

Antrim Hospital, 7 July 2009

Innovation in the selection of medicines and medical devices – a first for Northern Trust

The Northern Health and Social Care Trust (NHSCT) in collaboration with Digitalis Medicines Management Ltd, is launching STEPSelect, an online tool for the selection and procurement of medicines and medical devices in Northern Ireland.

STEPSelect (Safe Therapeutic Economic Pharmaceutical Selection) is designed to facilitate the rational selection and procurement of both medicines and medical devices.

Northern Trust Chief Executive, Ms Norma Evans, said: “The Trust is very pleased with the use of this scheme as it will improve the quality and safety of medicine use by patients in both hospital and community in Northern Ireland.”

STEPSelect is an online, step-by-step system by which rational considerations are made using review criteria to select preferred medicines. Preferred medicines are classified exclusively on the basis of clinically relevant considerations. They are then further evaluated using a patient orientated analysis that focuses on packaging, quality of patient information, and finally supplier factors.

This analysis is essential in order to coordinate the pharmacotherapy choices made with the procurement of the preferred medicines and the utilisation of these by the prescribers.

Mr Rob Brenninkmeijer, Pharmacist with Digitalis Mm said: “By developing the STEPSelect process with the Trust we are enabling the skills of doctors, pharmacists (both clinical and procurement) as well as other healthcare professionals and information specialists to be deployed towards a more collaborative and effective medicines management process built upon the key principles of quality and safety.”

The aim of STEPSelect is to increase the efficiency of medicines, which is why the method for use is based on the fact that quality (Q) and safety (S) result in both health improvement (I) and better efficiency (E): Q+S=I+E. One of the main objectives is to help prevent the fragmented approach that exists in the field of communication and decision-making within both the inter and intra sector as well as external chains of prescribers, suppliers and procurers of pharmaceutical care.

An extensive study of 'Integrated Medicines Management' in Northern Ireland has shown that a reduction in the incidence of hospitalisation due to the inappropriate use of medicines can be achieved through a more integrated approach and decision-making process within pharmaceutical care using STEPSelect.

Dr Mike Scott, Head of Pharmacy and Medicines Management NHSCT, said: "The new system has proven very successful in effectively linking clinical evidence with the procurement process resulting in a much more integrated approach to medicines management between primary and secondary care. The active participation of both primary and secondary doctors in this system has been a key factor in the success achieved.

This process complements NICE guidance and enhances and indeed accelerates implementation of the guidelines in medical practice".

In order to achieve this, Digitalis Mm Ltd has developed web-based modules in collaboration with groups of experts in Northern Ireland. STEPSelect is now gradually being introduced in Northern Ireland as part of the Pharmaceutical Clinical Effectiveness Programme following a successful pilot scheme carried out with the NHSCT and commissioned by the Department of Health Personal and Social Services and Public Safety (DHSSPS).

Regional Pharmaceutical Procurement Pharmacist Dr Jill Mairs said: "The process fully supports a robust and transparent evaluation procedure in full compliance with Public Contracts Regulations (2006)".

HSC Innovations is working with Digitalis Mm in facilitating the further development of STEPSelect by the NHSCT. Dr David Brownlee from HSC innovations said: "The collaboration between industry and health demonstrates the value of working with the clinical base in developing new product and technology opportunities for healthcare. These products can then help, to secure real improvements in healthcare practices locally (HSC), nationally (NHS) and globally."

Further information is available from: Dr Mike Scott, Head of Pharmacy and Medicines Management, NHSCT, telephone +44 2894424945 or, Mr Rob Brenninkmeijer, Digitalis Mm on telephone +31 6 54397911.

Or, the following websites: www.stepselect.com www.medicines-management.ie www.northerntrust.hscni.net and, www.crsc.n-i.nhs.uk/innovations

ENDS

Notes for Editors:

Digitalis has been active as a digital publisher and developer of knowledge based systems in the field of health care, pharmacotherapy, knowledge management and decision support since the late 1980s. Its main products and services involve linking and integrating the prescribing system Prescriptor with 65% of general practitioners in the Netherlands. Digitalis is also active in the development, publishing and support of interactive online knowledge modules for the clinical selection of medicines.

The data integrated in these knowledge based systems comes from authorised third party sources such as the electronic prescribing system used by the Netherlands College of General Practitioners (NHG) and the Dutch Health Care Insurance Board (CVZ), and from the online medicine selection modules created by groups of experts currently active in health care.

STEPSelect is an online, step-by-step system for use in integrated medicines management and with which rational considerations can be made to select preferred pharmaceuticals. The system primarily uses a matrix model based on review criteria.

The 'best' medicines, which are classified exclusively on the basis of clinically relevant considerations, are then further evaluated using a pharmaceutical analysis that focuses on packaging, quality of patient information, and finally supplier performance. Following a step-by-step selection procedure, users can select medicines and medical devices rationally and efficiently on the basis of clinical, pharmaceutical and economic considerations. The pharmaceutical analysis has proved to be essential in order to coordinate the choices made in the context of pharmacotherapy with the procurement of preferred medicines and the utilisation of these by the prescribers. STEPSelect therefore complements NICE guidance by ensuring that there is a very effective implementation process that leads both to optimal patient care and optimal resource utilisation

Digitalis Medicines Management Ltd was established and set up in Dublin in 2008 as a subsidiary of Digitalis Mx bv Amsterdam. At the start of 2009, Digitalis Mm Ltd formed a collaboration with the NHSCT. This collaboration involves the development and application of STEPSelect productions in Northern Ireland, and also the joint commercialisation and support of STEPSelect products and services in the UK and Ireland.

The selection criteria are determined and evaluated in Northern Ireland by a panel consisting of a wide range of experts (approximately 10 – 20 persons). The selection criteria are mainly standardised using rating scales. The medicines are subsequently evaluated and given a score according to their characteristics. The more important a criterion is considered to be, the higher

the score it will be allocated and the more significant any differences between the medicines and the final score will be.

Literature searches are carried out using relevant methods such as Pubmed, Embase and Cochrane. Choices are made primarily on the basis of evidence-based medicines using large-scale double-blind studies and/or meta-analyses where possible. Clinical experience of medicines plays a smaller role, but becomes more significant when no evidence is available.

The initiative for STEPSelect was taken by DHSSPS, which provided financial support for the NHSCT allowing it to apply the system on a large scale following a successful pilot scheme. Expert groups are selected by the NHSCT and approached in order to validate and authorise the discussion and considerations used in the decision model. Patient representatives are also involved as are pharmaceutical company representatives. In addition pharmaceutical companies are given the opportunity to provide comments and input to the process.

No selection method is ever totally objective. Every rating scale applied in order to evaluate something can be regarded as subjective, but it would be preferable in this case to talk about objectified (rather than objective) opinions. Potential unwanted influences are kept as low as possible by the transparent working methods used and the fact that a large number of experts, and patient interest groups where applicable, are involved in the selection process, and the fact that the pharmaceutical companies are given the opportunity to provide comments, although they are not automatically involved in the editing process.

People work according to the principle of Safety + Quality = Health Improvement and Efficiency, which is incorporated into what is known as Pharmaceutical Clinical Effectiveness including medicines management per se. One of the main objectives is to help prevent the fragmented approaches, communication and decision-making that exist within the inter, intra and cross sectoral as well as external chains of prescribers, suppliers and procurers of pharmaceutical care, and to achieve streamlining through a new approach.

The aim is to increase the efficiency of medicines and the associated pharmaceutical care and to make optimum choices in the interests of the patient. Thanks to the consensus achieved between health care providers – and the better scope for a more united approach – there is less confusion, fragmentation and a reduced risk of potential complications and errors.

This has been shown in an extensive study of Integrated Medicines Management in Northern Ireland, partly by the reduction in the incidence of hospitalisation due to the inappropriate use of medicine, in other words as a result of a more integrated approach and decision-making process within pharmaceutical care.

The number of modules and the number of medicine groups are being expanded. The aim is that 70-80% of all prescriptions fall within one of the medicine groups as agreed. This still allows for a certain degree of prescribing freedom, which is also required as it is not possible for all medicines to be

clustered in a rationally preferred treatment group. Thus another important aspect of this process is to both recognise the need to tailor medicines for patient needs and also to reflect the evidence base available where in certain patients other agents outside the standard products are more appropriate.

For example in relation to proton-pump inhibitors the outcome of the process identified omeprazole and lansoprazole as the preferred medicines with the appropriate manufacturers/suppliers then being awarded contracts in respect of these products. However it was also recognised that the evidence base also showed a role for esomeprazole in certain more problematic patients and therefore this fact was recognised in the summary guidance (A4 sheet) that was issued to the health service in Northern Ireland. This work contributed to the efficiency gain for the service (as part of the PCEP) of £70 million over the 2005-2008 time period thereby facilitating extra reinvestment in patient care including in excess of £0.75 million per annum in respect of wound dressings.

The process within Northern Ireland has now dealt with statins, proton pump-inhibitors, selective serotonin re-uptake inhibitors, angiotensin converting enzyme inhibitors and wound management products to date with biologicals for rheumatoid arthritis and erythropoietin stimulating agents being under review. In effect this process has now become the standard method for medicines and also dressings with its application to medical and surgical devices being progressed. New product groups for 2009-10 include bisphosphonates, anti-psychotics and granulocyte colony stimulating factor products

The collaboration between Digitalis Mm and NHSCT has been a great success for a number of reasons. Firstly because those people working at the heart of pharmaceutical care are committed to this system and integrate Digitalis knowledge modules into processes that have an immediate effect in working practice. Secondly, the NHSCT itself adds pharmaceutical information to the system increasing the value and usability of the Digitalis Mn knowledge modules, which in turn improves healthcare procurement and increases the scope of the system. Thirdly, a follow-up plan is being considered to introduce Digitalis prescription modules so that the prescriber can better implement the choices made. In short, in this collaboration, the NHSCT does not regard the Digitalis modules as optional and 'independent' but as essential components with which to modernise pharmaceutical care within the inter-intra cross sectoral and external chain of prescribers, suppliers and procurers of pharmaceutical care.

Regional autonomy has been flourishing in Northern Ireland since the Good Friday Agreement in 1998, which allowed a devolved administration to be established. During the last decade, various politicians, DHSSPS officials and opinion leaders among both health care providers and health care institutions became aware of a need for policy changes - including changes to the system of remuneration, contracting and organisation within health care - to ensure a more integrated, less "silo" approach to healthcare. In relation to integrated medicines management, it subsequently became apparent that by means of a combination of work stream initiatives significant healthcare benefits and cost reductions, could be achieved, It was also recognised that it was important that

health care providers became bottom-up 'owners' of the decision-making process and that policy-makers play a supportive role in creating the necessary preconditions. It was also crucial that the cost reductions achieved in Northern Ireland were reinvested in health care. This has also provided significant scope for pharmaceutical companies, whereby they have seen an increase in the budgetary resources available for new, yet expensive medicines, but which can greatly improve patient care in a number of therapeutic areas

Given the successes achieved in Northern Ireland, it is certainly worth putting quality and safety first as a short-term interest rather than the economy. The autonomy of health care providers should also be re-evaluated, not optionally but on the basis of contracted services and agreed results. STEPSelect can also be an excellent tool in other regions of the UK and Ireland where procurement power is more clustered and there is collaboration between parties in the field. However the model is adaptable to other countries and indeed other health care systems as the premise of both quality and safety is universal.

HSC Innovations is the innovation and intellectual property management service for all Health and Social Care (HSC) bodies in Northern Ireland. The service is responsible for identifying, protecting and commercialising, in partnership, intellectual property arising from research and clinical practice so that new products that provide benefits for patients can be developed. Additionally the service facilitates links between industry, universities and clinicians to accelerate the development and commercialisation of healthcare opportunities.