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Integrating Activity and Auditing Metrics to Advance Hospital Performance in Herzegovina-Neretva Canton, Bosnia and Herzegovina

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Introduction

Although the DRG patient classification system was introduced as a hospital payment method over 40 years ago, health systems worldwide continue to struggle with achieving its intended objectives: enhancing transparency, improving resource use efficiency, and improving the quality of care. It has become apparent therefore, that implementing the DRG system as a hospital payment model presents technological and change management challenges, which are often underestimated at the outset of DRG adoption.

Countries in the region have encountered significant challenges in implementing the Australian Refined DRG (ARDRG) classification system. These difficulties stem primarily from limited technical expertise and capacity, shortcomings in governance, and a lack of awareness of the system's full potential.

Importantly, however, the foremost prerequisite for realizing the full potential of the DRG classification system is the accurate reporting of hospital activity data and ensuring that each episode of care is properly coded in accordance with AR-DRG coding rules.

Our paper has two main objectives. First, to outline the approach used by the Health Insurance Fund of the Herzegovina- Neretva Canton (HIF/HNC), in Bosnia and Herzegovina to effectively measure hospital activity by auditing 30% of inpatient episodes of care each month. Second, to highlight the most common coding errors found in secondary and tertiary hospitals in the Canton.

Methods

The Herzegovina-Neretva County has three public acute hospitals contracted by HIF/HNC: general hospital Konjic (88 beds), Cantonal hospital "Dr. Safet Mujic" (198 beds) and University Clinical Hospital Mostar (793 beds). The inpatient payment model is based on AR-DRG v.5.2. which contains 665 groups and utilizes ICD 10-AM for the coding of diagnosis and Australian Classifications of Health Interventions for the coding procedures.

Each month, from 2023 to 2024, approximately 600 episodes of care were audited. These cases were selected by the HIF/HNC's hospital contracting department and reviewed by external auditors.

Audit was performed to determine the level of compliance to Australian and local coding standards. Data were submitted to external auditors as an excel file containing the input and output DRG Grouper data for the selected cases together with respective discharge letters in PDF formats. Data are anonymized and all other procedures in accordance with GDPR were followed.

Each month, audit results were submitted to the HIF/HNC within six working days of receiving the case data, with feedback provided to both the HIF/HNC and hospitals. Over the two-year period, the audit findings were:

a) Case complexity - annually, for the General hospital 95% of cases were deemed to be coded accurately, for the Cantonal hospital coding accuracy was between 85-90% and for the University hospital 80-85%.

b) Cases types - across all hospitals, coding issues were more frequently observed in medical DRGs than in surgical DRGs.

c) Regular feedback - dedicated workshops that focused on common coding issues are an effective tool not only for enhancing coding accuracy but also for improving the quality of clinical documentation on which coding relies.

Conclusions

To the best of our knowledge, HIF/HNC's comprehensive DRG coding audit approach, designed to support the accuracy of hospital activity measurement, is unique in the region.

Acknowledging deficiencies in DRG coding and auditing expertise, and demonstrating a commitment to addressing them, is the first step for health authorities in building the technical capacity necessary for the accurate measurement of DRG activity data. a: School of Medicine,

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