Session 5.4: Ms. Isariyaporn Kanta

- Policy and Plan Analyst
- Ministry of Public Health
- Thailand

BIO

Abstract
Development and Implementation of Medical Certificates of Cause of Death Audit System for Hospital Death in Thailand

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Acknowledgements

- Siripong Buadee. Strategy and Planning Division Ministry of Public Health, Thailand, siripongbuadee@gmail.com
- Wanvisa Khammak. Strategy and Planning Division Ministry of Public Health, Thailand, aommyjuice@gmail.com
- Wansa Pao-in. Faculty of medicine Thammasat university, Thailand, wansa@tu.ac.th
- Rugsapon Sanithiya International Health Policy Program Ministry of Public Health, Thailand, Rugsapon@ihpp.thaigov.net
- Kanitta Bundhamcharoen International Health Policy Program Ministry of Public Health, Thailand, kanitta@ihpp.thaigov.net
Introduction

-Death certificate workflow-

Hospital

Web Application

Ministry of Public health
collect, coding underlying COD in ICD-10, inspect and analyse

Issued Death certificates (Tor Ror 4/1)

Link Data

Death certificates (Tor Ror 4/1) database

Electronic Death certificates

Match underlying cause of death with Citizen ID

The Bureau of Registration Administration
Ministry of interior
From July 2021 and March 2023, we have developed and implemented a system with assisting tools and a system for regular review of medical death certificate by auditors’ doctors in 11 pilot provinces across the country.

The implementation of the project has been developed in two parts:

a) The system for issuing death certificates through the Electronic Medical Death Certificate (eMDC).

b) Medical Certificates of Cause of Death Audit (MCCD audit) system.
**METHODS**

**Medical Certificates of Cause of Death Audit (MCCD audit) system**

After the medical death certificate were created and issued in electronic format, the auditor will check the quality of every death certificate by searching for more treatment history in Ministry of Health database. The results of the reviewed medical deaths certificates were rated in to 3 parts;

- All sequence of the diagnosis text were written correctly, and the underlying cause of death were acceptable by the auditor.
- The information in the medical death certificate was not enough or needed to be added such as change/edit the diagnosis text, add more details about the supporting cause of death.
- Wrong conclusion of underlying cause of death or write mode of death instead of underlying cause of death.
RESULTS

Number of death certificate

5 pilot provinces

5 pilot provinces + 12th health region

Number of audited death certificate

Audited result as incorrect

ปี 1964-1965
Result of auditing eMDC

Number of audited electronic medical death certificate issued by eMDC = 26,968 cases

- 11,227 case (complete)
- 9,393 case (switch sequence/add more support info.)
- 6,348 case (needed to edit underlying cause of death)

Correct: 42%
Incorrect: 25%
Minor error: 35%
DISCUSSION/CONCLUSION

Electronic medical death certificate system together with the auditing system help improve mortality data and mortality registration system.

2 major challenges
1. Miscommunication among healthcare workers and the registrar, so the Ministry of Public Health provides a Standard Operating Procedures on Death Certification for Physicians.
2. A lack of auditor’s doctors and workload of auditor’s doctors, hence, we additionally provide consulting meeting and developing artificial intelligence (AI) to assist determine the quality of cause of death.