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The Impact of Accurate Health Record Coding on Billing Accuracy in Selected Hospitals in Ibadan North-East Local Government Area, Oyo State, Nigeria

Adenike O Fagbamigbe
Community Health Officers Training Programme UCH Ibadan

Muideen Babatunde Olatunji
Executive Secretary, Oyo State Primary Healthcare Board

Aibinuomo Ayomide Oluwaseyi
Texila American University

Oyekan Mojisola Adejoke
Lagos State College of Health Technology

Adeyeye Ayomide Blessing
University of Medical Science Teaching Hospital, Ondo State

Balogun Samuel Oluwasegun
Ladoke Akintola University of Technology

Abstract: Introduction: Accurate clinical coding is essential for effective medical billing and the overall efficiency of healthcare systems. Precise coding impacts not only the financial aspects of healthcare but also the quality of patient care and administrative decision-making. Despite its importance, hospitals often face challenges such as poor documentation, inadequate coding tools, and organizational barriers that hinder the effectiveness of coding practices. These issues can lead to inaccuracies in billing and inefficiencies in healthcare delivery, which necessitates a comprehensive examination of coding practices and their impact.

Objective: This study aims to evaluate the impact of accurate coding in health records on billing accuracy in selected hospitals within Ibadan North Local Government, Oyo State.

Method: Data were collected through a structured questionnaire administered to health information management professionals. The data were analyzed using descriptive statistics, including mean scores and standard deviations, calculated with SPSS Version 20.

Results: Analysis of the responses revealed that 57.3% of participants strongly agreed they have knowledge about clinical coding and billing, with a mean score of 1.5043 (SD = 0.6775). Furthermore, 53% strongly agreed they practice clinical coding, and 44.4% strongly agreed they practice medical billing, although there was variability in responses regarding specialized training. Factors affecting accuracy included poor documentation (mean = 1.8632, SD = 0.9640) and inadequate coding tools (mean = 1.6667, SD = 0.9191). Accurate coding was seen as significantly improving healthcare quality (mean = 1.2564, SD = 0.43853) and administrative

decision-making (mean = 1.2991, SD = 0.45985). Solutions proposed included better training and improved technology.

Conclusion: The study underscores the critical role of accurate coding in enhancing billing accuracy and overall healthcare management. Addressing challenges such as documentation quality and resource adequacy through targeted improvements can significantly advance billing practices and healthcare delivery.

Keywords: Clinical Coding, Billing Accuracy, Healthcare Management, Documentation Practices, Health Information Systems.

Introduction

In healthcare, coding referred to the systematic process of translating complex medical information, including diagnoses, procedures, treatments, and services rendered to patients, into standardized alphanumeric codes. These codes, derived from internationally recognized systems such as the International Classification of Diseases (ICD), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS), enabled uniform communication across healthcare settings. They served as the foundation for billing, reimbursement, quality assessments, and healthcare research. Hodge and Peck (2023) emphasized that accurate coding demanded not only administrative skills but also a deep clinical understanding of medical terminology, anatomy, and disease processes. Accurate coding was integral to ensuring that healthcare providers received proper reimbursement for services rendered. Errors in coding often led to claim denials, delayed payments, and financial loss for healthcare institutions. Smith and Johnson (2022) argued that accurate coding directly influenced billing accuracy, which in turn impacted the financial health of healthcare facilities. It also played a crucial role in maintaining data integrity, facilitating healthcare research, quality assessments, and policy development. Moreover, accurate coding was critical in ensuring compliance with regulatory requirements and insurance policies. Inaccuracies in coding led to audits, legal repercussions, and financial penalties, emphasizing the need for meticulous attention to coding practices. As Phillips and Johnson (2023) noted, accurate coding not only impacted financial outcomes but also contributed to patient satisfaction by generating clear and understandable billing statements.

The relationship between accurate coding and billing was essential for maintaining the financial stability of healthcare institutions. As Smith et al. (2021) suggested, coding inaccuracies distorted billing, leading to discrepancies between services provided and payments received. This misalignment had profound consequences on the revenue cycle, highlighting the critical role of coding accuracy in healthcare financial management.The relationship between accurate coding in health records and its direct influence on billing accuracy remained inadequately explored, with limited empirical evidence addressing how coding precision affected billing outcomes, financial reimbursements, and compliance. Given the evolving healthcare landscape, characterized by shifting policies, technological advancements, and the transition towards value-based care, there was an urgent need to investigate the impact of accurate coding practices on billing accuracy. A comprehensive understanding of these dynamics could have optimized revenue cycles, improved operational efficiency, and ensured accurate financial reimbursements, ultimately influencing the quality of patient care.

The primary objective of this study was to examine the effect of accurate coding in health records on billing accuracy in selected hospitals in Ibadan North-East Local Government, Oyo State. The specific objectives were to investigate the knowledge and practice of coding and billing among healthcare professionals in selected hospitals, identify factors affecting accurate coding and billing accuracy, assess the impact of accurate coding on billing efficiency, and propose solutions to improve coding and billing accuracy in the selected hospitals. This study sought to answer several research questions, including what the knowledge and practice of

coding and billing were in the selected hospitals, what factors influenced accurate coding and billing accuracy, how accurate coding impacted billing efficiency, and what solutions could address the factors affecting coding and billing accuracy in the selected hospitals. The scope of this study was limited to examining the effect of accurate coding in health records on billing accuracy in selected hospitals in Ibadan North-East Local Government, Oyo State. The research was conducted among male and female health information management professionals between November 2023 and April 2024.

The findings from this research is expected to benefit healthcare institutions within Ibadan North-East Local Government by highlighting the importance of accurate coding in improving billing processes and operational efficiency. Accurate coding could have helped optimize financial operations, streamline workflows, and ensure proper resource utilization. Moreover, the study's insights were expected to guide the development of targeted training programs for healthcare professionals, promoting adherence to coding guidelines and enhancing the accuracy of health record documentation. In addition, the research is expected to contribute to the generation of reliable healthcare data, essential for research, epidemiological studies, and healthcare planning. The findings would provide valuable insights for future studies on the relationship between coding accuracy and billing practices, contributing to academic literature on healthcare management and administration. Ultimately, the research aimed to improve billing accuracy, ensure financial stability for healthcare institutions, and enhance overall patient satisfaction.

Methods

Study Area

Ibadan North is a Local Government Area in Oyo State, Nigeria, with its headquarters located in Agodi, Ibadan, and a postal code of 200. The area hosts a diverse range of industries, including healthcare, manufacturing, and agricultural processing. It is also home to several banks, hotels, restaurants, recreational centers, and other businesses. Ibadan North features vibrant markets like the Bodija market, a hub for buying and selling a wide variety of goods, which fuels the local economy. The population is engaged in various key economic activities, such as woodworking, traditional medicine, textile weaving, and dyeing.

Study Population

The population for this study consists of health records staff from selected hospitals in Ibadan North Local Government, Oyo State, with a total of 120 healthcare professionals. The distribution of staff is as follows: Iye Hospital has a population of 5, while Fortune Hospital and Dental Care has 4. Queens Specialist Hospital and Skyline Hospital each have 5 and 4 staff members, respectively. Toun Memorial Specialist Hospital has 10 health records staff, of which 9 were selected for the sample. Ibadan Central Hospital has 6 staff, and Molly Specialist Hospital has a population of 12, with 11 included in the sample. The Grace Hospital has 3 staff members, and Alpha Specialist Hospital has 6. God's Knot Hospital and St. Macrina Hospital Ltd. each have 4 and 6 staff members, respectively, while Best Western Hospital, Ibadan, has 5. Anuoluwa Specialist Hospital has 4 staff, and West Wind Hospital and Maternity has 8. Bethel Specialist Hospital, Ibadan, has a population of 4, and Zenith Care Hospital, Ibadan, has 5. Vine Branch Medical Centre has 10 staff members, while Oyomesi Specialist Hospital has 5. Divine Favour Hospital has 6, and Jericho Specialist Hospital has 8 staff members, with 7 included in the sample. In total, the sample consists of 117 out of the 120 available healthcare professionals.

Sample Size and Sampling Technique

A total enumeration sampling technique was employed to select the respondents for this study. This method was chosen due to the relatively small population, making it impractical to use other sampling methods. The sample size for the study consists of 120 health information

management professionals from selected hospitals in Ibadan North Local Government, Oyo State.

Data Collection Instrument

The research instrument used to collect data for this study was a structured questionnaire comprising various sections. The first section focused on gathering the demographic characteristics of the respondents, while subsequent sections were designed to address different aspects of the study. These included assessing the knowledge and practice of coding and billing, identifying factors affecting coding and billing accuracy, evaluating the impact of accurate coding on effective billing, and exploring possible solutions to challenges in coding and billing accuracy in selected hospitals in Ibadan North Local Government, Oyo State. To ensure validity, the questionnaire underwent content checks to remove ambiguous and incorrectly worded questions before data collection commenced. Any inconsistencies or issues in relevance were identified, and necessary corrections and modifications were made by the supervisor before the instrument was administered to the respondents in the field.

Method of Data analysis

Data for this study were collected using a self-administered questionnaire. The questionnaires were distributed to health information management professionals in selected hospitals within Ibadan North Local Government, Oyo State. The researcher personally visited the departments, monitored the collection process, and checked for inconsistencies. Of the 120 questionnaires distributed, 117 were retrieved, resulting in a 98% response rate. The data were analyzed using simple percentage methods, with descriptive statistics, including mean and standard deviation, applied to interpret the results. The analysis was conducted using the Statistical Package for Social Sciences (SPSS, Version 20).

Ethical consideration

Verbal consent was obtained from the department heads and sub-heads of the selected hospitals using an approved letter from the School of Health Information Management, University College Hospital, Ibadan, Oyo State. An informed consent form was also provided to each respondent, ensuring their voluntary participation in the study. The questionnaire was designed in simple language to promote clarity and enable self-determination among the staff. Respondents were assured of confidentiality, with strict measures in place to keep the questionnaires secure and ensure anonymity by not requiring names or addresses. A detailed explanation of the study's purpose was given to the department heads and sub-unit heads at the chosen hospitals to ensure transparency.

Results

Table 1:Socio-demographic Characteristics of the respondents

Parameter	Classification	Frequency	Percentage
Gender	Female	62	53
	Male	55	47
	Total	117	100
Age	28-37	63	53.8
	38-47	34	29.1
	48-57	18	15.4
	58 and above	2	1.7
Marital Status	Single	15	12.8
	Married	102	87.2
	Widowed	0	0
Highest Level of Education	PD/ND	45	38.5
	HND	57	48.7
	B.Sc	15	12.8

	Msc Ph.D	0 0	0 0
Religion	Christianity Islam Traditional	99 13 5	84.6 111 4.3
Tribe	Yoruba Hausa Igbo	95 12 10	81.2 10.3 8.5

The study's sample comprised 117 respondents, with a gender distribution of 53% female and 47% male. In terms of age, the majority were between 28 and 37 years old (53.8%), followed by those aged 38 to 47 years (29.1%), 48 to 57 years (15.4%), and those 58 years and older (1.7%). Regarding marital status, 87.2% were married, 12.8% were single, and no respondents were widowed. Educational attainment varied, with 38.5% holding a Post-Diploma/National Diploma (PD/ND), 48.7% possessing a Higher National Diploma (HND), 12.8% having a Bachelor of Science (B.Sc), and no respondents with Master's (M.Sc) or Doctoral (Ph.D) degrees. The majority of respondents identified as Christians (84.6%), with 11% practicing Islam and 4.3% following traditional religions. In terms of ethnicity, 81.2% were Yoruba, 10.3% were Hausa, and 8.5% were Igbo.

Table 2: Knowledge and practice of coding and billing.

STATEMENT	SA	A	SD	D	Mean	StdDev
I have knowledge about clinical coding and billing.	67(57.3%)	44(37.6%)	3(2.6%)	3(2.6%)	1.5043	0.6775
I practice clinical coding in the hospital	62(53%)	47(40.2%)	4(3.4%)	4(3.4%)	1.5726	0.7229
I practice medical billing in the hospital	52(44.4%)	46(39.3%)	9(7.7%)	10(8.5%)	1.8034	0.9119
I have received any specialized training on clinical coding and medical billing before	54(46.2%)	52(44.4%)	4(3.4%)	7(6%)	1.6923	0.8036

The survey results on the knowledge and practice of clinical coding and billing reveal several insights. A significant portion of respondents, 57.3%, strongly agreed and 37.6% agreed that they have knowledge about clinical coding and billing, indicating a high level of familiarity with these practices, as evidenced by a mean score of 1.5043 and a standard deviation of 0.6775. In terms of practical application, 53% of respondents strongly agreed and 40.2% agreed that they practice clinical coding in their hospitals. This was reflected in a mean score of 1.5726 and a standard deviation of 0.7229, suggesting a widespread engagement in coding activities. Regarding medical billing, 44.4% strongly agreed and 39.3% agreed that they practice it in their hospitals. However, this practice showed a higher mean score of 1.8034 and a standard deviation of 0.9119, indicating a slightly lower level of agreement compared to clinical coding. When asked about specialized training, 46.2% of respondents strongly agreed and 44.4% agreed that they have received such training in clinical coding and medical billing. This response had a mean score of 1.6923 and a standard deviation of 0.8036, highlighting that while many have received specialized training, a notable portion has not, which could suggest a need for further professional development in this area.

Table 3: Factors affecting accurate coding and billing accuracy

STATEMENT	SA	A	SD	D	Mean	StdDev
Poor documentation of patient medical records	51(43.6%)	43(36.8%)	11(9.4%)	12(10.3%)	1.8632	0.9640
Illegible handwriting of the doctors	67(57.3%)	30(25.6%)	11(9.4%)	12(10.3%)	1.6667	0.9191
Inadequate coding tools	67(57.3%)	30(25.6%)	12(10.3%)	8(6.8%)	1.6667	0.9191
Increase in coding workflow	91(77.8%)	16(13.7%)	6(5.1%)	4(3.4%)	1.3419	0.7330
Lack of conducive environment for proper clinical coding and billing.	81(69.2%)	26(22.2%)	6(5.1%)	4(3.4%)	1.4274	0.7464
Shortage of clinical coding and indexing staff	81(69.2%)	26(22.2%)	6(5.1%)	4(3.4%)	1.4274	0.7464
Unfavorable management policies	81(69.2%)	26(22.2%)	6(5.1%)	4(3.4%)	1.4274	0.7464
Refusal of doctors to fill the discharge summary form /sheet	76(65%)	31(26.5%)	6(5.1%)	4(3.4%)	1.4701	0.7494

The analysis of factors affecting accurate coding and billing in table 3 above revealed several significant issues. Poor documentation of patient medical records was noted as a prominent concern, with 43.6% of respondents strongly agreeing and 36.8% agreeing that it impedes accuracy. This factor had a mean score of 1.8632 and a standard deviation of 0.9640, indicating a moderate level of impact. Illegible handwriting by doctors was identified as another critical factor. A majority of 57.3% of respondents strongly agreed and 25.6% agreed that it adversely affects coding accuracy. This issue recorded a mean score of 1.6667 and a standard deviation of 0.9191, reflecting its significant impact on the accuracy of coding and billing processes. Inadequate coding tools were similarly perceived as a major problem, with 57.3% of respondents strongly agreeing and 25.6% agreeing that a lack of appropriate tools contributes to inaccuracies. This factor also had a mean score of 1.6667 and a standard deviation of 0.9191, highlighting its role in the challenges faced.

The increase in coding workflow was perceived as the most severe factor affecting accuracy. A substantial 77.8% of respondents strongly agreed and 13.7% agreed that an increased workflow negatively impacts coding precision. This factor had the lowest mean score of 1.3419 and a standard deviation of 0.7330, demonstrating its considerable effect on coding accuracy. The lack of a conducive environment for clinical coding and billing was another significant issue, with 69.2% of respondents strongly agreeing and 22.2% agreeing that it hampers accurate coding and billing. This factor had a mean score of 1.4274 and a standard deviation of 0.7464. Similarly, the shortage of clinical coding and indexing staff, unfavorable management policies, and refusal of doctors to complete discharge summary forms were each identified as critical factors. Each of these issues had a mean score of 1.4274 and a standard deviation of 0.7464, underscoring their impact on the accuracy of coding and billing.

Table 4: Impact of accurate coding on effective billing

STATEMENT	SA	A	SD	D	Mean	StdDev
It helps in determining the quality healthcare rendered to patients in the hospital	87(74.4%)	30(25.6%)	0	0	1.2564	.43853
Clinical coding and billing	73(62.4%)	25(21.4%)	8(6.8%)	11(9.4%)	1.6325	.97023

improve medical research and enhances medical knowledge which improves performance.						
Clinical coding and billing improve administrative and clinical decision making.	82(70.1%)	35(29.9%)	0	0	1.2991	.45985
It involves generating health information useful for reimbursement.	81(70.1%)	35(29.9%)	0	0	1.3077	.46352
It helps in obtaining data on the utilization of hospital facilities.	85(72.6%)	32(27.4%)	0	0	1.2735	.44767
It improves standard reporting system.	87(74.4%)	30(25.6%)	0	0	1.2564	.43853
It aids effective billing and reimbursement.	87(74.4%)	30(25.6%)	0	0	1.2564	.43853
It helps to improve healthcare delivery with appropriate measures.	89(76.1%)	28(23.9%)	0	0	1.2650	.44321
It provides basement data for administrative and clinical decision making.	89(76.1%)	28(23.9%)	0	0	1.2393	.42850

The impact of accurate coding on effective billing demonstrates several key aspects. A substantial majority of respondents, 74.4%, agreed that accurate coding helps determine the quality of healthcare rendered to patients, as reflected by a mean score of 1.2564 and a standard deviation of 0.43853. This indicates a strong belief in the role of coding in assessing healthcare quality. Further, 62.4% of respondents agreed that clinical coding and billing improve medical research and enhance medical knowledge, contributing to improved performance. This perspective had a mean score of 1.6325 and a standard deviation of 0.97023, suggesting a recognition of the broader benefits of accurate coding and billing beyond immediate financial outcomes. Regarding administrative and clinical decision-making, 70.1% of participants felt that accurate coding and billing significantly enhance these processes, with a mean score of 1.2991 and a standard deviation of 0.45985. Similarly, 70.1% agreed that such practices are crucial for generating health information useful for reimbursement, indicated by a mean score of 1.3077 and a standard deviation of 0.46352.

The effectiveness of coding in obtaining data on the utilization of hospital facilities was supported by 72.6% of respondents, yielding a mean score of 1.2735 and a standard deviation of 0.44767. Additionally, the same proportion believed that accurate coding improves standard reporting systems, evidenced by a mean score of 1.2564 and a standard deviation of 0.43853. The impact of accurate coding on billing and reimbursement was affirmed by 74.4% of respondents, underscoring its importance in financial operations, with a mean score of 1.2564 and a standard deviation of 0.43853. Furthermore, 76.1% agreed that accurate coding enhances healthcare delivery by enabling appropriate measures, reflected in a mean score of 1.2650 and a standard deviation of 0.44321. Finally, 76.1% of respondents noted that accurate coding provides foundational data for administrative and clinical decision-making, supported by a mean score of 1.2393 and a standard deviation of 0.42850. This comprehensive view illustrates the critical role of accurate coding in not only financial aspects but also in improving overall healthcare quality and decision-making processes.

Table 5: Solution to the factors affecting accurate coding and billing accuracy

STATEMENT	SA	A	SD	D	Mean	StdDev
Provision of adequate coding and billing tools	89(76.1%)	28(23.9%)	0	0	1.2393	.42850
Recruitment of adequate clinical coding and billing staff	87(74.4%)	26(22.2%)	3(2.6%)	1(9%)	1.2991	.56117
Periodic training and development of clinical coding and billing staff.	82(70.1%)	31(26.5%)	3(2.6%)	1(9%)	1.3419	.57479
Setting a policy for compulsory writing of discharge summary form/sheet	86(73.5%)	27(23.1%)	2(1.7%)	2(1.7%)	1.3162	.59668
There should be proper motivation of clinical coding and billing staff	87(74.4%)	28(23.9%)	2(1.7%)	0	1.2735	.48466
Provision of conducive working environment for clinical coding and billing staff.	86(73.5%)	29(24.8%)	1(9%)	1(9%)	1.2906	.52621
Establishment of quality improvement system	88(75.2%)	27(23.1%)	1(9%)	1(9%)	1.2735	.51902

The analysis of solutions to the factors affecting accurate coding and billing accuracy reveals several key recommendations. The provision of adequate coding and billing tools was identified as a critical solution, with 76.1% of respondents strongly agreeing and 23.9% agreeing that such tools are essential. This aspect had a mean score of 1.2393 and a standard deviation of 0.42850, indicating a strong consensus on its importance. The recruitment of sufficient clinical coding and billing staff was also highlighted as a necessary measure, with 74.4% of respondents strongly agreeing and 22.2% agreeing that adequate staffing is crucial. This recommendation had a mean score of 1.2991 and a standard deviation of 0.56117, reflecting broad support for increasing the workforce in this area. Periodic training and development for clinical coding and billing staff were deemed important, with 70.1% of respondents strongly agreeing and 26.5% agreeing that regular training enhances staff capabilities. This solution was supported with a mean score of 1.3419 and a standard deviation of 0.57479, emphasizing the need for ongoing professional development.

Setting a policy that mandates the completion of discharge summary forms or sheets was also favored, with 73.5% of respondents strongly agreeing and 23.1% agreeing that such a policy is necessary. This recommendation had a mean score of 1.3162 and a standard deviation of 0.59668, suggesting that policy enforcement could address documentation issues. Proper motivation of clinical coding and billing staff was another recommended solution, with 74.4% of respondents strongly agreeing and 23.9% agreeing that motivation is crucial for performance. This measure received a mean score of 1.2735 and a standard deviation of 0.48466, highlighting its importance in maintaining staff engagement and efficiency. Providing a conducive working environment for coding and billing staff was similarly recommended, with 73.5% of respondents strongly agreeing and 24.8% agreeing that a supportive environment is essential. This solution had a mean score of 1.2906 and a standard deviation of 0.52621, reflecting a consensus on the need for an improved work setting. Finally, the establishment of a quality improvement system was endorsed by 75.2% of respondents who strongly agreed and 23.1% who agreed that such a system would enhance accuracy in coding and billing. This recommendation had a mean score of

1.2735 and a standard deviation of 0.51902, indicating broad support for systematic quality improvements.

Discussion

The analysis of participants' knowledge and practice of clinical coding and billing reveals significant insights. A substantial majority reported confidence in their knowledge, with 57.3% strongly agreeing and 37.6% agreeing that they are well-versed in these areas. This confidence was reflected in their self-reported practices, as 53% strongly agreed and 40.2% agreed that they actively engage in clinical coding within their hospital settings. However, opinions on medical billing practices showed more variability; 44.4% strongly agreed and 39.3% agreed that they practice medical billing, while 16.2% either strongly disagreed or disagreed, indicating some divergence in experiences or perceptions. Regarding specialized training, 46.2% strongly agreed and 44.4% agreed that they had received such training, with 6% expressing disagreement. This variation suggests differing views on the necessity and availability of specialized training, which is consistent with findings by Jha et al. (2017).

Factors affecting accurate coding and billing accuracy were also examined. Participants identified poor documentation of patient medical records as a major issue, with 43.6% strongly agreeing and 36.8% agreeing that it impacts accuracy. Concerns about illegible handwriting from doctors (57.3% strongly agree, 25.6% agree) and inadequate coding tools (57.3% strongly agree, 25.6% agree) were prevalent, highlighting challenges in interpreting handwritten notes and the need for improved resources. An increase in coding workflow was noted as a significant factor (77.8% strongly agree, 13.7% agree). Participants also pointed out organizational issues such as inadequate work environments (69.2% strongly agree, 22.2% agree), staffing shortages (69.2% strongly agree, 22.2% agree), and unfavorable management policies (69.2% strongly agree, 22.2% agree). Additionally, the refusal of doctors to complete discharge summary forms was highlighted by 65% of respondents who strongly agreed and 26.5% who agreed, emphasizing the need for greater cooperation among healthcare professionals for comprehensive documentation. These findings are consistent with those reported by Ahmadian et al. (2018).

The impact of accurate coding on effective billing was also evaluated. Participants widely agreed that accurate coding significantly influences various aspects, including determining the quality of healthcare (74.4% strongly agree, 25.6% agree), enhancing medical research and knowledge (62.4% strongly agree, 21.4% agree), and improving administrative and clinical decision-making (70.1% strongly agree, 29.9% agree). Accurate coding also facilitates reimbursement processes (70.1% strongly agree, 29.9% agree) and helps in the effective allocation of hospital resources (72.6% strongly agree, 27.4% agree). Moreover, it enhances the reporting system (74.4% strongly agree, 25.6% agree), supports billing and reimbursement (74.4% strongly agree, 25.6% agree), improves healthcare delivery (76.1% strongly agree, 23.9% agree), and provides essential data for decision-making (76.1% strongly agree, 23.9% agree). These comprehensive benefits align with the findings of Park and Lee (2019).

Proposed solutions to address the factors affecting accurate coding and billing included several recommendations. Participants supported the provision of adequate coding and billing tools (76.1% strongly agree, 23.9% agree), recruitment of sufficient staff (74.4% strongly agree, 22.2% agree), and periodic training and development (70.1% strongly agree, 26.5% agree). They also recommended implementing policies to ensure the completion of discharge summary forms (73.5% strongly agree, 23.1% agree), enhancing staff motivation (74.4% strongly agree, 23.9% agree), and creating conducive working environments (73.5% strongly agree, 24.8% agree). Additionally, establishing quality improvement systems was endorsed by 75.2% of participants who strongly agreed and 23.1% who agreed. These proposed solutions reflect a consensus on the need for comprehensive measures to improve coding and billing accuracy, in line with the recommendations of Bates, Porter, and Cook (2018).

Conclusion

The study on the effect of accurate coding in health records on billing accuracy in selected hospitals in Ibadan North Local Government, Oyo State, underscores the crucial role of precise clinical coding and its significant impact on billing accuracy. Findings indicate a strong understanding and implementation of coding practices among healthcare professionals, yet challenges such as poor documentation, inadequate tools, and organizational issues persist, hindering optimal performance. The widespread acknowledgment of the benefits of accurate coding—ranging from quality assessment and resource allocation to enhanced healthcare delivery—highlights its essential role in improving medical billing systems. Addressing the identified barriers through enhanced training, better staffing, and upgraded technological support could substantially advance billing accuracy. This, in turn, would enhance overall healthcare delivery and administrative efficiency in the region. To address these challenges effectively, recommendations for healthcare management include implementing regular training programs, improving documentation practices, investing in technology, and creating supportive work environments. Health information professionals are encouraged to advocate for professional development, promote standardization, and lead quality assurance initiatives. Government agencies are advised to enforce regulations, support training and capacity building, enhance infrastructure, and foster public-private partnerships. By adopting these measures, stakeholders can tackle critical issues, leading to improved accuracy in medical coding and billing, better healthcare delivery, and enhanced patient satisfaction and health outcomes.

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