Guidelines to Encourage the Adoption and Meaningful Use of Health Information Technologies in the South African Healthcare Landscape

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Various benefits associated with adoption and meaningful use of Health Information Technologies (HITs)

Much of South African healthcare system still relies on paper-based medical records

Leads to extreme data fragmentation

Adoption of HITs uncertain and challenging task

Calls for sensitive matching of local needs to available technologies and resources

Main objective: Formulate guidelines to encourage adoption and meaningful use of HITs in South African healthcare landscape
Methods

- 3 Round Delphi Study:
  - Identify factors that should be addressed to encourage the adoption and meaningful use of HITs
- 21 Delphi panel members – suitably knowledgeable regarding adoption and meaningful use of HITs in context of SA healthcare landscape
- High retention rate - all participants completed all three rounds
Methods
Delphi Panel

- Job titles:
  - Managers (clinical-, clinical risk-, contracts-, division-, project-, senior account-, senior operations-)
  - Heads of departments, chief executive officers, directors, presidents
  - Specialists (EMR-, healthcare informatics sales-)
  - Consultants, researchers, senior facilitators

- Organizations:
  - Public and private healthcare providers, medical aids, ICT companies, research institutions, departments of health, agencies providing ICT services to the government, not-for-profit organizations
Open-ended question:

- Based on your experience and knowledge of the South African healthcare landscape, describe as many aspects/barriers that should be addressed to encourage the adoption and meaningful use of HITs

Qualitative data analysed to identify unique factors

58 Factors derived from analysis
Methods
Delphi Round 2

- Factors identified in Round 1 formed basis for Round 2
- Participants asked to rate importance of each factor
- Rating: Very important, important, slightly important, unimportant
- To identify factors that require most urgent attention to encourage adoption and meaningful use of HITs in SA
Methods
Delphi Round 3

- Based on results from Round 2
- Personalized questionnaire to each participant
- Allowed panel members to consider their response in relation to that of panel members
Results

- Consensus reached on 42 out of 58 factors rated as important to very important.
- According to rating scale: factors have significant to direct impact on adoption and meaningful use of HITs in SA healthcare landscape.
- Formulate guidelines:
  - Reflect on original Round 1 contributions to gain deeper understanding.
  - Similar factors grouped together.
- Result:
  - 20 Guidelines that provide indication of factors that need to be addressed to create environment that is generally conducive to the adoption and meaningful use of HITs.
Guidelines

1) Initiate a government-backed drive to implement relevant HITs

2) Develop a national framework and guidelines to drive implementation and meaningful use

3) Establish professional bodies to support and monitor technology implementation and adherence to relevant policies and regulations

4) Address staff shortages in public healthcare sector

5) Establish career path for health informaticians
6) Ensure appropriate budgeting for HIT adoption

7) Adopt relevant standards when developing HITs

8) Establish professional body to guide, enforce, and monitor compliance to relevant standards

9) Involve users in all stages of development and implementation

10) Improve quality control mechanisms in software
11) Investigate potential of wireless and mobile technologies to make HITs more accessible

12) Improve SLAs to ensure appropriate after sales and technical support

13) Improve direction, leadership, and support in terms of HIT adoption

14) Increase HIT awareness

15) Ensure appropriate training
16) Improve ICT resources on site

17) Implement appropriate change management strategies to support adoption of HITs

18) Identify unique patient identifier

19) Raise awareness regarding the benefits associated with HIT use

20) Improve connectivity and communication infrastructure
Conclusion

- Results of study raise awareness with regards to factors that need to be addressed to encourage adoption and meaningful use of HITs in the South African context.
- Highlight areas that should be addressed by various stakeholders to create environment that is conducive to adoption and meaningful use of HITs.
Any questions?

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