Clinical Utilisation Review

An Overview

On average 30-40% of patients are cared for at a level of intensity beyond their clinical need. This is detrimental to their care and wellbeing and at a significantly inappropriate cost to the NHS.

Clinical Utilisation Review (CUR) is a rigorous approach to ensuring safe and effective care. It is based on the proven concept that the intensity of service is the best proxy to determine a patient's required level of care. This is achieved by application of objective clinical utilisation review (CUR) criteria. It is designed to ensure that appropriate care is delivered across the health care continuum; that is in the right place, at the right time.

The CUR approach informs understanding and decision making around the core purpose of healthcare organisations. - Are we ensuring the care we deliver to our patients is appropriate to their needs and meeting the highest standards? If not, what do we need to do about it? As such CUR replaces a lot of ad hoc and uncoordinated initiatives. These ad hoc initiatives are time consuming and tend to focus on peripheral issues and support costs and do little to address root problems. CUR also ensures that initiatives are focussed; resources and budgets are used wisely and most importantly that patients are not put at risk.

Successful healthcare organisations worldwide have embraced this approach to reduce the variances in healthcare and improve patient outcomes. These organisations are using innovative approaches to ensure that evidence based criteria replace subjective opinion. As a result the appropriate care needs of their patients are being addressed.

Effective CUR programmes have to be concurrent (real time) and built upon the rigour of applying objective internationally validated clinical criteria to every patient every day. The solution is proven to result in accelerating patient flow and reducing pressures on beds and services; including A&E, acute, sub-acute and home care. Through the application of CUR and by identifying the clinical appropriateness of each patient every day, local health economies will be able to better utilise existing clinical resources and ensure safe, timely transition throughout each level of care. The approach has demonstrated real and significant opportunities for financial savings through overall capacity (bed) management while ensuring high quality care based on international best practice.

History of the Development of CUR

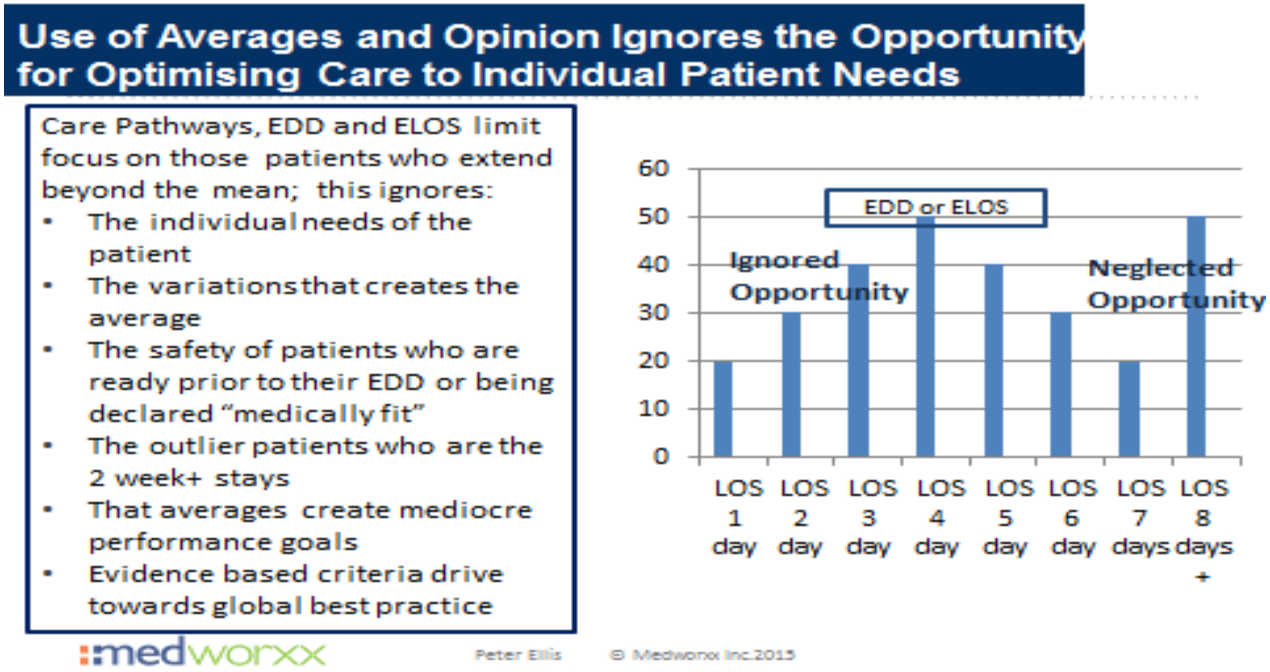
CUR systems have been developed over the last 30+ years. In the USA they were mandated in the 1980s, primarily as payment approval/denial tools for insurers and also to meet the need for providers to demonstrate they had a system to monitor the appropriateness of the care their medical staff was delivering. This was at the time the U.S. judicial system began to hold hospitals responsible for monitoring the care provided by their medical staff on the premise that as they had credentialed their medical staff and given them "privileges" .they were accountable for monitoring the quality and appropriateness of the care they delivered

In parallel with these US initiatives the Medworxx' CUR solution was being developed in Canada. The underlying concept "that intensity of service was the best proxy to determine if a patient was receiving the most safe and appropriate care"- was the same. The main difference was the drivers. Canada, as a government funded, single payer system, is driven from the patient's clinical needs rather than the insurance sector payment certification needs. This underlying philosophy it shares with the UK. Thus, in Canada, CUR has been refined and enabled by technology into an effective and easy to use solution that is essential at the point of care. When used for daily review on all patients CUR has demonstrated::

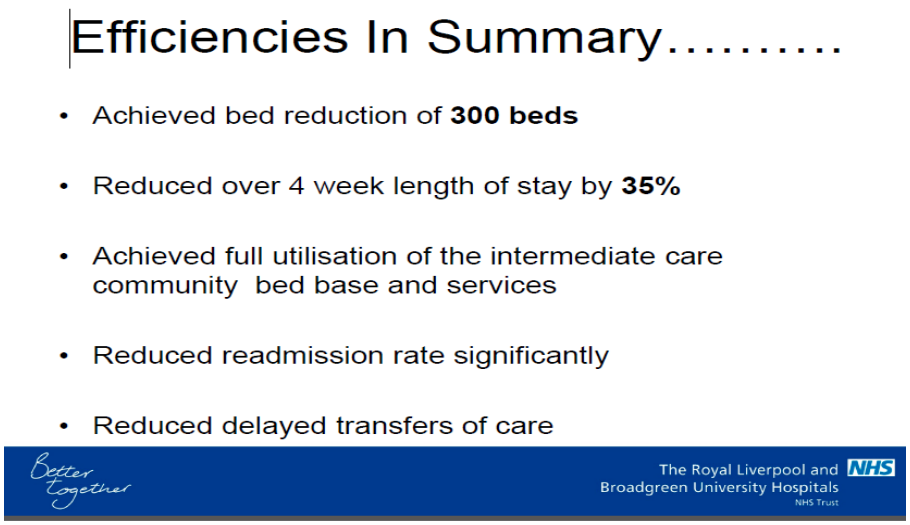
- improved patient care and outcomes
- it helps front-line staff in delivering exemplary care and improves care team focus and interactions
- it has proven itself as a rapid and easy to deploy. solution
- it provides unique insightful information for operational management and strategic purposes

In the UK to date CUR has been slow to be adopted. The NHs had promoted such an approach in 2006 but commissioners have not required such scrutiny and some of the US developed approaches had the reputation of being cumbersome management tools with little immediate direct clinical value to front line staff. In the UK there also tended to be a focus on individual, disease-based, care pathways or segments of the care continuum (e.g. A&E breaches or DTOC). Such approaches however fail to recognise that effective patient flow, safe care and rapid transitions requires the needs of individual patients and all their co-morbidities to be considered to determine the appropriateness of the care required.
There has also been in the UK some confusion between CUR (based on the latest internationally validated, best practice criteria) and PAS and Bed Management solutions that capture reasons for delays that are based on an individual opinion or only patients declared medically fit for

discharge. This confusion results in huge opportunities for improvement being missed (see diagram below)



The initiatives by NHS England; starting in 2014 and leading to this year's mandatory requirement within specialised commissioning, has helped focus on the realisable potential of CUR in the UK and helped clarify the importance of the consistent use of objective criteria.
Royal Liverpool and Broadgreen University Hospital was a pioneer in England in adopting CUR. They outlined the benefits at a recent NHS England event to launch the National CUR initiative.



It should be noted that CUR solutions are not primarily an IT solution. The concept combines process, communication and technology with robust clinical criteria as a decision support tool for all levels of the healthcare economy (from pre-admission through primary, acute, intermediate and community care). CUR informs decisions at all points of the continuum of care and supports strategic provisioning decisions throughout the local health economy. The solution does however follow the principle of “enter once use often” and integrates with PAS, EPR and Bed Management Systems through standardised HL7 messaging to avoid duplication. The solution also provides integrated customisable assessments that replace many, opinion based, ad-hoc, data collection efforts (SitReps, CCMDS, Readiness for Discharge assessments) that are neither evidence-based nor integrated.

The significant results from early pioneer sites in the UK has resulted in CUR being embraced by clinical staff as valuable to the delivery of effective care and as a means to improve inter-professional relationships .The Medworxx solution is rapid C (30 seconds to 2 minutes. It provides insight into the barriers or obstacles that affect patient flow, delay safe and effective transitions and cause excess bed days. As a result this provides insightful real-time data for use by front line staff that can support and prompt action that’s in the best interest of the patient. CUR ensures that either unnecessary admission is avoided or causes of delays to allow safe transition are addressed. The accumulated rich data and patterns allow systemic issues to be resolved and inform strategic decision making and service improvement and redesign. The data derived feeds heretofore unavailable information into the organisation’s operational, management and clinical governance processes

Benefits of CUR

Application of concurrent utilisation review is proven to:

- Prevent inappropriate patient admissions
- Reduce systemic bottleneck/barriers that would otherwise cause delay in patient care plans and affect patient flow
- Assure safe patient transitions between levels of care whilst safely reducing LOS
- Enable safe, appropriate and effective patient discharges
- Avoid unplanned readmissions
- Provide real-time capacity management capability
- Ensure out of hours care at nights and weekends is as effective as regular hours
- Improve bed utilisation and efficiency gains to enable increased patient throughput and/or bed reductions
- Identify and help reduce variances between clinicians

- Improve relations within and between organisations as discussions are based on evidence and data, not opinion and anecdote

This approach provides unique insights that can be made available to both commissioners and providers on a daily basis (in real-time).

- Identifies patients who should never have been admitted and systemic improvement opportunities for admittance avoidance
- Allows more effective management of the “front door”
- Demonstrates whether or not patients are clinically appropriate for the level of care they are receiving or bed they are occupying
- Demonstrates whether or not patients are clinically ready for discharge or transition
- Identifies causes for each day of care beyond what is clinically necessary: analysed by responsible parties (hospital, doctor, or community).
- Provides categorised reasons and details for each barrier or delay, such as services delays, observation days, and community placement issues.
- Validates and prioritises the critical issues affecting LOS.
- Real-time demand management capability and forecasting
- Shares a consistent view of current status at all parts of the local health economy
- Identifies opportunities for health system, campus, facility and service realignment
- System co-ordination and control centre display of current status and demand
- Predictability of system pressures and impending alert situations

NHS England CQUIN

In recognition of the effectiveness of CUR tools, NHS England has indicated its requirement for CUR in its Commissioning Intentions document 2015/16 and its early adopter programme:

- “A vision has been set for all providers of specialised services, to embed Clinical Utilisation Review Tools”.
- “The CQUIN enables all providers and commissioners to work together in partnership”
- “All providers need to establish implementation plans for CUR”

NHS England opened its Dec 2014 CUR launch event with the following statement based on results of UK CUR assessments:

- “Median **42%** bed days (Range 35%-69%) needed less intensive setting”
- “Median **14%** admissions (Range 7%-23%) did not meet acute criteria “

A generous CQUIN to support embedded solutions using “proven and recognised clinical criteria based CUR tools” has been developed and local commissioners have been encouraged to mirror national initiative and recognise health economy wide benefits

The value of this CQUIN would enable Trusts and commissioners to offset the upfront costs the embedded system.

Use of CUR Solutions

The CUR technology is effective as both an audit tool to be used in diagnostic/snapshot reviews to determine the opportunities for improvement and more powerfully, as an embedded solution fully integrated into the patient care process.

Audits/Diagnostic Reviews

The solution lends itself to be used as an audit tool to review an organisation's current performance, issues and opportunities for improvement. These audits/snapshots can be focused on a particular cohort of patients, e.g. un-scheduled care or a broader review across the whole organisation. This can be achieved through either concurrent or retrospective reviews of appropriate patients.

For providers and commissioners who have financial and strategic challenges it provides unique insights that demonstrate how effectively the core purpose of both individual organisation and/or the local health economy.is being managed; i.e. is the care appropriate to the needs of the patients and in line with best practice.

There are at least three models and a number of iterations thereof:

1. **Option 1** - a focused retrospective review of a sample of patients from a specific service e.g. unplanned care or care of the elderly
    - Identifies inappropriate lengths of stays and quantification of barriers by cause, together with opportunities for improvement
    - Requires a sample of 100-150 patients depending on scope.
    - Provides ROI for targeted area but cannot be extrapolated across whole organization

2. **Option 2** - A more extensive review across the whole organisation and/or health economy which would involve a concurrent or retrospective review of a sufficient cohort of patients. (250-500) to provide statistically valid sample of the whole system
    - In both acute and sub-acute settings.
    - Identifies inappropriate admissions and conservable days along with barriers. Includes a potential ROI for implementing the full system.
    - Review of current processes, data capture and patient flow issues

3. **Option 3** - A full system concurrent review of appropriate sample of >1000 current patients involving including a review of the health economy's demand management and patient flow processes.
    - Produces output as per (2) above plus an in-depth review and recommendations on all relevant processes and accountability structures across the organisation(s)
    - The opportunities for health economy wide sharing of real time demand and capacity data

- Strategic data as to service provision issues and requirements by GP, postcode locality etc.

Each of these reviews requires engagement/interviews with key stakeholders and a review of current processes and systems used to capture information and manage patient flow.
The review is led by our UK based clinical and technical consultants. The output is a detailed analysis of the data
Note: All of the above include the technical and clinical resources to undertake the reviews as well as use of the criteria sets

Embedded Solution

While audits help diagnose the problems they don't provide an ongoing solution. The full benefit of CUR is achieved as an embedded solution in concert with a realignment of accountability and processes, thus enabling both operational improvements, as highlighted above in the Liverpool case and identifying strategic provisioning opportunities. .

The Clinical UR system allows a rapid assessment for every patient, every day. The embedded solution is designed to cover every bed/patient at the client site to achieve system wide efficiency gains.
To achieve the full benefits it requires an in depth review of roles and accountability within the MDT for acting on the available daily assessment. Alignment and integration with financial information and accountability allows systemic issues and patterns to be addressed.

Quantitative Benefits to Commissioners and Providers

The opportunity for the interested parties can be estimated as follows:

- Providers
  - 10-15% of direct care budget per annum , if only 30-50% of the potential were achieved
  - Excluding community caused delays, typically two thirds of the savings are under the providers direct control
  - Readmission rates should be reduced by ensuring safe transitions with consequent reduction in penalties and unfunded care
  - Routine data capture ensures patient's condition and co-morbidities are recognised for coding etc.
- The Commissioners
  - 5-10% avoidable admissions reduced
  - Excess bed day payments reduced (likely £2-5m per annum)
  - System realignment to match service provision to reduced intensity of service requirements and levels of care

Qualitative Benefits to Commissioners and Providers

- Providers
  - Faster safer transitions to appropriate level of care
  - Untoward patient events reduced
  - Faster more focussed MDT and bed round meetings

    - Real time consistent view available throughout the organisation
- The commissioner
    - Real time view of health economy
    - Ability to build control centre
    - Create an integrated health economy approach
    - Base resourcing and commissioning decisions on objective data and best recognised practise

Clinical Assessment Model

It is important to emphasise that while CUR is an enabler for significant improvements in patient flow, it requires significant changes in accountability for its effective use and follow up. Key to its success is the identification of the persons/roles whose responsibility it would be to undertake the daily assessment of the individual patients (30 seconds to 2 minutes) and the follow up actions with the MDT and others with responsibility for the delays or safe transition of the patient. There are various staffing options and role changes, all of whom should be ward based.

- Delegate responsibility to supernumerary ward nursing management staff
- Use front line nursing staff
- Realign existing clinical discharge planning staff and related functions and retrain as “case managers”

Trust and System Wide Structural Realignment

As demonstrated above, the rigorous application of objective clinical utilisation criteria will highlight opportunities and deficiencies in the broader health economy that will need to be addressed.

The options for the most appropriate location for varying levels and types of care are changing as technological and other advances have changed best practice. The CUR approach will flag and highlight where the organisation does not comply with best practice. The variances with best practice identified may be resolvable within the organisation or it may raise issues about the provision of services or facilities outside of the Trusts control

It is essential therefore, to have the mechanisms in place with authority to address the issues and barriers identified. The CUR system will require clear accountability to recommend and implement solutions that impact on both the Trust and system wide. The issues will lead to reviews of, process, structure and resource priorities to ensure maximum benefits realisation.

The two key structural requirements that would be required to monitor and take action on the needs identified are:

1. The creation of a Trust Board Level Utilisation Review/Quality Committee to monitor the rich data that the system produces and to recommend actions both operationally and strategically to improve the effective flow of patients and service provision within the Trust and beyond.

2. A local health system coordination committee involving the CCG and providers. This would have the authority to recommend on such issues as:
    a. To address the inappropriate provision and system delays that the application of international best practice criteria highlights
    b. To recommend opportunities for system wide improvement in the location and provision of services

Creation of Health-Economy-Wide Patient Flow Management Centre

The capabilities of CUR extend to all levels of care, pre admission, acute intermediate care, mental health and community. This provides the potential for creating a “central control centre” which can monitor and assist management of flow across all aspects of the local health economy. This would provide the capability throughout the health economy for consistent real time information to be shared as to the management of capacity and demand. It would also have the capability to alert as to potential system blockages and other scenarios in advance of their occurrence.

The extracts from the accumulated data would be integrated into the organisation’ s informatics capabilities to allow CUR information to be an integral part of dashboards and reports to support clinical governance and operational and executive management processes.

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