories and within each category, from the most important to the least important, based on the comparative health benefit of treating the condition for optimising the health of the population. Considering social values, clinical effectiveness of the treatment of the condition to produce quality outcomes, relative cost-effectiveness of drugs, procedures, etc.

The tests to indicate success include:

- Hospitals involved would be trying to be emptier not fuller and celebrate that it is less needed by the population.
- The dynamics of supply-driven care are no longer strong and that patients pull resources rather than vice versa.
- Patients recognise that the health care system is mindful of their needs, wants and opportunities for health even when they themselves.

2.1.4. *IMPACT (Improvement / Action) Network*

IMPACT is the IHI's "association for change," an intensive program where member organizations work together and with expert faculty to make dramatic and measurable improvements at the system level.

The IMPACT network brings health care organisations together to achieve dramatic improvements in clinical outcomes, patient and provider satisfaction, and financial performance. It currently comprises of 176 organisations and 224 teams, supported by a Leadership Community for senior leaders and front-line improvement teams working in a variety of areas. Results are achieved by peer-to-peer action, commitment to action and ideas that work.

IMPACT is a membership network whose members work to achieve rapid improvement through three essential ingredients that cannot be found together elsewhere:

- *Ideas That Work*
IMPACT is a tremendous source of innovative, breakthrough improvement ideas – inspired by world-renowned scientists and practitioners.
- *Peer Exchange*
IMPACT is a learning society of improvement-minded organizations committed to transparency and an “all teach, all learn” philosophy – because it is exponentially easier to improve together than alone.
- *Action*
IMPACT is designed for action for driving and supporting the hard work of leading improvement and implementing sustainable change at the front line.

Collectively, these three elements provide a powerful lever for achieving breakthrough results and world-class performance.

IMPACT has addressed a rolling programme of domains through establishing Learning and Involvement Communities. On its the launch in 2002, the programme concentrated on the five domains of safety, office, flow, critical care and workforce and has evolved to include such domains as access, mortality and health acquired infection.

IMPACT is facilitated by building a leadership system for improvement where quality is the strategy for success. This involves setting direction and establishing the foundations to achieve this direction by preparing personally, building relationships, choosing and aligning a senior team and building improvement capability. The next steps are to build the will, generate ideas and execute change.

IMPACT provides a host of supporting networks for senior leaders. Leadership Working Parties are small group learning opportunities for senior leaders and address such issues as reducing patient mortality and improving patient experience. The Executive Quality Academy is a three day retreat for senior leaders and trustees to identify primary quality-related challenges and to create detailed plans to move forward. Regular leadership meetings have allowed for learning and innovation communities to develop, involving new improvers, experienced improvers and innovators. Such communities include ‘Redesigning Office Practice’, ‘Improving Outcomes for High-Risk and Critically Ill Patients’ and ‘Reducing Hospital Acquired Infections’. Communities are continually connected by regular meetings, web seminars, conference calls and via the extranet.

Progress through improvement in system level measures is measured and centered on the Institute of Medicine Six Dimensions:

These Whole System Measures are:

- *Safe*: Adverse Events, Inpatient and Outpatient, Incidence of Non-fatal Occupational Injuries and Illnesses
- *Effective*: Hospital Standardized Mortality Ratio (HSMR), Unadjusted Raw Mortality, Functional Outcomes, Readmission Percentage
- *Patient-Centered*: Patient Satisfaction, Inpatient and Outpatient
- *Timely*: Days to Third Next Available Appointment, Primary Care and Specialty Care
- *Efficient*: Inpatient Days During the Last Six Months of Life, Health Care Costs per Capita for the Region
- *Equitable*: Stratification of the above measure.

2.1.5. Health Foundation Safer Patients Initiative and the Scottish Patient Safety Alliance

The Health Foundation, an independent charity that aims to improve health and the quality of health care for the people of the UK selected the IHI to design, promote and implement the Safer Patients Initiative, a quality and performance improvement programme. The IHI itself has been involved in addressing patient safety and quality, producing the Leadership Guide to Patient Safety, which shares the experiences of senior leaders who have undertaken pioneering and innovative work to reduce adverse medical events and eliminate the harm they cause.¹

Initially, 20 hospitals representing the four countries of the UK joined the initiative, with a further 20 joining during Phase 2.

The Health Foundation's *Safer Patients Initiative* (SPI) is a four-year award scheme that began in October 2004. The initiative focuses on key elements of safety work including Critical Care, Perioperative, General Ward, Medicines Management, and Culture and Leadership.

It is estimated that over 850, 000 incidents harm or nearly harm National Health Service hospital patients in the UK each year. Furthermore, on average 40 incidents a year contribute to patient deaths in a single NHS organisation. Incidents include medication errors, infections during treatment on intensive care units and infections associated with surgery. The Health Foundation believes that patients should not experience unnecessary harm, pain or suffering as a result of an error or medical intervention.

The *Safer Patients Initiative* Trusts are developing tools in the course of their improvement efforts including successful protocols, order sets and forms, instructions and guidelines for implementing key changes.

One of the activities linked to the SPI were Patient Safety Leadership Walkrounds. The aim of the walkround process is to:

1. Increase the awareness of safety issues among all clinicians
2. Make safety a priority for senior leaders by spending a dedicated time promoting a safety culture
3. Educate staff about patient safety concepts such as incident reporting
4. Obtain and act on information gathered that identifies areas for improvement.

The walkround is undertaken by one or two members of the executive team, accompanied by the Head of Risk Management. During the walkround, the team discuss:

- Key patient safety concerns
- What can be done together to improve
- How local teams operate
- Communication
- How leadership can help and
- Incident reporting.

¹ Botwinick L, Bisognano M, Haradan C, *Leadership to Patient Safety*, IHI Innovation Series White Paper. Cambridge MA: Institute for Healthcare Improvement; 2006

The process is confidential and anonymous and an action plan is devised after each walkround to address any issues.

The Scottish Patient Safety Programme builds on work that is already taking place through the UK Safer Patients Initiative.

The objective of the ground-breaking Scottish Patient Safety Programme is to steadily improve the safety of hospital care right across the country. This will be achieved by using evidence-based tools and techniques to improve the reliability and safety of everyday health care systems and processes.

Real-time data will be gathered unit-by-unit, and the staff caring directly for patients will lead the changes required to achieve the aims of the Programme.

The Scottish Patient Safety Programme recognises the complexities involved in delivering modern healthcare, and so it has been designed to standardise approaches to care. There is good research to show which interventions make a difference when it comes to protecting patient safety, and these will be implemented uniformly in acute hospitals across the country.

Over the next five years, steps will be taken to:

- Ensure early interventions for deteriorating patients
- Deliver evidence-based care to prevent deaths from heart attack
- Prevent adverse drug events
- Prevent central line infections
- Prevent surgical site infections
- Prevent ventilator associated pneumonia
- Prevent pressure ulcers
- Reduce staphylococcus aureus (MRSA plus MSSA) infection
- Prevent harm from high alert medications
- Reduce surgical complications
- Deliver evidence-based care for congestive heart failure
- Drive a change in the safety culture in NHS organisations.

The *Scottish Patient Safety Alliance*, established in 2007, saw the Institute for Healthcare Improvement join forces with NHS Quality Improvement Scotland (NHS QIS) to lead the implementation of Scotland's biggest ever patient safety initiative, the Scottish Patient Safety Alliance.

IHI is world-renowned for its achievements in improving the safety of care, most recently through the '100,000 Lives Campaign,' a U.S. wide effort to reduce preventable deaths. IHI estimates that facilities participating in the '100,000 Lives Campaign' avoided more than 122,000 unnecessary deaths during the 18-month campaign period. While it is not possible to isolate the impact of the campaign alone, it is known that the campaign – along with a number of other worthy programmes and enhancements – contributed to the overall improvement in hundreds of hospitals.

The IHI and NHS QIS joined together to co-ordinate the Scottish Patient Safety Alliance, a world-leading programme aimed at improving patient safety. Building on the successful Safer Patients Initiative at four UK sites, the Scottish Patient Safety Alliance involves staff at all levels taking simple steps to cut down on unnecessary harm as a result of issues like preventable infections, or errors in prescribing.

These steps include identifying existing good practice and agreeing that these are reliably and consistently applied across key areas. For example: setting up processes to ensure all patients receive the right medicine at the right time and in the right dose; implementing monitoring systems to more quickly identify patients whose condition is deteriorating; and looking at ways to improve hand hygiene compliance.

The Scottish Patient Safety Alliance was launched in March 2007 with five objectives:

- reduce healthcare associated infection
- reduce adverse surgical incidents
- reduce adverse drug events
- improve critical care outcomes, and
- improve the organisational and leadership culture on safety.

The Scottish Patient Safety Alliance has been established to oversee the development of the Scottish Patient Safety Programme.

The Scottish Patient Safety Alliance brings together the NHS, The Scottish Government, professional bodies and patient representatives in a new drive to significantly reduce adverse events and improve patient safety.

2.1.6. 5 Million Lives Campaign

Following on from the 100, 000 lives campaign, whose aim was to save 100, 000 lives, build a national infrastructure for change and raise the profile of the problems around patient safety, the 5 Million Lives Campaign was devised.

The aim of this campaign is to reduce harm. In the US in 2005, there were 40 to 50 patient injuries per 100 patients, based on 37 million admissions, resulting in 15 million injuries per year. Through replicating best performance across the existing 100, 000 lives Campaign population, it was hoped that 3.5 million injuries would be avoided.

The 5 Million Lives Campaign was a voluntary initiative to protect patients from five million incidents of medical harm over a 24 month period (December 2006 – December 2008).

‘Protecting 5 million lives from harm’ is a bold objective set by the IHI: *Protect patients from five million incidents of medical harm over the next two years (2006 – 2008)*. To achieve this, over 1, 500 hospitals were enlisted in a renewed national commitment to improve patient safety faster than ever before.

The Campaign challenges American hospitals to adopt 12 changes in care that save lives and reduce patient injuries including to:

- Deploy Rapid Response teams
- Prevent adverse drug reactions
- Prevent harm from high-alert medications (e.g. anti-coagulants, sedatives)
- Prevent pressure ulcers
- Deliver reliable, evidence based care for congestive heart failure
- Reduce methicillin resistant staphylococcus aureus (MRSA) infection
- Get Boards on board.

To improve quality and reduce harm, Boards are expected to undertake, as a minimum, 6 activities:

- Setting aims
- Getting data and hearing stories
- Establishing and monitoring system-level measures
- Changing the environment, policies and culture
- Learning .. starting with the Board
- Establish executive accountability.

Underpinned by the IHI's Framework for Leadership of Improvement, which suggests five core leadership activities relevant to improvement:

- Establish the mission, vision and strategy
- Build a foundation for an effective leadership system
- Build will
- Ensure access to ideas
- Attend relentlessly to execution.

As of October, 2008, over 4, 000 hospitals had enrolled on the Campaign and there are encouraging reports of important progress in improving patient safety, and dramatic improvements in the care patients receive.

2.2 Cambridge Health Alliance (CHA)

Cambridge Health Alliance provides high quality care in Cambridge, Massachusetts. With three hospital campuses and a network of primary care and specialty locations, the CHA serves more than 400,000 residents of Boston's metro-north region. In doing so, it places special emphasis on preventive care and in serving the area's most vulnerable and diverse populations.

Patient care is central to CHA's community health mission. CHA provides comprehensive and coordinated care at hospitals, community health centres, and through some very special programs, right in people's homes. This includes 24-hour emergency care and specialty services at each of its three hospital campuses.

In 2008, CHA was recognized by Verispan as one of the Top 100 Most Integrated Healthcare Networks in the nation.

CHA is proud to provide health care of the highest quality. Its clinical sites are fully accredited by the Joint Commission, and in 2008, the system was named to the Harvard Pilgrim Health Care Hospital Honour Roll. This designation is given to hospitals that ranked in the top 25% of all US hospitals for standard healthcare quality and patient experience measures.

As the only healthcare organization in the state that is a teaching affiliate of Harvard Medical School, Harvard School of Public Health, Harvard School of Dental Medicine, and the Tufts University School of Medicine, CHA plays a unique role in the training of medical professionals.

In order to meet the broader needs of the community, CHA manages health programs and leads community coalitions that address issues such as obesity, substance abuse, and childhood asthma. Some of these programs are part of its Cambridge Public Health Department, which is operated via municipal contract with the City of Cambridge.

CHA also operates Network Health, a statewide Medicaid managed care and Commonwealth Care provider that offers critical health coverage to low-income individuals.

Pursuing Perfection

Cambridge Health Alliance has been heavily involved in the Pursuing Perfection initiative run by the IHI. The Pursuing Perfection sites have learned that the pursuit of perfection, or aiming high, raises the bar on health care performance and leads to clinical and operational results once considered out of reach.

Pursuing Perfection organizations are redesigning their systems to create dramatic improvements in all of their major care processes. "Pursuing perfection" means working at three levels:

1. Leadership

In order to transform the entire organisation, senior leadership – including executives and the Board of Directors – must drive their effort. While no single leadership model was implemented in Pursuing Perfection, all leaders developed quality as a central strategy and brought quality into focus in the daily work of the management team. Leaders have found that the following create leverage needed to pursue perfection:

- Measure performance at system level
- Align organisational strategy, daily work, and improvement projects with the system level measures
- Channel attention to improvement
- Get the right management team 'on the bus'
- Make the Chief Executive Officer a champion of quality
- Build capacity for improvement throughout the organisation.

2. New designs and innovations

For the entire organisation to raise its level of performance, new and innovative designs are required. Pursuing Perfection organisations are developing new designs to improve the reliability of service delivery, improve flow through the organisation, deliver evidence based planned care, reduce mortality organisation-wide, and deliver care that honours patients need and preferences. The designs were derived from the new rules contained in the Crossing the Quality Chasm (IHI) report. Each of these new designs results in changes to the infrastructure of the organisation and the delivery of service at the front line.

3. Results at the front line

In order to raise the bar and achieve dramatically improved performance, Pursuing Perfection organisations have learned to set ambitious goals that exceed current benchmarks, design the frontline improvements with the big system in mind, and change the infrastructure to support the improvements, especially with regard to the workforce, information technology and communications. Encouraging results have already been achieved in mortality reduction, patient safety, and care for patients with acute myocardial infarction, congestive heart failure, and asthma.

The challenge is to identify the best known performance — the bar — and then improve care to exceed this.

Raising the Bar has five steps:

1. Establish the will to go beyond “we are doing OK” performance
2. Set aims that raise the bar, reaching beyond what has been achieved in health care thus far
3. Measure performance at this higher level
4. Develop and test the type of changes that can bring an organization to a new level of performance
5. Learn from the changes in ways that benefit the entire organization.

CHA has focused improvement efforts in Pursuing Perfection on improving chronic illness care across the community, as well as improving flow and safety in the hospital setting.

2.3 Bureau of Primary Health Care (BPHC)

Overview of the Bureau of Primary Health Care and Centre for Quality.

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary Federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable.

HRSA provides national leadership, program resources and services needed to improve access to culturally competent, quality health care in every state and U.S. territory. HRSA grantees provide health care to uninsured people, people living with HIV/AIDS, and pregnant women, mothers and children. They train health professionals and improve systems of care in rural communities.

The HRSA Centre for Quality was established to strengthen and improve the quality of health care.

The Bureau of Primary Health Care (BPHC) is part of HRSA. The mission of the health centre program run by the BPHC is to improve the health of the Nation's underserved communities and vulnerable populations by assuring access to comprehensive, culturally competent, quality primary health care services.

HRSA provides federal grant funding to over 1,000 health centre grantees in every state, known as Federally Qualified Health Centres (FQHCs). These entities must serve a medically underserved area or population (MUA, MUP). The centres are governed by a community board composed of a majority (51%) of health centre patients who represent the population served. The health centres provide comprehensive primary care services as well as supportive services such as education, translation, and transportation that promote access to care. The services provided are adjusted according to the ability to pay. The centres must also meet other performance and accountability requirements regarding administrative, clinical and financial operations, and are performance managed by the Office of Performance Review, HRSA.

The benefits of the health centre program include access to federal grant funding to support the cost of uncompensated care, participation in the 340B (discounted) Drug Pricing Program and automatic Health Professional Shortage Area Designation and participation in National Health Service Corps (NHSC) (co-ordinated by the Bureau of Clinical Recruitment and Service within the HRSA).

The NHSC offers a scholarship program designed for students committed to providing primary health care in communities of greatest need. Scholarship recipients serve where they are most needed upon completion of their training.

Health centres participating in the health centre program must provide directly or through contract or established arrangement:

- All required primary and preventative services
- Supplementary services including referrals to other providers and health related services
- Case management services (counselling referral and follow-up) and other services designed to assist patients in establishing eligibility programs that provide financial assistance
- Enabling services including outreach, transportation and translation
- Education regarding the availability and proper use of health services
- Additional health services as appropriate including behavioural and mental health and substance abuse services, recuperative care and environmental health services.

During 2001 – 2007, this program produced a 56% increase in the number of patients served including a 63% increase in patients who are experiencing homelessness and a 21% increase in the number of migrant and seasonal farmworker patients. The program has seen a 108% increase in dental visits and a 124% increase in mental health care visits.

The principles of community health centres:

- Focus on the needs of the underserved
- Nearly two-thirds of health centres patients come from minority populations
- Act as a one-door facility
- Establish partnerships in the public and private sectors – community involvement
- A governing board with a quality assurance plan.

The program aims to reach the most at need within the country. 91% of the patients served have incomes below 200% of the federal poverty level, 39% uninsured and 38% of a racial minority. The program is supported by 103 full time equivalent staff and is based on being community driven, community responsive, comprehensive, culturally competent and interdisciplinary.

The goal of the Presidents Health Centres Initiative, commenced in 2002, was to strengthen the health care safety net for those most in need with 1, 200 new or expanded health centres, serving an additional 6 million people and maintaining a commitment to community based programs. By 2007, over 1, 200 health centres had access points funded. In 2005, the President announced a High Poverty County Initiative offering grants to put health centre sites in more low income counties than ever before, stretching the health care safety net to places it has never been before.

The Bureau of Health Professions within the HRSA strives to assure access to quality health care professional education and training and works with the health centres to enhance diversity and distribution of the nations health care experts.

The HRSA accomplish their mission by:

- Working with States and communities to develop integrated service systems and to form an appropriate health workforce for improving access to high-quality health care
- Ensuring that the health systems address the needs of the communities they serve, especially special needs that result from cultural and linguistic differences, geographical location, and economic circumstances; and
- Promoting the recruitment, training, and retention of a culturally and linguistically competent, diverse health care workforce.

HRSA has designed a Knowledge Gateway Website, a portal meant to provide a means for the public healthcare community to share knowledge, outcomes documentation, tools and resources related to improving quality healthcare. The gateway links users to key HRSA collaboratives including asthma, business care / redesign, cancer screening and prevention, cardiovascular disease, depression, diabetes, patient safety and clinical pharmacy services and perinatal and patient safety. The system has a results sharing mechanism whereby performance measurement data is shared and made available to other clinics and health centres.

2.3.1 Visits to Federally Qualified Health Centres funded by HRSA

Federally qualified health centers (FQHCs) include all organizations receiving grants under section 330 of the Public Health Service Act, certain tribal organizations, and FQHC Look-Alikes. FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors.

I visited three FQHCs funded by HRSA. These were Community Clinic Inc., in Rockville, Great Baden Medical Services, Inc. in Upper Marlboro, Maryland, and Unity Health Care Inc. in Washington.

2.3.1.1. Community Clinic Inc. (CCI) operates two free-standing sites which serves 18 census tracts, of which 17 are medically underserved populations (MUP). 53% of the target population lacks any health insurance and the service area is known for its diversity, with foreign born residents and significant health disparities also exist for cancer, tuberculosis, HIC infection, sexually transmitted diseases and multiple prenatal health indicators. Major barriers to care include the unique cultural / linguistic needs of the target population, financial / insurance barriers and provider barriers. 80% of staff are bilingual, all patients are accepted regardless of their ability to pay or insurance status and through increased investment in providers, they have achieved a 37% increase in patients numbers from the patient base. 5 of the census tracts are designated as Health Professional Shortage Areas for primary, dental and / or mental health services by HRSA. CCI has a demonstrated record of quality, evidenced by JCAHO (Joint Commission on the Accreditation of Health Services) accreditation since 2003.

CCI uses a variety of evaluative measures to measure their performance improvement.

The Performance Improvement (PI) Program is directly linked to the mission of providing the highest quality of care and services to the medically underserved population in the community. The PI philosophy and methodology is integrated into daily activities throughout all disciplines, allowing the systematic identification, monitoring and evaluation of the quality of both clinical and operational processes. The PI Program is fully compliant with the extensive standards imposed by JCAHO and strong performance improvement capacity is demonstrated by clear clinical improvements e.g. for diabetes, the average HbA1c dropping from 8.8 to 7.8.

Evaluation plans are integrated into programmes and projects, ensuring decision making is data driven.

Performance-related initiatives are implemented in a systematic way, including measurable outcomes, detailed action steps required for implementation, and a time frame associated with each activity. The Health Care Plan details the clinical goals and objectives, including quantifiable goals specific to each lifestyle, and mental / oral health goals. The Business Plan includes measurable goals in relation to administration, governance, finance and management information systems.

The implementation of electronic medical records (EMR) in April 2008 will greatly expand the capacity to manage and evaluate care, with clinical outcome reports tracking progress toward health care goals. The implementation of EMR will improve clinical quality, improve the overall effectiveness of patient care, improved efficiency and enhance patient safety.

Through Federal New Access Point Community Health Centre funding from HRSA, CCI envisage a 37% increase in unduplicated patients² over the next three year period.

2.3.1.2. Greater Baden Medical Services serves a target population that includes those individuals in the community with incomes less than 200% of federal poverty levels who are under- or uninsured. The services provided by Greater Baden result in improved health status and fewer complications of chronic disease for its patients. Services provided by Greater Baden include comprehensive primary medical care, management of acute and chronic diseases and outreach services provided throughout the community and to local homeless shelters.

Greater Baden has a variety of management and quality systems in place. It has divided its Quality Improvement Committee into three separate teams, each with different but coordinated functions. The Performance Improvement Team develops clinical goals, analyses data, and monitors performance. The Clinical Operations Team develops processes necessary to achieve the goals developed by the Performance Improvement Team. The team also performs problem solving for clinical processes, and insures uniformity of process across different clinical sites. The Safety Team conducts safety inspections and performs audit, the results of which are forwarded to the Performance Improvement Team to decide actions to be taken and refers matters with significant expense to the Executive Team. Each Team convenes monthly, on consecutive weeks, and the minutes of all the meetings are provided to the Board and circulated to staff, placed on the web-site and discussed at monthly departmental meetings.

Greater Baden has developed a process whereby staff or patient complaints are reviewed by the Performance Improvement Team to discuss if further action or investigation is required.

Staff satisfaction surveys are done annually with additional periodic topic-specific surveys to obtain staff input.

The Executive Team develop benchmarks for productivity and clinical outcomes which can be easily measured to ensure reports can be produced in a timely fashion. Progress is documented monthly and reported to staff and the Board.

Greater Baden uses medical staff for data entry as the use of clerical staff led to an unacceptable level of mistakes during data entry.

Population based clinical outcomes are regularly reported for individual centres as well as provider specific and this information is used to develop unique goals for each centre.

² An unduplicated count means that a patient is counted only once for each type of service even if the patient received services on multiple occasions or in different service settings.

Greater Baden has also enhanced its cultural competences by having a bilingual personnel available at each centre and they have also developed the capacity to use its telephone system to reach a bilingual member of staff at another site if needed. Greater Baden are also translating their brochures and is in the process of translating its web-site.

2.3.1.3. Unity Health Care Inc.

Unity Health Care Inc. is a non-profit organisation which uses an integrated approach to providing primary medical care and social services to homeless and medically underserved residents of Washington D.C. Unity helps to empower clients to better their lives and they advocate social change and resource allocation to help those in society who have become marginalised.

Unity operates 26 health centres and 2 mobile outreach programs. Services include, amongst others, primary care, social services, substance abuse services, and dental services and they also provide health services to inmates housed within district jail facilities including discharge planning, directly linking clients to health centres for continuing care upon release.

Unity use a variety of evaluative measures. They operate automated quality improvement (QI) and risk assessment processes and as data on quality improvement indicators are collected, health centre specific quality improvement plans are developed. To improve the efficiency and ease of this process, a web-based electronic reporting system for the peer review process has been implemented. This allows providers to submit results electronically resulting in more efficient compilation and analysis of data.

Unity are also planning on implementing a web-based incident reporting process to improve the tracking and responding to incidents. The automated process will reduce response time, as well as automate the 'sign off' process for supervisory review of an incident report. Managers and quality improvement personnel will be alerted via e-mail regarding a reported incident and the status of the report. The electronic process will also allow for higher level analyses and trending to identify and address risks.

In 2006, a Quality Improvement Plan was approved and implemented, which introduced a list of clinical indicators, most of which pertained to adults patients and to primary medical care. In 2007, specific departments, including mental health, paediatrics, and obstetrics / gynaecology, were required to develop their own specific clinical QI indicators to be used for all peer review for patients aged 0 – 21 years of age.

Unity have commenced the implementation of an electronic management record (EMR) system, as well as an associated Practice Management (PM) system. These will lead to significant positive outcomes in clinical and business practices, particularly through enhanced quality improvement. These systems have also improved effectiveness, efficiency, safety and quality improvement and assurance.

In 2003, Unity Health Care partnered with United Health Foundation (based in Minneapolis) to establish the Congress Heights Centre of Excellence, offering comprehensive services that aim at improving access to / and delivery of care, and at improving health outcomes of the patients, particularly those with cardio-vascular risk factors, diabetes, asthma and prenatal / post-partum / neonatal conditions.

The United Health Foundation are passionate about working with others to improve the quality and cost effectiveness of medical outcomes, to expand access to health care services for those in challenging circumstances and to enhance the well being of communities.

Some of the accomplishments to date include:

- Increased number of patients served by 63% with a 70% increase in patient visits
- Increased continuity of care with the primary care provider
- Implemented micro-systems, a patient centred health care team model that in addition to including a nurse care manager performs aggressive targeted care management and patient / community health education to enhance patient self-management and behaviour change
- Planned team visits for the purpose of reviewing patient charts prior to their scheduled visit thereby identifying needed diagnostics, referrals, education and other services
- Instituted state of the art patient registry that tracks progress towards American Medical Association (AMA) / American College of Obstetrics and Gynaecology (ACOG) defined clinical standards of care and performance measures of the patients with the four focus conditions of the Centre of Excellence
- Improved patient outcomes and performance measures including:
 - Decreased average HbA1C for diabetics to 8.8 to 8.4
 - Increased percentage of persistent asthmatics prescribed an inhaled corticosteroid (ICS) to consistently over 90%
 - Increased percentage of cardiovascular risk patients with controlled blood pressure from 29% to 52%
 - Increased percentage of coronary patients prescribed aspirin from 29% to over 80%
- Increased home care services by adding outreach workers to the Community Health Promoter Programme and instituting Unity Health Care's first geriatrician-run Medical Home Visit Program now serving over 150 homebound patients
- Increased or added speciality care in podiatry, dental, obstetrics, nutrition, psychiatry and a full service dental lab, and an added social worker to increase eligibility of patients
- Established a transportation program with an assigned van and driver for patients needing this service
- Began to spread many of these incentives to other Unity Health Care sites.

By 2006, the first evaluation documented the following:

- 96% of asthmatic patients were prescribed appropriate medication and evidence based treatment
- 72% of the women treated at the clinic were screened for cervical cancer
- 72% of patients treated at the clinic were screened for HIV disease
- Patients reported high rates of satisfaction with their care, particularly with the time the doctor spent with them, how often they received follow-up information on test results, etc.

The results were achieved through utilizing United Health Foundations financial support to reorganise and augment its traditional service model. Examples include:

- A new comprehensive health care model called Microsystems that increases patient / community education and enhances patient self-management

- Enhanced co-ordination of comprehensive health and medical interventions for high-risk patients
- A new patient registry to better track progress towards a defined and state-of-the-art clinical standard of care and performance.

3. Summary of Outcomes

1. To visit the Institute of Healthcare Improvement (IHI) and the Cambridge Health Alliance (CHA) to discuss and examine the quality improvement and management programmes they are running and determine reasons for their continued success.

The IHI and CHA facilitate a variety of quality improvement and management programmes as mentioned in the report. Their continued success is partly based on the ability to measure what is being delivered and demonstrate what is being achieved as outcomes from that delivery. Each quality improvement scheme and management programme underpins governance processes which can demonstrate progress towards and achievements of aims, objectives and goals.

2. To visit the Bureau of Primary Health Care (BPHC) to discuss and examine the quality improvement and management systems they have in place to ensure quality primary health care to vulnerable or disadvantaged people. Also to examine how they ensure equitable accessibility to primary care services.

The mission of the health care programme run by the BPHC is to improve underserved communities and vulnerable populations by assuring access to comprehensive, culturally competent, quality primary health care services. The Bureau provides funding to health centres who serve medically underserved areas. These centres provide comprehensive primary care services as well as supportive services such as education and translation services. The centres are monitored in terms of the services they provide, as well as being expected to meet other performance and accountability requirements e.g. financial, and are performance managed by HRSA.

3. To visit primary health centres to see the quality improvement and management systems in place and to talk to staff about how they view the quality of services provided. The chosen health centres provide quality health services for disadvantaged people or are recognised as excelling in providing high quality health services and who are or have been involved in quality improvement programmes.

Staff at the primary health centres are enthusiastic about the implementation of quality improvement and management systems to enhance access to and the provision of primary health services. These systems clearly underpin the governance processes and there is evidence that the achievements from the delivery of these systems are being monitored and reviewed. Each centre has systems in place to share with staff the benefits and achievements from implementing such systems. It is evident that staff are very much encouraged to be part of a larger successful team, and share in the success of the Centre as a whole.

4. Examine how quality improvement schemes underpin governance processes that can 'measure' what is being delivered, and then demonstrate what is being achieved as outcomes from that delivery.

The majority of quality improvement schemes researched during this project have been designed to underpin governance processes that can 'measure' the impact and outcomes from the delivery of these schemes. It is apparent that where such schemes are implemented, regular monitoring of the impact and outcomes provides a continuous evaluation process to ensure that the schemes are successful in achieving their aims and objectives.

4. Key Lessons and Action Points for the PCT and wider NHS

- 4.1 To consider the benefits of the quality and management programmes mentioned in this report with a view to implementing them to enhance primary care services and
- 4.2 To consider applying the methods identified in the report to improve access to primary care, especially in areas that have substantial elements of urban deprivation with generally poor health experiences.

For example

- Redesigning office practice
- Innovations in Planned Care
- Triple Aim Initiative
- Pursuing Perfection
- Performance Improvement Program

5. Resources:

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Knowledge Gateway - www.healthdisparities.net/hdc/html/home.aspx

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