A North West Health System approach to Advancing Quality

Executive Summary

The focus on quality as a key principle of reform and the development of the Advancing Quality (AQ) Programme was supported by clinicians and managers within the North West (NW) instantly aligning them on a path of cultural and organisational change. The NW health system, at the same time, recognised the need to support the general public in becoming discerning consumers of health services, rather than passive recipients of care.

AQ is a relatively large and complex piece of work which has been implemented quickly, gaining acceptance and momentum in nine months. The key elements for achievement were:

- adherence to a philosophy of 'lift and implement
- Chief Executives agreeing the need to focus on quality
- clinicians engaged fully leading the co-production of measures

There was significant will in the health system aligned with the vision and values of the programme and early feasibility work concluded that there were no show stoppers. In order to proceed, dedicated resources were used to get the programme launched and implemented.

The governance structure changed to reflect what worked and what did not work, though the principles though were consistent. An agreement by the health system to full public reporting of AQ results was unanimous.

The NW health system concluded that clinical support would only exist and alignment achieved when a rigorous process had been followed and the criteria for co-production of the Clinical Focus Areas (CFAs) was stringently observed and agreed by clinicians themselves. The potential then exists for clear and unambiguous metric definitions that allow for regional, national and international comparisons or benchmarks. Rigorous definition would prevent future conflict when the outcomes of the programme are published. This also reduced the potential for arbitrary veto.

The health system took a 'belt and braces' approach to information governance which took time and creativity to identify a solution. Reliance on a number of systems e.g. SUS does provide some risks outside local control and can cause some data transfer difficulties which creates challenges and

some tensions now that data is becoming available. An appetite at clinical team level has been created, to see the data regularly.

Overtime directing financial incentives at the right AQ measures will ensure alignment, relevance and effectiveness. A blended approach is required that rewards top performance in the first year and attainment and most improved in subsequent years. In some hospitals, the NW health system experience to date is that, data collection for CFAs has been manual. In other hospitals full electronic data transfer has been possible. The evidence, although at this stage subjective, suggests that the data collection for five new CFAs is a maximum number the NW health system could handle in terms of implementation at any one time. As CFAs data flow becomes more established and follows an electronic format the adoption of further CFAs is increasingly possible.

The recognition that the capacity and skills needed to deliver a Pay for Performance type programme and to communicate effectively required external expertise. The capacity and capability was not available within existing organisations.

At local health system level the need for project management was identified and as roll out has moved on, one clinical coder per trust, to support the data extraction process, although this has varied by organisation depending on expertise and staffing levels. Each CFA, in each hospital, also required a champion – outlining the roles and responsibilities required, immediately took a great deal of anxiety out of AQ implementation.

The health system is committed to independent evaluation to provide assurance and verify whether anticipated benefits have been achieved, identify the lesson for wider knowledge diffusion in the NW health system and the NHS as a whole. Also the commitment to independent evaluation was a particular feature that engaged the clinical community and Regional Consultants Committee (BMA). The communication of best practice and the benefits already emanating from the programme are being told in case studies that staff and clinicians can relate in their every day practice.

The new adoption of CFAs is flexible where they are being developed in different health sectors such as Mental Health, but as a general rule no more than five new CFAs should be implemented in any one year, whilst at the same time developing a maximum of two addition CFAs.

Introduction

In today's financially charged times, health systems are shifting emphasis, from a pure 'access to services' agenda toward a vision of improved health outcomes for patients. At the core of this movement is a clinical focus on quality that is increasingly becoming the organising principle of health system reform and development.

Health systems do have many of the attributes needed to drive a quality focused agenda, however, in differing proportions there still arguably exists:

- variable use and attitude to evidence of effectiveness
- poor or piecemeal clinical quality measurement
- gaps in data collection, management and quality improvement
- areas where clinical quality is isolated from perception and experience
- a disconnected hierarchy – a lack of alignment in the health system

In early 2007, the North West (NW) health system took the view that designing local stand alone quality campaigns and incentives would be confusing and sub optimal for organisations and the public. What was needed was a coordinated NW quality programme, consistent with reform, but based on addressing shorter term skills and information gaps. This approach ultimately became the Advancing Quality (AQ) programme.

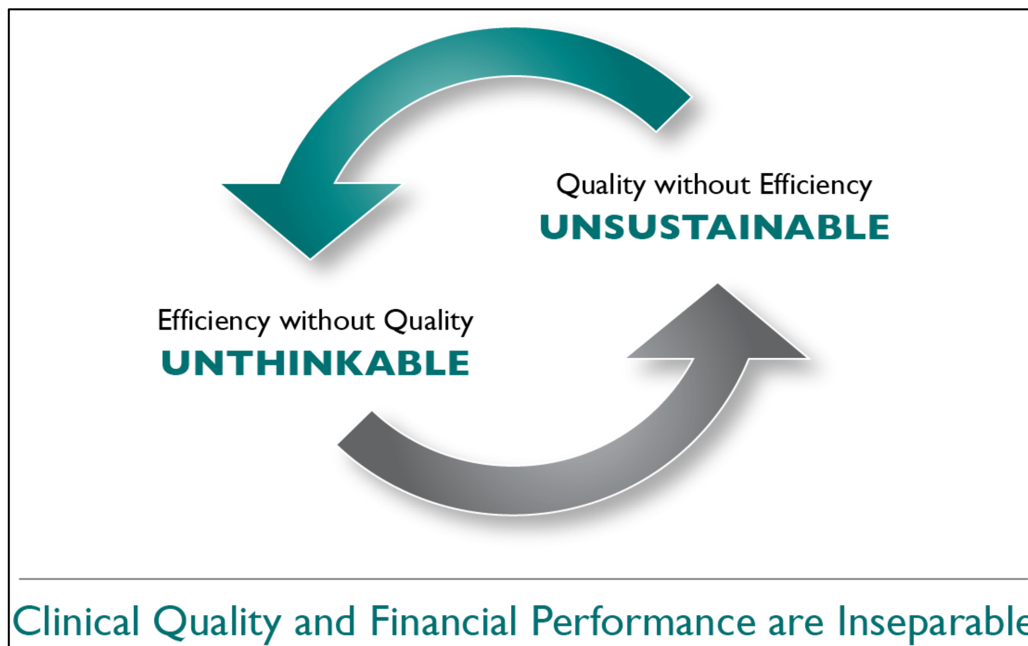
The NW initial drivers for change were as follows:

- align providers and commissioners on measures which deliver improved outcomes
- engage clinicians and clinical teams in continuous improvement
- the idea of quality without efficiency is unsustainable and unaffordable
- the idea of efficiency without quality feels like a status quo that is unthinkable
- an understanding that World Class Commissioning recognises the need to focus on outcomes not just quantity
- a strong desire to publically share the outcome

The AQ journey, that describes how the NW health system moved from a desire and willingness to implement a NW quality programme to the development of AQ, implementation and further development, is contained within the main body of this text. It should, however, be stated that AQ is not just about data collection. It is about intelligently synthesising different elements of quality to build as rich a picture as possible to enable service improvement. It will be demonstrated that the programme has subsidiarity and coproduction as the foundation of its construction – Trusts are free to decide how data on the clinical focus areas (CFAs) is collected and how they will improve services against the AQ metrics. These have been designed and agreed by clinicians, with patients forming the value proposition as to what has worked.

The catalyst for the NW health system reform was a trip to Charlotte in North Carolina in April 2007 to view a demonstration of Premier Inc's version of the programme – Hospital Quality Incentive Demonstration (HQID) project. The US study began in 2003 and involved more than 260 hospitals in tracking process and outcome measures in the five clinical focus areas (CFAs). The US study conclusions are shown below in figure 1

Figure 1

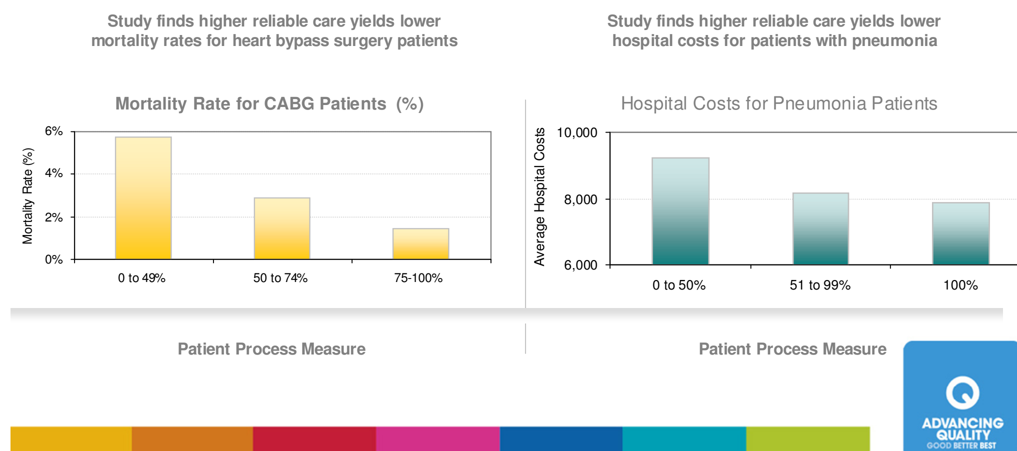


The HQID project reduced costs, improved the quality of care and saved lives. Furthermore if the five chosen clinical areas all received the same steps of care it raised the possibility of achieving 5,700 fewer deaths, 8,100 fewer complications, 10,000 fewer readmissions and 750,000 fewer days in hospital which would lead to cost reductions of $1.4 billion. The case for the systematic adherence to quality metrics was persuasive given the following evidence shown in figure 2.

Figure 2

Premier ‘Performance Pays’ research update

Premier’s Performance Pays study demonstrated that when evidence-based care is reliably delivered, quality is higher and costs are lower.



In the summer of 2007 Premier Inc. was invited to make a return visit to the NHS in the NW to assess whether a similar programme to HQID could be implemented. Having visited several very different hospitals and the North West Ambulance Service they concluded that this was entirely feasible and that:

- measures used in the American HQID programme were relevant to the NHS
- there was wide acceptance of the programme by clinicians in the NW NHS
- the measurements required to drive a programme were on the whole collected by hospitals;
- the Payment by Results model was complementary to the programme;
- an adequate level of performance infrastructure existed within the NHS and was adaptable; and
- there was widespread existence within the NW NHS of a true passion to improve quality and performance

The AQ programme, although based on the HQID project, has been tailored to NW health systems. It has been expanded to include patient experience measures (PEMs) and patient reported outcome measures (PROMs).

Measures

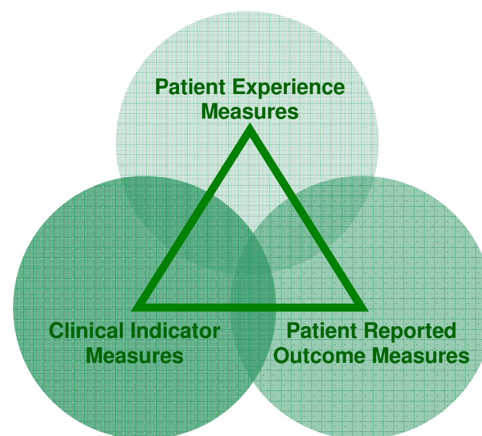
In trying to understand and address the relevance of HQID and P4P generally with the local health system, the rigour and systematic nature of these

programmes were highlighted. Having observed this, the challenge was not just to create a bias towards the clinical outcome, but to triangulate three dimensions of quality through the following measures:

- clinical indicator measures
- patient reported outcome measures
- patient experience measures

This is represented diagrammatically below in figure 3:

Figure 3



Clinical Indicator Measures (CIMs) - The initial CIMs were developed by clinicians in the US, as part of the HQID project. Although the evidence base was seen as non-contentious, each set of CIMs still took between 18 months and two years to be developed and owned by clinicians and the US regulatory bodies. The NHS NW system was attracted to the international consensus surrounding the CIMs within HQID, which would enable a 'lift and implement' type programme and the NHS NW system was able to gain quick, almost instantaneous, clinical buy in to these CIMs through local clinical champions. In addition the CIMs were backed by NICE, which confirmed the CIMs corresponded to their guidance and that of the various royal colleges.

It was decided that the measures should be applied to the same five clinical focus areas (CFAs) in HQID that afforded maximum health gain, deliver improved outcomes and reduce cost, namely:

- Heart failure (HF)
- Acute myocardial infarction (AMI)
- Coronary artery bypass graft (CABG)
- Community-acquired pneumonia (CAP)
- Hip and knee replacement

The associated CIMs are as follows in figure 4:

Figure 4

Advancing Quality measures

Community-acquired pneumonia (CAP)

1. Percentage of patients who received an oxygenation assessment within 24 hours prior to or after hospital arrival
2. Initial antibiotic selection
3. Blood culture collected prior to first antibiotic administration
4. Antibiotic timing, percentage of pneumonia patients who received first dose of antibiotics within six hours after hospital arrival
5. Smoking cessation advice/counseling

Hip and knee replacement

1. Prophylactic antibiotic received within one hour prior to surgical incision
2. Prophylactic antibiotic selection for surgical patients
3. Prophylactic antibiotics discontinued within 24 hours after surgery end time
4. Recommended Venous Thromboembolism prophylaxis ordered
5. Appropriate Venous Thromboembolism prophylaxis within 24 hours prior to surgery to 24 hours after surgery

Acute myocardial infarction (AMI)

1. Aspirin at arrival
2. Aspirin prescribed at discharge
3. ACE or ARB for LVSD
4. Smoking cessation advice/counseling
5. Beta blocker at arrival
6. Beta blocker prescribed at discharge
7. Thrombolytic received within 30 minutes of hospital arrival
8. PCI received within 90 minutes of hospital arrival
9. Inpatient mortality rate

Coronary artery bypass graft (CABG)

1. Aspirin prescribed at discharge
2. Prophylactic antibiotic received within one hour prior to surgical incision
3. Prophylactic antibiotic selection for surgical patients
4. Prophylactic antibiotics discontinued within 48 hours after surgery end time
5. Inpatient mortality rate

Heart failure (HF)

1. Left Ventricular Systolic (LVS) assessment
2. Detailed discharge instructions
3. ACEI or ARB for LVSD
4. Smoking cessation advice/counseling

NHS North West on behalf of the NW health system tendered in late 2007 for a partner to support the CIMs collection and knowledge transfer. Premier Inc. were successful in this tender process and from January 2008 have provided the necessary data tools, technical analytical support and knowledge transfer portal to support the AQ programme. This partnership approach ensured that the programme could be developed and introduced quickly across the health system.

Learning from other P4P programmes in the UK and US was used to develop the NW incentive rewards. An outcome specification that was developed in the tender process is available for NHS organisations.

PROMs - Linked with the other AQ elements, PROMs has the potential to put patients at the heart of a reformed NW health system, delivering world class services. Patients themselves will be the arbiters of whether their health care intervention worked for them and improved their outcome. It is intended through AQ to reward such improvements at an organisational level through appropriately designed financial rewards Again, NHS NW on behalf of the NW health system tendered for a PROMs management service provider. The Royal College of Surgeons (RCS) were successful in the tender process and will provide the necessary questionnaires, training materials, data collection services and management information that over time will link with Hospital Episode Statistics, Joint National Registry and AQ for the CFA hip and knee

replacement. Again AQ intends to use a 'lift and drop' type process that will benefit from the RCS involvement in the national POIS Audit.

PEMs – NHS NW has been developing CFAs specific PEMs for some time. Although the least quantifiable at this stage it is anticipated, given the AQ infrastructure, that this measure will be implemented relatively quickly

Taking the learning from existing P4P schemes the Advancing Quality (AQ) programme was developed to provide a solution linking the reform agenda with a real drive and focus on quality across the NW health system in these CFAs.

Learning Point 1 *- The focus on quality as a key principle of reform was supported by clinicians and managers instantly; aligning them on a path of cultural and organisational change. The NW health system, at the same time, recognised the need to support the general public in becoming discerning consumers of health services, rather than passive recipients of care.*

In the NW health system, the CFAs in AQ accounts for approximately £160m of resource each year. This is sizeable resource consumption for a programme that has only taken nine months to get up and running.

PCTs in the North West have reserved up to £10.6m per annum (only .01% of annual allocations funded from growth money in the NHS financial year 2006/07) for the whole programme. The total amount of incentive reward identified for clinical teams which deliver the first five AQ CFAs, is £5.2m per annum. On average this costs each PCT £0.5m per annum.

Learning Point 2 *- AQ is a relatively large and complex piece of work which has been implemented quickly, gaining acceptance and momentum in nine months. The key elements for achievement were:*

- *adherence to a philosophy of 'lift and implement*
- *Chief Executives agreeing the need to focus on quality*
- *clinicians engaged fully leading the co-production of measures*

All of the above would likely not have been enough if a robust yet flexible governance framework had not been put in place that had subsidiarity and coproduction at its heart in term of its clinical and stakeholder representation.

Governance

The governance framework is representative of a broad range of clinicians and managers and of the geography of the NW. It also has the support and active engagement of the British Medical Association (BMA), NICE and Department of Health who are fully involved in the Framework depicted in Figure 5 below:

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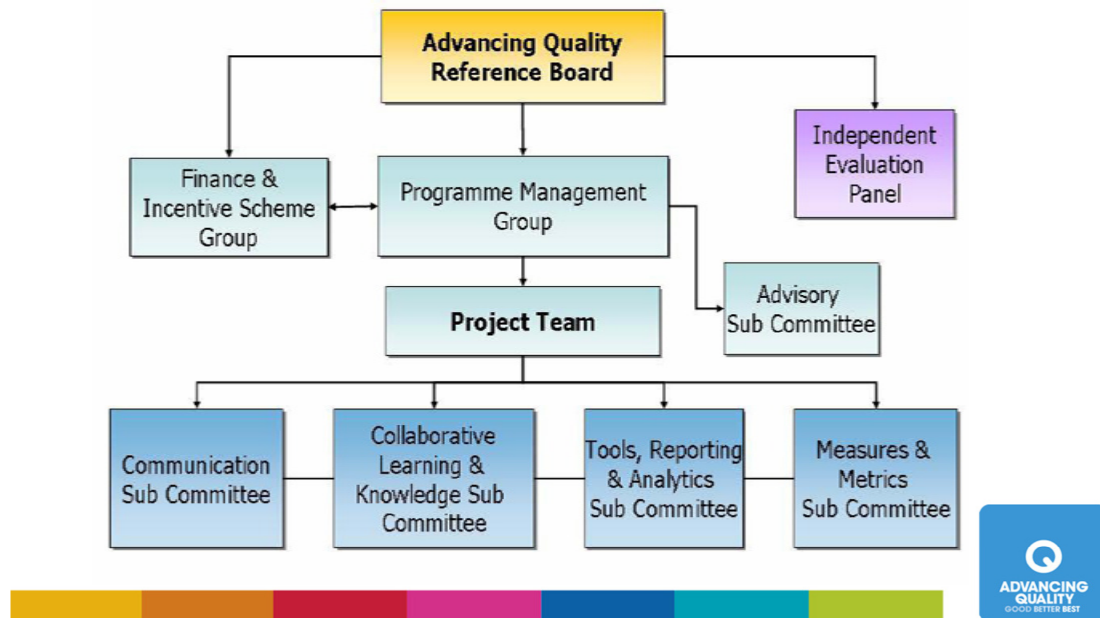
Figure 5



The governance framework has been a dynamic process adapting to the learning and development of the programme as it has rolled out

The AQ Measures and Metrics sub committee has been established; members of this sub committee are predominantly clinical. It works in tandem with an AQ Data and Tools sub committee on metric development. Following best practice in systems management, new clinical networks have been established, whilst existing networks have been reinvigorated. Time limited advisory groups have also been established to support development areas such as PROMs.

An early action was to ask organisations to sign an establishment agreement, which set out the terms of reference for the AQ Reference Board, outlined the governance framework and identified the key principles of the programme. The agreement also identified the resource commitment from PCTs and provided a 'set of rules' for the use of these monies and reporting mechanisms over a three year period.

At the outset one of the key principles of AQ was that the outcome of the incentive scheme would be publically reported (the evidence is that high performing organisations are committed to openness and transparency). Whilst the format and presentation of this still being designed the programme intends to carry out a survey of the general public to determine how they go about finding out about the quality of local health services. This will be used to inform the public reporting of the first year of the programme in spring 2010.

Learning Point 3 - *The governance structure changed to reflect what worked and what did not work, though the principles though were consistent. An*

agreement by the health system to full public reporting of AQ results was unanimous.

Developing the Measures

The AQ programme encourages and rewards continuous improvement in the quality of care offered to patients and this is measured through the use of simple clinical measures. These CFAs and accompanying metrics in AQ have been the subject of extensive discussion. These have been clinically led locally and supported by national bodies such as the National Institute for Health and Clinical Excellence (NICE) and various royal colleges.

The NW health system has adopted the following criteria, for co production of CFAs as follows:

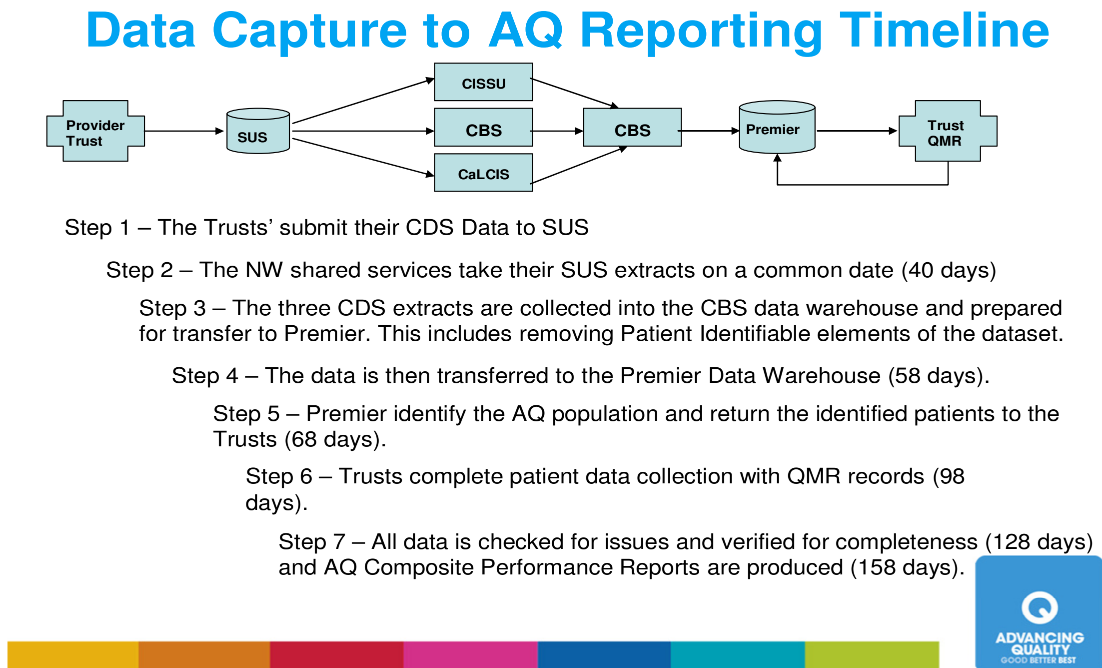
- <u>Evidence based measures should be available</u>, accepted by independent experts as evidence based, scientifically sound, non contentious. Standardised at a national if not international level for comparability allowing for minimum modification
- <u>Data collection must be feasible and affordable</u> using data already collected electronically wherever possible.
- <u>Appropriate risk adjustment is important when comparing quality</u> e.g. outcome measures are affected by complexity of individual's case.
- <u>Quality measures should be capable of showing improvement over time</u>:
  - applying to a wide range of care and providers
  - the provider must be able to influence the measure and need to consider how to identify responsibilities when care crosses boundaries
  - measures should evolve to focus on those areas most in need of improvement
  - of high impact in terms of cost and volume

Learning Point 4 *- The NW health system concluded that clinical support would only exist and alignment achieved when a rigorous process had been followed and the criteria for co-production of CFAs was stringently observed and agreed by clinicians themselves. The potential then exists for clear and unambiguous metric definitions that allow for regional, national and international comparisons or benchmarks. Rigorous definition would prevent future conflict when the outcomes of the programme are published. This also reduced the potential for arbitrary veto.*

Collecting the data

The data collection process is a challenge in any system particularly where there is little of no automation. The Data flow process for CIMs is described in figure 6 below:

Figure 6



A significant piece of work early on in the programme was to address the information governance issues associated with Patient Identifiable data and the requirement to send CIMs data to the US for analysis. A solution was found which does not require any patient identifiable data to be shared with our partners Premier Inc. The process has been considered and supported legally and with the Information Commissioner.

The data collection and analysis relies on Secondary user Service (SUS) data to extract the patient populations. NW data warehouses support this element of the process, all patient identifiable data is removed from the record and one complete file sent monthly to the US for analysis. Premier Inc. process the file using their algorithms to identify the appropriate patients for AQ for each hospital. This data is then given back to the hospitals to abstract the process and outcomes measures and populate the Quality Measures Reporting (QMR) tool. Once this information is entered clinical teams can run reports informing them of their performance in respect of adherence to the care pathways and identify opportunities for improvement.

Learning Point 5 - *The health system took a 'belt and braces' approach to information governance which took time and creativity to identify a solution. Reliance on a number of systems e.g. SUS does provide some risks outside local control and can cause some data transfer difficulties which creates*

challenges and some tensions now that data is becoming available. An appetite at clinical team level has been created, to see the data regularly.

Having identified the measures and data collected the next step was design complimentary incentive rewards that over time raised the bar of quality improvement.

Incentive Rewards

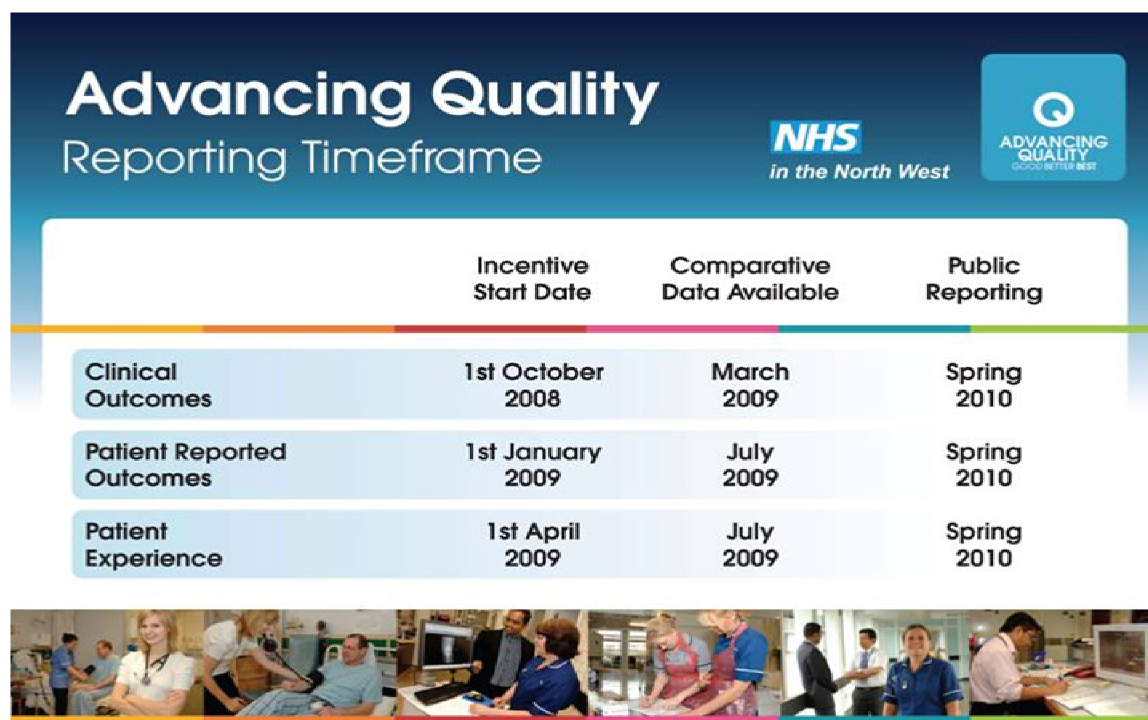
The principles of incentive rewards were agreed at the start of the programme, and were based on available evidence at that and experience of P4P schemes in the US:

- voluntary participation not mandatory
- positive incentives not penalties
- independently evaluated
- new money not recycled funding
- simple construction of reward
- simple communication and recognition
- in principle reward goes to clinical teams delivering improvement

Having surveyed the available evidence the concept of 'Positivity' to create high levels of engagement has been a driving force of AQ from the beginning. Whether this is in terms of incentive rewards rather than penalties, or other aspects, there is a belief in the NW that at the programme start up this positivity was a necessity to ensure success. A more detailed explanation is given in **Appendix A**.

A reporting timeframe that identifies when the incentive rewards start date begins and comparative data becomes available and when public reporting will take place has been communicated to the NW health system and is illustrated below in Figure 7:

Figure 7



Advancing Quality
Reporting Timeframe
NHS in the North West

	Incentive Start Date	Comparative Data Available	Public Reporting
Clinical Outcomes	1st October 2008	March 2009	Spring 2010
Patient Reported Outcomes	1st January 2009	July 2009	Spring 2010
Patient Experience	1st April 2009	July 2009	Spring 2010

Although it is still early in the timeframe, individual Trust CIMs data flow has started to be fed back to Trusts. This is not comparative data, but it is already starting to generate almost unquantified benefits concerning the acceptance of discussing and looking for improvement on quality metrics as part of every day business and actions. In other words, it already appears to be giving the purchase and momentum to a cultural shift in desired behaviours of individuals and organisations.

The incentive rewards agreed by the Reference board for year one will be 4% of the HRG value that are relevant to the AQ CFAs for the top performing quartile of hospitals, 2% for the 2nd quartile. £1m has been reserved for both PROMs and PEMs.

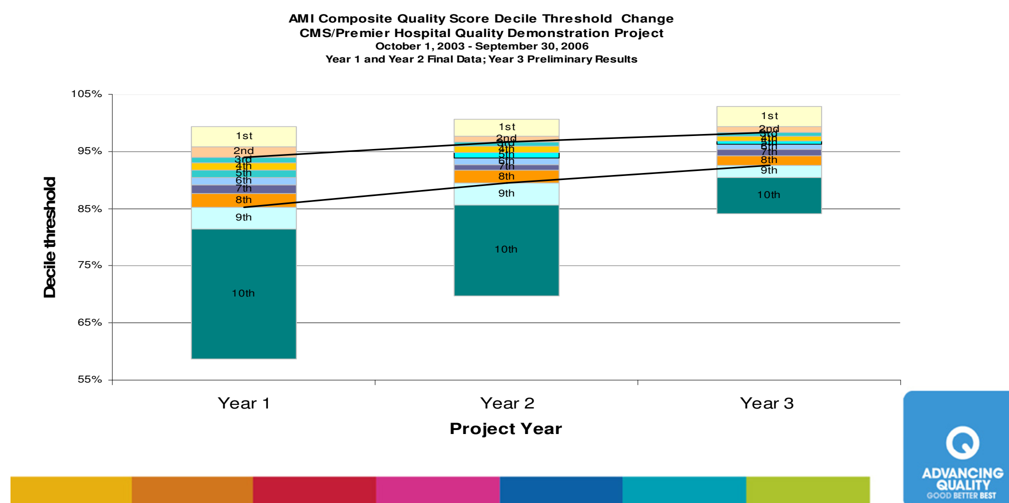
One of the founding principles of AQ is that clinical teams receive the incentive reward. Although the reward is relatively small, by total health budget comparisons, it is large enough to induce behavioural change at a clinical team and organisational level to encourage continuous improvement. It has to reinvested back into patient care but it encourages and acknowledges the effort needed to be a top performing team.

A number of measures will be used in the next three years to assess and reward improving performance against quality indicators. They have been designed to give as many Trusts as possible the chance of a reward where there has been a marked improvement in quality and to avoid the compacting the improvement of top performers overtime as represented in Figure 8:

Figure 8

Compression – Evidence from HQID

- **Quality improvement across all hospitals**
- **Variation in hospital performance decreased**



Over the next three years service quality improvement in all three elements of AQ will be assessed and rewarded using the following performance measures:

- *Top Performance* - Hospitals that are top in each clinical area will receive an incentive payment. Used solely in the first year of rewarding improvement for those Trusts in the first and second quartile of performance.

- *Attainment* – Hospitals that attain or exceed a median level of performance will receive an incentive payment. This will supplement *Top Performance* from year two onward as part of a blended approach of matching rewards to measures over time.

- *Top Improvement* – Hospitals attaining median level performance who have the largest percentage quality improvements in each clinical area will receive an additional incentive payment. This will also supplement *Top Performance* from year two onward.

Incentive rewards are the corner stone of any Pay for Performance programme. However, AQ is in essence a programme of cultural change and organisational development (OD) that seeks positively to influence clinicians' behaviour, supported by IT systems capable of providing detailed information about available best practice; where this is being delivered and the support available to enable Trusts to achieve the improvements in the outcomes and outputs to which they aspire.

In respect of timescales, the approach of AQ and the 'lift and implement' of CIMs and PROMs has worked extremely well in the NW. It allowed the health system to move quickly but required clinicians to work with a set of measures which has already been through a rigorous process of identification and development albeit in the US not the UK. Ensuring these measures were appropriate for use in the UK required consultation with various Royal Colleges, clinical leads across the NW, Networks, NICE and leading experts. Also a significant exercise was carried out to transfer the measures into procedure and diagnostic codes ICD 10. Different data capture processes have been developed across individual organisation; some have explored full electronic data capture whilst others rely solely on manual data extraction.

Learning Point 6 *- Overtime directing financial incentives at the right AQ measures will ensure alignment, relevance and effectiveness. A blended approach is required that rewards top performance in the first year and attainment and most improved in subsequent years. In some hospitals, the NW health system experience to date is that, data collection for CFAs has been manual. In other hospitals full electronic data transfer has been possible. The evidence, although at this stage subjective, suggests that the data collection for five new CFAs is a maximum number the NW health system could handle in terms of implementation at any one time. As CFAs data flow becomes more established and follows an electronic format the adoption of further CFAs is increasingly possible.*

The AQ programme has successfully rolled out data collection to all its NW Trusts (24 Trusts) in less than six months for the five CIMs. It is anticipated that this will take a further three months for PROMs and PEMs. In order to achieve these timescales an effective communications strategy was needed.

Engaging and communicating with the health system

A coordinated communications strategy around media, staff and public relations was formulated early on. Following a procurement process the organisation Communiqué was appointed as the AQ communications partner for an initial two year contract. Communiqué are an integral part of the implementation team as they communicate all aspects of AQ development including updates on AQ metric development via e-alerts(which are distributed fortnightly to more than 2000 staff at one time), art work and a dedicated web site. This is particularly key in the first phase of communication with the health system in general and organisations and staff specifically.

The AQ programme has encouraged clinical leaders to own and lead the development and definition of the clinical measures. They have been active in discussions and engagement of the wider clinical community. A key 'selling point' was the focus on this being positive incentives with no financial penalty. The Programme has demonstrated that positive incentive delivers effective clinical engagement and commitment to really focus on quality and improving

outcomes, and significantly reducing the time needed to secure participation/sign up or convince a sceptical work force.

Communication has been key to successful implementation, the AQ team have been very active and have held discussions, attended many meetings with boards, executive and clinician teams. The early identification of a local programme lead within providers has been critical to the successful implementation. Those organisations/health economies that have provided additional resources to support the programme have progressed quickly.

The AQ programme has clearly stated and communicated its aim to save lives and improve the quality of patient care and provide the best available health services when measured against international standards. All this can be done as well as achieving value for money. It is for these reasons the success of this programme is vital for patients and as a result the NW health system, aligned like never before, will continue to drive this programme forward.

Learning Point 7 *- The recognition that the capacity and skills needed to deliver a Pay for Performance type programme and to communicate effectively required external expertise. The capacity and capability was not available within existing organisations.*

Implementation

As part of preparing Trusts to use the AQ data to identify priorities for their improvement effort, a Performance Improvement Self Assessment is carried out by each Trust. This is followed up by an onsite visit to learn what works well and what is currently in place within organisations to support the improvement effort. A report is then presented to the executive team to help them identify their strengths and weaknesses. This approach has been extremely positive in developing relationships at Trust level and has been welcomed by staff and senior teams. Through these visits the AQ team have an understanding of how to support each organisation and are able to link them with organisations that have successful addressed similar issues. This encourages knowledge sharing and effective use of resources.

A small high level team, led by an Executive SHA Executive Director and championed by the SHA CEO, has handled the management of day to day implementation. This has been supported by a governance structure that is flexible and responsive to issues as they arise. The NW experience has found that a blend of Procurement, Commissioning, Finance and general management experience assisted by senior clinicians has been beneficial. At a minimum it is recommended that at least two full time senior staff are employed by the programme.

Given the amount of communication required at a Board and senior clinical level it is also useful that these members of the team are able to communicate across and at the highest levels in the health system. As part of the learning

there were seven wave one sites through which a resource file was developed. This contained clear roles and responsibilities for local health systems and provided a guide for next steps and what to focus on as implementation commenced.

Learning Point 8 *- At local health system level the need for project management was identified and as roll out has moved on, one clinical coder per trust, to support the data extraction process, although this has varied by organisation depending on expertise and staffing levels. Each CFA, in each hospital, also required a champion – outlining the roles and responsibilities required, immediately took a great deal of anxiety out of AQ implementation.*

Providing assurance

Data must be assured prior to any incentives being paid. NHS NW is working closely with the Audit Commission to develop an AQ Assurance Framework that is risk based. Providing an assurance function for AQ programme is of critical importance. The AQ programme is data driven relying on high data quality (coding & completeness) for its successful operation and reputation.

In the HQID project it is important to note that a hospitals data is considered 'validated if it's overall validation (agreement) result is greater than 80%. The consequences for a hospitals data not being validated are severe – they do not receive any incentive reward and can not be classified as a top performer.

The findings of the Audit Commission Payment by Results (PbR) Assurance Framework suggest that most NHS NW Trusts are capability of achieving well over 80 percent. However, there maybe a few trusts that do not achieve that target. Given that for the CIMs there is no past performance record upon which to base the setting of a threshold and that such care has been taken in constructing a reporting and payment model that develops progressively over time the Audit Commission are advising that:

- for the first year of reporting there are no penalties for shortcomings in data quality
- that from year two onwards, a universal threshold is set and communicated well in advance that is both stretching but achievable (it is anticipated this would be well in excess of 80 percent)
- that Trusts are judged against this threshold on a CIMs basis
- that penalties are set in such a way that providers are incentivised to achieve the threshold but do not lose out completely if they fail to do so
- that the threshold be progressively increased over time to drive continuous improvement in line with the AQ principles of stretch and achievability

The AQ programme is committed to knowledge share and learning. NHS NW will be jointly appointing an academic partner with the National Institute for Health Research and Service Delivery and Organisation (NIHR SDO) in

December 2008. This partnership will ensure that maximum knowledge is shared within NHS NW and across the NHS – not least that the metrics are capable of delivering the stated AQ programmes aims of reduced average length of stay, reduced complications, reduced costs and reduced patient readmissions and improved mortality.

The learning will focus on the following questions over a five year period:

- What impact has AQ had on the behaviour of commissioners and the quality of commissioning? Have they changed the way they conduct and prioritise their business? Are they able to measure the effectiveness of work along a patient pathway?
- What impact has AQ had on the behaviour of provider organisations? Do provider organisations place a greater emphasis on quality and how is this managed?
- What impact has AQ had on clinical practice? What is the impact on clinical innovation and clinical collaboration across organisations? Do financial incentives provide a key incentive for change or are other mechanisms more important (e.g. public reporting)?
- What impact has AQ had on patient related outcomes such as clinical outcomes, patient experience and the patient's quality of life?
- What is the relationship of AQ to other change strategies and incentives to improve performance and quality?
- How cost effective is AQ? Does it provide good value for money and increased public value? Are the transaction costs greater than the benefits generated by the programme? Is it possible to identify the optimal amount of financial incentives needed to effect change among commissioners, clinicians and provider organisations? Are there any perverse incentives (e.g. cream-skimming or gaming)?
- What are the most important attributes of the AQ approach? How dependent is AQ on the intervention support provided by the project team, Premier Inc etc.?
- What lessons are there for the wider implementation of P4P schemes across the NHS as a whole including different settings and for other areas of clinical care (e.g. long-term conditions)? What are the key characteristics of successful implementation and sustainability of the programme? How transferable and sustainable is the AQ pay for performance programme?

Early in the development of the AQ programme there was a decision to concentrate on getting the process right for these five CFAs. This allowed the wider system to understand the programme, its complex nature and work load involved in systematically collecting the data to support the measures. As CFA data flows become more routine and where possible follows an electronic format the adoption of further CFAs becomes increasingly possible. There is also a commitment to sharing best practice and processes through a portal which allows the health system to ask questions of each other, share protocols etc. Top performing organisations will have their experiences and processes documented to support the levelling up and compression of performance over time.

Learning Point 9 *- The health system was committed to independent evaluation to provide assurance and verify whether anticipated benefits have been achieved, identify the lesson for wider knowledge diffusion in the NW health system and the NHS as a whole. Also the commitment to independent evaluation was a particular feature that engaged the clinical community and Regional Consultants Committee (BMA). The communication of best practice and the benefits already emanating from the programme are being told in case studies that staff and clinicians can relate in their every day practice.*

Next stage development and continuous improvement

AQ is looking to move to its next stage of development and is moving to establish new CFAs in stroke and mental health. It is also investigating the feasibility of a longitudinal extension of hospital CIMs into community heart failure and acquired pneumonia that would bridge the gap in the care pathway to the Quality and Outcomes Framework. There has been extensive development of stroke metrics in both the US and UK that is anticipated will form a new CFAs. In this regard, there are less clearly defined metrics associated with mental health. As such, AQ is planning that, it will take 18 months to fully develop and create the necessary consensus required of a new CFA in stroke and two years to achieve the same in mental health.

AQ CFAs now have the potential to be dropped into any contractual framework and the methodology is sufficiently simple to allow for adoption into other clinical areas or services to facilitate the development of local measures.

The NW health system has had the opportunity to learn as it has introduced the elements of the programme. It is able to elucidate some of the potential 'pitfalls' of these types of programmes in the NHS. For any health system to embrace a quality improvement focus the broader lessons learned by the NW may be advantageous to understand. What is now apparent to the NW health system is that continuous improvement revolves around the four R's of *Rigour, Reputation*, *Recognition, and Relevance*. They can be described as follows:

Rigour – Clear unambiguous data definition (including exclusion and inclusion criteria), simple processes for collection & analysis of data which compares service processes on a 'like for like' basis, regular comparable performance data & information at local level, outcome focused measurement and a small number of evidence based measures for each pathway of care.

Reputation – Public reporting of information is a key driver to levelling up performance and provides sufficient incentive to improve. Peer pressure is also a strong lever in the process with changes in clinical practice taking place quickly once the CIs start to be collected. There is a certain organisational pride in encouraging patients to choose them as their preferred hospital for care. The commitment to the sharing of best practice and process, coupled

with a willingness to learn from others has demonstrated a healthy appetite for learning and continuous improvement.

Recognition – Each clinical lead has been keen to know their levels of performance against the CIs and compare these with members of their own team. Clinicians and managers alike have been keen to see performance data at hospital and Trust level in order to identify areas of weakness and highlight areas of strength. This enables appropriate prioritisation and target improvement efforts.

Relevance – the information can be returned quickly to clinical teams, allowing for more real time performance improvement. The triangulation of clinical outcome, Quality of Life (PROMs) and patient experience makes the output relevant to all stakeholders.

Learning Point 10 *- The new adoption of CFAs is flexible where they are being developed in different health sectors such as Mental Health, but as a general rule no more than five new CFAs should be implemented in any one year, whilst at the same time developing a maximum of two addition CFAs.*

APPENDIX A

Advancing Quality
Incentivising Continuous Improvement in the North West

Generating momentum - clinical engagement and motivation

The NHS in the North West (NW) Advancing Quality (AQ) programme is a Pay for Performance (P4P) type scheme that has been designed to bring about cultural change. The key issues in respect of adopting positive incentive rewards and a small number of clinical relevant indicators are outlined below:

Positive incentives

- An early decision to adopt positive incentives in AQ has engaged the clinical community to act as its champions.
- Early AQ proof of concept involved a review of the available academic literature on P4P, with decisions on incentive design having a clear evidence base.
- The evidence base for the benefits and penalty system is less persuasive.
- The fact that clinicians do generally respond positively to financial incentive schemes is extensively supported in the academic literature.
- The evidence also supports the hypothesis that incentive rewards in P4P do indeed form the cornerstone of desired changes in clinical behaviour that lead to service improvement.
- The evidence strongly indicates that public reporting also provides a strong incentive to change.
- One of the learning points from the Premier Hospital Quality Incentive Demonstration (HQID) project (the forerunner of AQ in the US) was that health systems either didn't participate or withdrew from the scheme if they consistently performed in the lower deciles. The reasons for this were they would lose a percentage of their DRG payment for poor performance and the perceived negative impact on reputation.

- Incentive rewards should be simple to communicate and linked to performance in a way that is reported in standard data definitions and reporting mechanisms
- Few of the existing 150 who pay for P4P programmes currently adopt penalties. Those that do only plan for their very rare use and so far we are not aware of any instance where they have been called upon to any great extent.
- By having purely positive incentives and no disincentives it creates mind sets were clinicians have been relatively easy to engage, are positive about the programme and ‘cannot find a reason why not to participate’.
- Agreeing the principle that the reward money goes to the clinical teams that deliver the improvement have also engaged the clinical community.
- Incentive rewards and measures have been designed to allow the provider to generate a reasonable return on investment when incurring costs associated with any redesign of clinical pathways.

Measures

- Fixed targets will need to be advanced in AQ as providers performance improves and leads to potential compression of Top Performers.
- When making decisions about the design of measures in PfP programmes, providers would be frustrated if multiple, uncoordinated data requests from multiple commissioners emerge.
- AQ wanted to guard against having larger numbers of measures, loosely defined, unclear data collection you loose the ability to control and compare performance - the ‘apples and pears factor’ creating a confusing situation for patients when making choice of provider.
- By encouraging collaboration between commissioners, provider, regulators and clinicians through the governance structure AQ has aligned and obtained significant agreement on process, measures, management and learning in a way that has not happened before.
- AQ creates legitimacy around patient outcomes, not just clinical ones.
- AQ has been sold early on as having the priority of improving overall system performance, as judged by the end-users of the system – the patient, with a value proposition firmly grounded in their own outcomes and experiences
- Implementation of AQ will deliberately be aimed at fostering innovation and include independent evaluation (commissioned by SDO) and reflection as part of the overall design.
- AQ measures selected as part of national and local programmes must be clinically reviewed, evidence based, and relevant.

- It was a given that in any construct of AQ performance improvement must be measurable.
- Evidenced-based measures of performance with clinically acceptable definitions are critical to AQ.
- By having a small number of measures this has enabled the implementation to concentrate on getting these areas right and collect and share the learning.
- The clinical areas are of high clinical importance regionally and highly relevant to the population.

In its development AQ has been aware of the evidence from the Premier HQID project was that the following key elements were present in all top performing health systems:

1. "Quality" core value of institution and a priority of executive team
2. Clinician engagement
3. Improvement and Prioritisation methodology within the organisation
4. Dedicated resources to successfully manage and lead the programme
5. Committed "knowledge transfer"

Resources

The incentive rewards in AQ are based on "new money" which recognises that there are often sunk costs of capital investment that health systems require to improve quality and seamlessly into the positive aspects on which AQ is based.

By introducing a small amount of additional money into the system through Local Delivery Plans of £10.6m commissioners are rewarding providers who have invested in a better delivery system without jeopardising the potential for other providers to "level up" with the high performers.

Investment of "new money" is seen as more acceptable by providers and clinicians alike as it is seen as easing the transition from a pure Payment by Results financial regime to a complimentary value-based programme of Pay for Performance.

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