3M™ 360 Encompass™ System

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Contact us: sales.his.uk@mmm.com
The Medicode core encoder is enhanced by six additional modules designed to improve the accuracy of the data captured and ultimately assure you that your Trust activity is accurately recorded and appropriately reimbursed.

- Integral part of the clinical coding team in over 100 of NHS acute trusts
- More than 27 years’ experience supporting the NHS with encoder solutions
- Integrated to all major Patient Administration Systems throughout the UK
- Compliant with the four national data standard releases across the NHS
- Employs consistent rules and expert logic to aid the coding process
- Logic pathways provide coders with the ability to assign codes quickly and accurately
- UK based technical development and support
- Integrated reporting suite
3M™ Medical History Assurance (MHA)

- Designed to safeguard Trust income by prompting for previously recorded conditions
- Identifies previously coded relevant conditions collected as patient history
- Prompts the coder to include relevant patient co-morbidities reducing chance of data omission that could impact the derived HRG
- Requires the coder to include rationale for not selecting a prompted co-morbidity
- Total transparency of analytic processes identifying the impact that Medical History Assurance delivered to your organisation providing Return On Investment evidence and rationale for the decisions
- Provides an audit trail of code assignment, as well as showing rationale for non-assignment, that can be both easily and quickly reviewed
- Delivers real-time analytics on financial impact of decisions, inclusions and omissions
- Real-time actionable data presented in a simple and easy to read format
- Increases productivity of your existing coding team resource
- Enables you to take control of your data and your information
3M™ Data Quality Analytics (DQA)

- Validates assigned clinical coding and HRG to ensure accurate reimbursement
- Presents real-time actionable data in a dashboard available to Trust management teams
- Increases productivity of your existing coding team resource allowing processing of data as frequently as required
- Enables you to take control of your data management processes
- Re-runs all or selected coded episodes against a range of validation points to quickly identify common coding errors
- Supports performance management of coding team through increased volume of episodes validated
- Combines the power of 3M™ Data Quality Analytics with the 3M™ Integrity Plus (Audit Module) to run targeted audits based on highlighted risk areas
- Manages time pressure on Trusts to meet clinical coding ‘Close Down’, ‘SLAM’ and ‘Submission’ target dates while maintaining accuracy and depth of clinical coding
- Proven success (see case studies)
04

3M™ HRG Assistant (HRGa)

- Ensures the most accurate HRG is assigned to each episode to generate the correct income for the Trust
- Real-time user prompts to ensure accuracy of HRG
- Identifies UZ HRGs and prompts user to investigate
- Prevents filing of UZ HRGs which attract no income
- Offers appropriate resequencing of procedures based on national weightings
- Validates Length of Stay (LoS) against HRG national average (ALoS)
- Eliminates data-entry error on fifth digits
05

3M™ Template Coding (TC)

- Drives consistency of coding across your organisation
- Increases coding capacity by speeding the input of the coded clinical data
- Improves the accuracy of the coding
- Reduces the risk of omitted codes and so can improve depth of coding
- Templates are created and managed by the Trust
- Supports National clinical coding standards
- Speeds the entry of frequently used code sequences
3M™ Integrity Plus (IP) Auditing Solutions

- Improves auditor efficiency and so increases audit capacity
- Quantifies financial differences by calculating both the HRG impact and Additional Payments
- Reduces risk of inaccurate final submission
- Uses the full NHS clinical coding audit methodology in line with NHS Digital requirements
- Identifies training needs and supports performance management and continual improvement process
- Designed to increase the percentage of Trust data validated
07

3M™ Out-Patient Coding Module (OpC)

- Functions exactly as 3M™ Medicode™ Core Encoder to support continuity
- Consistency of coded clinical data irrespective of setting
- Functionality allows Trust managed pick-lists to be used by non-coding staff
- Recognises setting and provides appropriate out-patient HRGs
- Full reporting suite functionality relevant to outpatient attendances
Ensures your organisation is compliant with the National Information Board (NIB) Personalised and Health Care 2020: A Framework for Action requirement for SNOMED CT to be the single common terminology in Electronic Care Records and in use across the entire health care system by April 2020.

- Takes the SNOMED-CT concepts and descriptions and maps them to the appropriate classification (ICD, OPCS)
- Ensures compliance of the mapped codes to NHS Digital coding guidelines
- Provides generation, validation and optimisation of HRG4 (group) code to protect revenue
- Advanced reporting engine capable of processing large enquiry sets of SNOMED-CT Concept codes
- Familiar Graphical User Interface (GUI) for clinical coders
- Education tools to support clinical coders, managers and auditors available 24/7 via the 3M Health Care Academy
Investigate and validate. To improve data accuracy.

The Dudley Group Case Study.

The Dudley Group NHS Foundation Trust (DGH) serves the population of Dudley and surrounding communities. The Trust annual inpatient activity is approx 150,000 Fully Coded Episodes (FCE’s).

In line with the NHS as a whole, DGH faced financial pressures against the backdrop of a budget freeze and the requirement to make more savings year-on-year. The Trust continued its drive to make efficiency savings and developed schemes to deliver £10m of savings and revenue generation in 2014/15.

Project outline

Sue Levitt, Clinical Coding Manager, and her coding team at The Dudley Group NHS Foundation Trust started working with 3M Health Information Systems, (HIS), in July 2014 as a development partner for the Data Quality Analytics (DQA) Solution. During this time, continuous improvements have been made to the DQA Solution to ensure it delivers tangible benefits to the Trust.

Financial results were produced by processing a month’s data and amending codes, i.e. using a more specific code and also adding codes where DQA highlighted a potential error and on further investigation where extra codes could be added.

Data was processed by 3M DQA and reviewed by the Clinical Coding Manager, using their audit skills and with reference to the full case notes.

The 3M HIS team worked with the clinical coding manager to identify areas where changes would improve the user’s experience and allow them to focus more quickly on key areas. 3M DQA showed a direct correlation between improved documentation and increased accuracy of the coded clinical data.

“The 3M DQA Solution has helped identify where improvements can be made in our departmental processes.”

Financial balance

3M DQA highlighted HRG errors, prompting the introduction of a new coding process to code common combinations of procedures and to ensure accurate payment.

The Trust reviewed all activity coded with these procedures and made changes to some episodes prior to submission. To date, following deployment, the Trust increased income using the tool by £60k in three months.

Quality versus quantity

The Clinical Coding Manager used the standard report in the 3M™ Medicode™ Clinical Encoder to assess the daily throughput.

Reviewing the case notes against the coding with the coder allowed the clinical coding manager to overcome and reduce errors.

“3M DQA allows you to check for errors you never knew you had, therefore improving your income.”

Financial benefit*

Over £12k

In one month

Potential £144k

Over 12 months

“3M DQA gives me confidence during busy periods – because I can check the quality of the data in real-time.”

1, 2, 3, 4 – Quotes provided by Sue Levitt, Clinical Coding Manager at The Dudley Group NHS Foundation Trust. *Financial results were produced by processing a month’s data and amending codes, i.e. using a more specific code and also adding codes where DQA highlighted a potential error and on further investigation where extra codes could be added. **Data on file with the Clinical Coding Department at The Dudley Group NHS Foundation Trust.

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Improving data quality to deliver more accurate reimbursement.
NHS Foundation Trust Case Study.

An NHS Foundation Trust in the East of England that provides acute hospital and community care services to around 280,000 people has taken steps to deal with significant financial pressures and a requirement to maximise value for money with the available resources. 3M’s Health Information Systems (HIS) business enjoys a strong working relationship with the Trust’s clinical coding team, which uses 3M™ Medicode™ Clinical Encoder as its primary clinical coding tool.

Project requirement
Complete, accurate clinical coding is essential in NHS Trusts. The Payment by Results framework means that a Trust’s revenue is dependent on its coding quality. The Trust had previously engaged an external firm to review the quality of its coded clinical data, however this had resulted in a significantly increased workload for the senior coding team, as the suggested changes were often inappropriate and had to be reviewed carefully. The Trust’s Clinical Coding Manager contacted 3M’s HIS team to see how it could help the Trust to better use its resources to improve data quality.

Identified needs
3M’s HIS team quickly recognised three key insights.
Firstly, it was important to build on the coding team’s existing knowledge of Medicode clinical encoder. Secondly members of the existing senior coding team were best placed to identify and assess anomalies in their own data. Thirdly it was necessary to reduce data to a manageable quantity by screening out activity that did not require review.
The addition of three new Medicode modules was proposed to improve the coding process, optimise data quality and maximise the capacity of both the clinical coding auditor and clinical coding trainer:
One of the modules was the 3M™ Data Quality Analytics Solution (DQA) which reviews all coded episodes and reports against the national clinical coding standards, alerting the user to potential errors. Target review areas are identified effectively and efficiently at episode level. DQA fits into the daily coding process where alerts can be reviewed by people trained to recognise the impact of errors.

Results
First six months all saw improved reimbursement results, with £52,000 generated in September 2015 alone. Data on file with the Trust’s Clinical Coding Department 2015.

“Twice-weekly running of DQA means that the coding team has immediate feedback, in more detail. Our month-end checks are fewer and completed nearer to the time of coding, meaning that we are able to quickly correct errors and feed back to the coders.”
Clinical Coding Manager

Financial benefit
A more accurate data submission has led to an income improvement of £148,000 in the first six months, meaning an average of £24,000 per month increase in appropriate reimbursement.

Increased data accuracy
The new modules have led to improved accuracy and quality of data for both internal and external use.

Increased capacity for audit
The introduction of the new modules has meant that all coded data can now be audited internally using existing resources.

Development of people skills
DQA has allowed the existing team to optimise its efficiency and initiate a cycle of continuous learning and development.
3M™ Medicode case study

The Trust wanted to deliver a 21st Century coding department, to be cutting edge, to take on new coders and train them and to develop their own training department.

The background
Clinical coding is central to the performance of an NHS Trust. A report by the Audit Commission concluded that – coding of diagnoses and procedures is particularly important under payment by results, as these codes are two principal determinants of the HRG that the patient is assigned to, which in turn determines income. Incomplete coding translates to loss of income for Trusts, while inaccurate coding leads to inaccurate payments, which can impact negatively on the finances of providers or commissioners.1

The challenge
Sheffield Teaching Hospitals, one of the UK’s largest NHS Foundation Trusts, was created in 2004 from the merger of the five NHS adult hospitals in Sheffield. It has been awarded the highest rating of ‘excellent’ for both the quality of services and financial management and was recently one of four Trusts to be awarded the Dr. Foster ‘Trust of the Year’ award for 2011. With over 2,300 beds, 15,000 staff and over a million patients each year, its Clinical Coding Department is responsible for coding approximately 280,000 in-patient episodes per year.

The Trust wanted to improve its existing coding capability, ensuring that the quality of its clinical coding was of the highest standard and accurately reflected the patient case mix, and to develop the Department’s own Coding, Training and Audit roles. The plan coincided with a move to a single Patient Administration System (PAS) instead of the two which were in use.

The solution
The Trust investigated coding specific applications to support the transition to the new PAS and to facilitate further improvements to the clinical coding. They also wanted more enhanced coding functionality than that available in the PAS.

Installed in May 2011, the 3M™ Medicode™ Coding and Grouping software suite from 3M Health Information Systems was identified as the solution.

With 43 coders in five locations across the Trust, Medicode software from 3M fulfilled the requirements – flexible enough to become Sheffield specific, whilst offering support for achieving coding consistency. With a number of trainee coders in post, Medicode software is useful in supporting their training whilst the audit function is beneficial in supporting the Trust’s internal audit cycle for improvements to coding.

Medicode software has been used by the NHS since 1990 and is the market leader with more than 100 installations in the UK. The Sheffield Trust invested in a full suite of modules including the Medicode classification encoder, 3M™ HRG Assistant™ Validation and Rules Investigation Module, 3M™ Data Quality Assistant Data Validation module and 3M™ Integrity Plus™ DQAF Auditing Suite.

Coding clinics
There are hundreds of Coding Clinics going back as far as 1993, which created problems of paper based storage and access. The coding team can now save time by accessing all these clinics ‘on-screen’, and Medicode software prompts them when there is a Coding Clinic relating to the procedure in question.

Additional ‘signposts’
The Sheffield Trust was able to correct coding previously going to the wrong HRG, by using additional Signposts. They were able to create a ‘pop-up’ message which reminded coders to use the site code (i.e. wing of ilium) when coding ‘bone marrow aspiration’, ensuring it fell to the correct HRG, generating £866 instead of £444 per case.

Quick coding
They frequently need to predict the detailed HRG and associated tariff for a new procedure and combination of codes. With one application instead of three, Medicode’s quick coding feature has

Re-order and change codes
The Trust wanted to reduce the time it takes to re-work codes when missing case notes re-appear before the quarterly deadline. Medicode software enables codes to be changed, re-ordered and copied, thus providing major time savings for the department.
delivered significant time savings by enabling the Department to support clinicians and simulate new procedures. This is being rolled out to other managers.

**Faster audits**

Sheffield Trust’s in-house auditor conducts frequent audits, and now uses the Integrity Plus auditing suite from 3M to measure coding performance by specialties and individual; this has significantly reduced the time it takes to perform an audit.

This also aligns to their aim of conducting their own IG audits and to the PCI (Process of Continual Improvement). It identifies issues within a specialty case mix, improves the information flow, makes a case to get the information needed and change working practice.

**Dorland’s medical dictionary**

Understanding clinical terms and anatomy is essential for non-medically trained coders, Medicode software gives immediate on-screen access to a comprehensive Medical Dictionary, this has been especially useful for junior coders, saving time spent on using other resources, or accessing the internet looking at non-qualified sources.

- **Reduce ‘U’ codes**
  The HRG Assistant module supports accurate reimbursement and coding by undertaking real-time analysis so ensuring that the correct and most appropriate HRG is assigned, including Length of stay (LOS) anomalies.
  
  The Trust now gets noticeably far fewer ungroupable U codes and 99Z codes. Medicode software helps to order the codes and complete the coding correctly, this has reduced the number of 99Z codes from around 75 per month to 15 per month.

- **Depth of coding**
  Another KPI is the ‘Depth of Coding’, or the number of diagnostic codes that are applied to each patient episode.
  
  This is recognised as an important factor in coding quality and captured on a national scale. Medicode software helps the Sheffield Trust to improve its depth of coding by making it easier to review previous coding.

**Summary**

The installation of a dedicated clinical encoder offers a range of value added benefits; this has enabled the Sheffield NHS Foundation Trust to increase productivity, efficiency and reimbursement.

- Support accurate reimbursement
- Fewer ‘ungroupable’ codes
- Re-work coding
- Access to Coding Clinics
- Quick additional ‘Signposts’
- Quick coding
- Train novice coders
- Speed up audits
- Embedded Dorland’s dictionary
- Multi-site capability
- Manage classification changes
Data is the foundation of everything we do within 3M Health Information Systems. We enhance healthcare data so it becomes the fuel for the engine that drives system change and performance improvement.

We have the expertise to support multiple terminologies classification schemes and languages. Operating in over 200 countries, we work with more than 10,000 clients.
Financial and data quality assurance from 3M

- Real-time actionable data presented in a simple and easy to read format
- Designed to enhance your existing clinical encoder
- Increases productivity of your existing coding team resource
- Enables you to take control of your data and your information
- Navigating reimbursement can be a whole lot more accurate with the 3M financial assurance and data quality modules
- Proven success – see case studies inside

Contact us at sales.his.uk@mmm.com and ask how we are helping trusts to significantly improve their reimbursement accuracy in as little as 10 working days.