Mission report: EHIF and quality of healthcare in Estonia

Dr Charles Shaw, April 2013

1 Introduction

This report was commissioned by EHIF to focus on improvement of the current clinical audit programme of EHIF, and to support the WHO PATH indicators network in Estonia. Cursory desk review of previous reports and existing policy and regulation indicated a need to look more broadly at the national context in order to understand the role of EHIF and the rationale for being involved in defining, assessing and improving standards of quality in healthcare.

A five-day visit to Tallinn and Tartu touched on a wide range of related topics but gave little opportunity to discuss everything with all the stakeholders, especially the Ministry of Social Affairs, or even with EHIF. Compared with other countries in the European Union, Estonia has many characteristics which favour improvement in healthcare quality and safety, including: strong northern European culture and social values; high level of computer literacy and use of electronic patient records; many fragments of quality systems at local and national level. Less supportive features include: lack of unifying policy and organisation eg information, patient safety; weak leadership of the quality agenda from Ministry; few incentives for institutions or professionals to improve; shortage of training at all levels (knowledge, attitudes and skills required to improve quality and safety). A series [1] [2] [3]of analyses and reports in the past ten years has consistently noted a lack of coherent policy, stakeholder involvement and leadership for quality management in Estonia.

Section 2 aims to summarise the national environment of quality and safety, as a basis for defining future options for the positioning and involvement of EHIF within it (section 3).

2 National overview of quality in healthcare

2.1 Policy

The Health Services Organization Act 2002 and the Hospital (network development) Master Plan 2003 identify a general vision, supported by a directive requiring internal quality systems in provider units. Professional participation in peer review and internal systems for quality and safety is not a requirement of ethical codes, or a condition of licensing by the Health Board.

In preparation for EU accession, clinical training curricula were adapted to meet European standards, but quality and safety are not systematically embedded in undergraduate and postgraduate training, or in CPD and CME. (The 2005 MSA report disagrees). The EC directive on rights of patients in cross-border care requires member states to identify their systems for quality and patient safety, and to make information available to the public through a national contact point. Member states have been asked to report on the implementation of the cross-border directive[4], and to respond to Council recommendations on patient safety (below)[5]. (Have these reports been made public?)

Recommendations for national action on patient safety, Council of EU 2009

- Establish national policies and programmes
- Empower and inform citizens and patients
- Promote training of healthcare workers
- Share knowledge, experience and best practice
- Develop and promote research
- Adopt strategy for healthcare associated infections
- Establish infrastructure on use of antimicrobials

A World Health Organisation report[6] referred to the Estonian Healthcare Quality Policy of 1998 as lacking an overall conceptual framework, objectives for quality assurance, future vision and action plan. The review by MSA in 2005 identified regulation No. 128[7] "The quality assurance requirements for health services" (2004) as the basis for planning a framework of the quality strategy, and recommended, following a consultative workshop, that "The quality strategy for health services (hereinafter: quality strategy) is much a part of the whole healthcare policy and healthcare strategy and the quality strategy should be the main instrument in the development of the healthcare policy and strategy."

2.2 Organisation

A report from the Ministry of Social Affairs in 2005[8] reviewed the legal basis for quality assurance in healthcare in Estonia, and identified some organisational roles at national and institutional level, such as:

- Structure: HC Board regulation of professions, institutional licensing (structure only)
- Process: quality management systems within institutions; independent expert analysis by the Healthcare Board
- Outcome: "not legally regulated" EHIF expected to define quality criteria for health insurance benefits (in terms of access and eligibility, or also safety and performance?)

Under "methods" the report offers two pages of measurable elements, but no guidance on how to improve. (Where is the "quality handbook" which supports internal systems, training etc?)

In the absence of any integrated national strategy, key elements of quality improvement (such as technology assessment, clinical guidelines, patient surveys, performance indicators, clinical audit) are gravitating to EHIF. In effect, the EHIF has largely taken over from the Ministry the responsibility for public protection in health services at national level.

At institutional level arrangements vary. Principles could usefully be agreed nationally for:

- Accountability and responsibility of supervisory boards, CEOs, clinical directors, medical staff
- Internal systems for defining clinical policy, adopting evidence-based guidelines, learning from self-assessment
- Horizontal coordination: between specialties, between professions, within teams

2.3 Methodological principles

The Law of Obligations Act (Chapter 41: Contract for Provision of Healthcare Services), which took effect in the summer of 2003, provides for various patients' rights, e.g. informing patients and

obtaining informed consent of patients for the provision of health services. Other approaches such as practice guidelines, infection control and analysis of complications have been variously adopted, but there appears to be little consistency or comparability of methods between institutions.

Adverse events are reported to MSA but there is little evident analysis, feedback or learning. A common definition is required for reportable events at local and national level, together with relevant ICD codes such as clinical complications which affect DRG grouping.

Licences are issued to healthcare providers; there is no formal review or relicensing to verify continued compliance with statutory requirements. Licensing is concerned solely with structure rather than performance or safety in providing specialist services. Health Board assessment of "structure" may include organisation and methods of systems for quality and safety, as defined by the Estonian Health Care Act.

Peer review is organised by some clinical specialty associations, both of service organisation (eg family medicine) and of clinical practice (eg anaesthetics).

External assessment is currently confined to inspection of structure (Health Board), clinical audit (EHIF), and some specialty peer review; there is also some use of EFQM assessment and ISO certification (quality management system ISO 9004); nine medical laboratories are certified under ISO 15189.

The population is too small for independent healthcare accreditation for organisational audit but options might include:

- develop voluntary peer review (without formal accreditation) using international standards for health organisations eg JCI, or European tools eg SANITAS (safety in hospitals)
- link organisational assessment to accreditation of institutions providing clinical training
- incorporate external assessors from existing programmes in other EU states eg Denmark
- buy into international accreditation programmes eg JCI, DNV "accreditation"

2.4 Resources for quality improvement

The principal requirements are not inevitably "more staff, more equipment, more money". Effective quality systems at institutional and clinical level need:

- **Time**: regular opportunity (on protected paid time) for systematic reflection with work colleagues to support quality improvement and personal development
- **Data**: access to relevant, accurate, complete and timely data,, especially on clinical process and outcome
- **Information**: academic and practical guidance on standards and measurement; access to national and international references (eg WHO patient safety toolkits)
- **Skills**: quality co-ordination, technical skills and training in methodology
- **Staff support:** technical and clerical for collecting data from records (electronic and hard copy)

Education and learning are central to improvement. Training is essential for quality managers, and the relevant knowledge attitudes and skills are essential for all clinicians and managers. Patient safety and quality improvement should be visible in undergraduate/ postgraduate curriculum, teaching and examination. Peer review and clinical audit can be developed as basis for CME/CPD (earning credit points) and for individual performance appraisal.

3 Role of the EHIF in improving healthcare

3.1 Defining a policy

EHIF priority is to protect public money by distributing available funding to the optimum benefit of the insured population; the principal method is to define and monitor underuse, overuse and misuse of health technology based on scientific evidence.

While quality should be embedded in every service contract, the task of developing and implementing a (long overdue) comprehensive national strategy for improvement should not fall solely upon a health insurance fund. The Fund has the infrastructure and competence to support such a development, led by a balance of stakeholders (public, professionals, managers, owners, regulators…). The aim of the Fund (and of the national strategy) should be to promote and enable the institutionalisation of quality and safety in hospitals and primary care – a shift from top-down to bottom-up responsibility.

In fulfilling its role as supervisor of healthcare funding, EHIF shares a monitoring role with other statutory and voluntary organisations, such as the MSA, Health Board and professional associations. To avoid duplication, inconsistency and loss of learning, EHIF needs to know who is assessing what services against what criteria – and to be able to share conclusions.

The Fund's role in quality improvement should focus on active purchasing, infrastructure support for a national quality steering group and providing data for performance management and benchmarking. Estonia does need to define who develops clinical guidelines, organisational standards, methodology, and education in quality and safety– and how providers (and maybe the public) can access them. This is not commonly a function of HIFs, without a stakeholder mandate and budget.

The EHIF already has several strategies (for improvement of the health system) which could be further developed:

- quality in contracts
- performance measurement
- verification and enquiry
- clinical audit
- clinical practice guidelines

3.2 Quality in contracts

Paragraph 36 of the health insurance law requires contracts for purchasing to define duration and price and "consider quality of services and conditions". Payment may be related to quality and safety by identifying non-reimbursable services, by specifying general organisational requirements (5 year

contract) or specific clinical requirements (evidence-based measures) in annual contract. (Research what conditions do other HIFs use in contracts for performance?)

General conditions could include:

- Documented evidence of governance of quality and safety eg approval of work programme, budget, accountability of quality manager
- Documented evidence of comprehensive internal quality management systems, including clinical audit, patient surveys, use of indicators, adverse event reporting etc (refer SWRHA contracts for clinical audit)
- Standardised reporting to EHIF of key performance indicators (definition, frequency to be determined)
- Structured annual report on patient safety and quality (to be defined) available to public; include participation in collaborative peer review, benchmarking (eg PATH, external QA of laboratories)
- Evidence of compliance with regulatory requirements (tbd eg licensing, adverse event reporting)

3.2 Performance measurement

Database enquiries

Use available data to formulate guidelines for referral, to quantify wide variations in process and outcome, to define quality "targets" for annual contracts, or to identify priorities for investigation:

- items which are often used inappropriately eg: Underuse: prophylactic antibiotics in surgery, discharge medications in AMI; Misuse: streptolysin given too late; Overuse: routine pre-operative chest X-ray, pre-operative stay (elective surgery), tonsillectomy
- low volume of specialist work eg obstetrics, surgery (paediatric, vascular…)
- ratios eg procedure-specific daycase:in-patient surgery; open:endoscopic procedures
- delay eg cancer waiting time, diagnostic scanning of stroke patients, extended hospital stay
- complication rates – diagnosis/procedure specific (correlation with workload?)
- avoidable events eg diabetic amputations, children admitted with asthma
- data quality checks eg codes/discharge, use of ill-defined "dump" codes eg I64, consistency of distribution within hospitals eg ratio of haemorrhagic:ischaemic stroke

Explore options for HSMRs from existing EHIF database; see Jarman etc. See What are Hospital Standardised Mortality Ratios? http://www.drfosterhealth.co.uk/features/what-are-hospital-standard-mortality-ratios.aspx

3.3 Verification and enquiry

Routine monitoring of invoice data should identify priorities for investigation eg high cost, high risk, high volume events; wide variations in clinical process or outcome (case-mix adjusted); other concerns specific to individual patients, providers, diagnoses or interventions. Site visits could focus on:

- data quality: procedures for clinical coding, supervision, sample recoding; integration, storage and retrieval of paper records; documentation on admission, referral , transfer, discharge

- clinical practice: systematic analysis, against agreed clinical guidelines, of documented care given by clinical teams to an identified sample of patients having in common a specific circumstance, diagnosis, procedure or intervention. Data may be extracted from electronic and paper records according to measurable criteria and definitions agreed in advance by the clinicians involved. Audit criteria should be an integral element of all authorised guidelines

- service organisation: assessment (by observation, interview and document review) of relevant arrangements for management , facilities, skills, operational policies and quality improvement. This presupposes the agreement and adoption of explicit organisational standards eg JCI, SANITAS.

All assessments should follow the general formula of the quality (or PDCA) cycle: Explicit standards, criteria; validated measurement processes; specific action planning; systematic follow-up and review of impact.

3.4 Current EHIF clinical audits

Since 2002, five clinical audits have been undertaken each year, costing around €100,000. Topics are identified by consensus of current concerns. The primary aim is to verify that invoice data, on which reimbursements are paid, are complete and accurate. Quality improvement is a secondary aim, focusing on clinical practice, rather than on service organisation and delivery.

There has been no systematic evaluation of the methods of the clinical audits, or of their collective impact on the quality and safety of services. In practice, the implementation of recommendations arising from the audits depends on managers and clinicians whose accountability is often unclear; no financial sanctions or rewards are made by EHIF to provide incentives for compliance.

An “audit of audit” could improve the process for future years, including:

- Topic selection rationale
- Stakeholder involvement
- Underlying standards, requirements, evidence
- Selection of criteria to be measured
- Definition of homogenous sample or case mix adjustment
- Sources and methods of collecting information
- Training for auditors
- Analysis and presentation of findings
- Interpretation and preliminary conclusions
- Feedback, consultation, learning
- Action planning, dissemination and follow-up

The clinical audit handbook

The current draft handbook is designed to assist in the training and work of external assessors for programmed EHIF audits. Even when internal audit becomes more established, EHIF must retain a capacity for external review, whatever it is called. As such, auditors and staff need a written

description of the purpose, design, procedures, analysis, presentation, consultation, action planning and follow-up required of any external assessment.

No such handbook is final, but is part of a continuing process which must respond to emerging national strategies for improvement and, specifically to the role of the EHIF. Publication of the current draft version should not be delayed pending achievement of perfection, but work on the next edition should follow, reflecting feedback from users, and the changing environment of healthcare in Estonia.

Assuming this version is for a limited number of EHIF auditors and available only in electronic format rather than hard copy, it could be made publicly available on the website – if it is clear that it does not represent any statement of policy by EHIF, other than continuous improvement.

3.5 Clinical practice guidelines

Law, funding and management should enable Individuals and clinical teams to practise within the bounds of evidence-based medicine, but require justification for deviation, either individual (eg case complexity) or systematic (eg research). International collaborations, such as the Cochrane network, have pooled research data to generate evidence-based guidelines for almost every clinical circumstance. The exceptions are in very rare conditions, multiple pathology, chronic disease and co-morbidity; the latter is becoming increasingly significant in ageing populations.

Given the wealth of internationally recognised clinical guidelines which are freely available on the internet, Estonia would best concentrate not on repeating research and technology assessment but on defining general criteria for local adoption eg is the guideline consistent with Estonian culture, epidemiology, available funding?

Some guidelines should be designed locally, but using international evidence and frameworks eg Guidelines for handover between shifts, specialties, hospitals, primary care (see EC “Handover” research project), guidelines for referral from family medicine to specialist and from local hospital to specialist centre, guidelines for pre-authorisation of elective cross-border care.

4 Recommendations to national working group

1. Responsibility for integrating quality improvement across the health system, and the roles of the contributing organisations remain unclear. The quality development steering group should identify existing structures and activities within a national strategic framework, including the context of legislation and healthcare policy, the accountability of governmental and professional organisations, principles of methodology and evidence, and the support required for time, training and information systems.
2. The responsibilities and interrelationships of healthcare organisations should be defined within the national strategy for quality and safety. At institutional level this should include supervisory boards, CEOs, managers and clinicians; at national level, the Ministries of Social Affairs and of Education, the public health institute of the medical faculty, EHIF, regulators and professional associations.
3. Common principles of the quality improvement cycle – standards, measurement and change management – should be defined within the quality strategy, consistent with biomedical and health service research, international empirical evidence, and national requirements

4. Improvement in healthcare depends less on additional money and manpower than on better using the existing structural resources. The quality strategy should identify its implications for staff time (such as the proportion of clinician contracts attributable to continuing education, peer review and audit); indicators, information systems and libraries (at local and national level); and training (at undergraduate, post-graduate and specialty level).

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