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Digital Health for Myocardial Infarction: Research Topics and Trends

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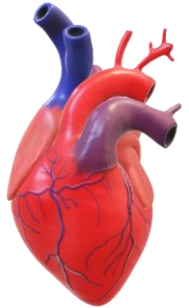
AIDH IMIA

Background – Myocardial infarction



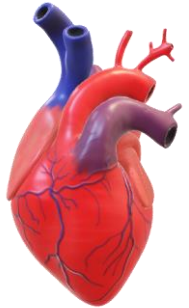
9% In-hospital mortality

19% 1-month readmission

30% Higher relative risk for all-cause mortality and recurrent event

(Connie et al., 2023; Johansson et al., 2017; Teo et al., 2013)

Background – Myocardial infarction



9% In-hospital mortality

19% 1-month readmission

30% Higher relative risk for all-cause mortality and recurrent event

4.3% Patients adhering to primary protective factors

(Tsao et al., 2023; Johansson et al., 2017; Teo et al., 2013)

Background – Digital health

- Timely, efficacious, cost-efficient (Jiang, 2019; Widmer, 2015)
- Reduces readmission (Park, 2019)
- Increases drug adherence and patient satisfaction (Johnston et al., 2016)

Background – Digital health

Advancements in technology can assist.

Diverse range of technologies can create challenges in deciding on an approach.

Scope and aim

Publication trends provide insight into emerging, novel research.

Synthesis of technologies for myocardial infarction.

This study aims to identify and visualise the **hot topics and trends** of research in digital health for myocardial infarction.

Methods

Literature Search.

Search strategy:

- 1. "digital health" (similar key words separated by OR),
- 2. "myocardial infarction" OR "heart attack",
- 3. "telecardiology" OR "tele-ECG",
- 4. (#1 AND #2) OR #3,
- Timespan: 2012-2021, Language: English.

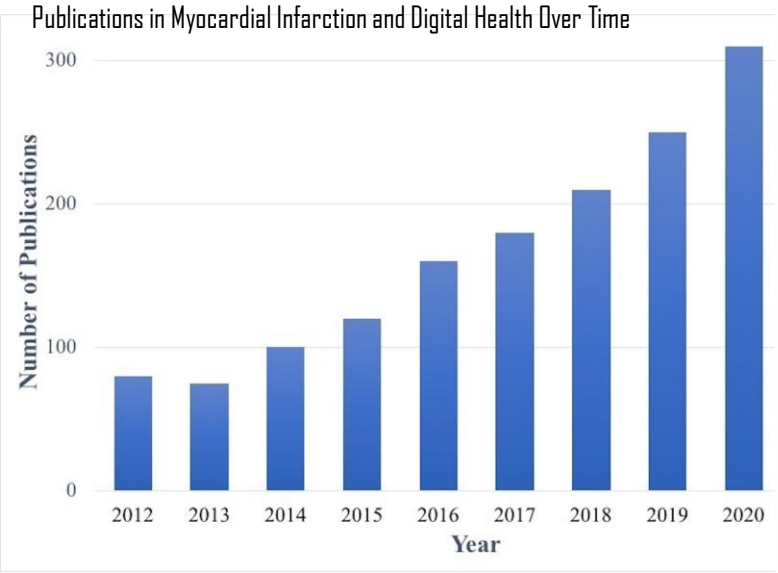
Records exported into VOSviewer

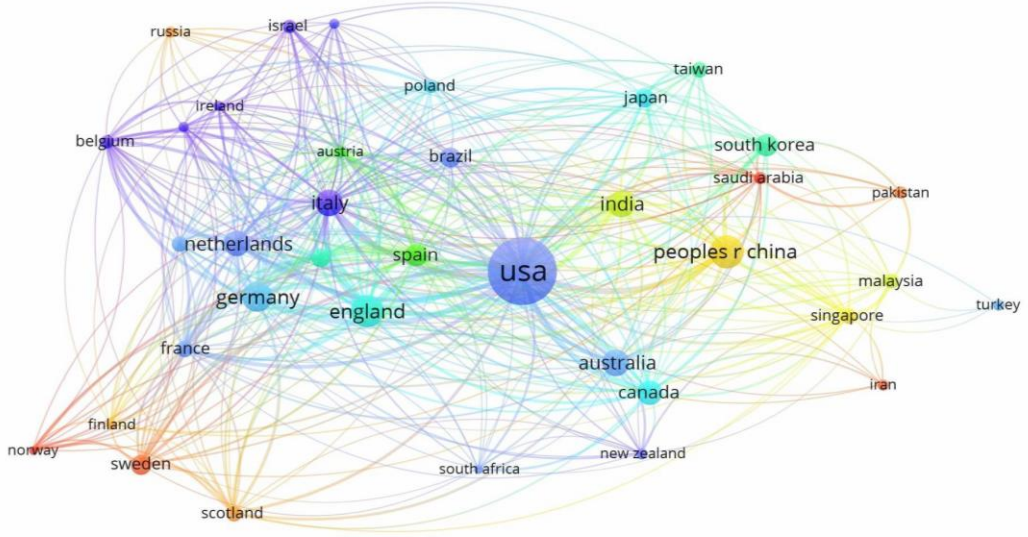
Two types of maps were created:

-Network Visualisation

-Overlay Visualisation

Results - *Publication trend, country analysis and journal analysis*

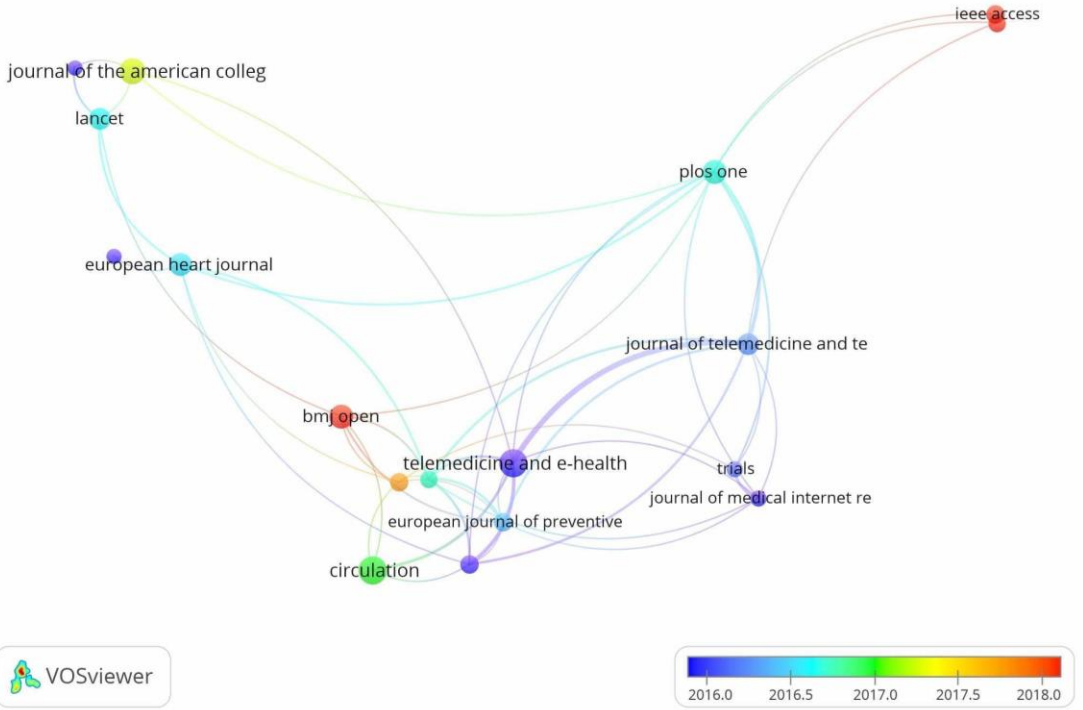




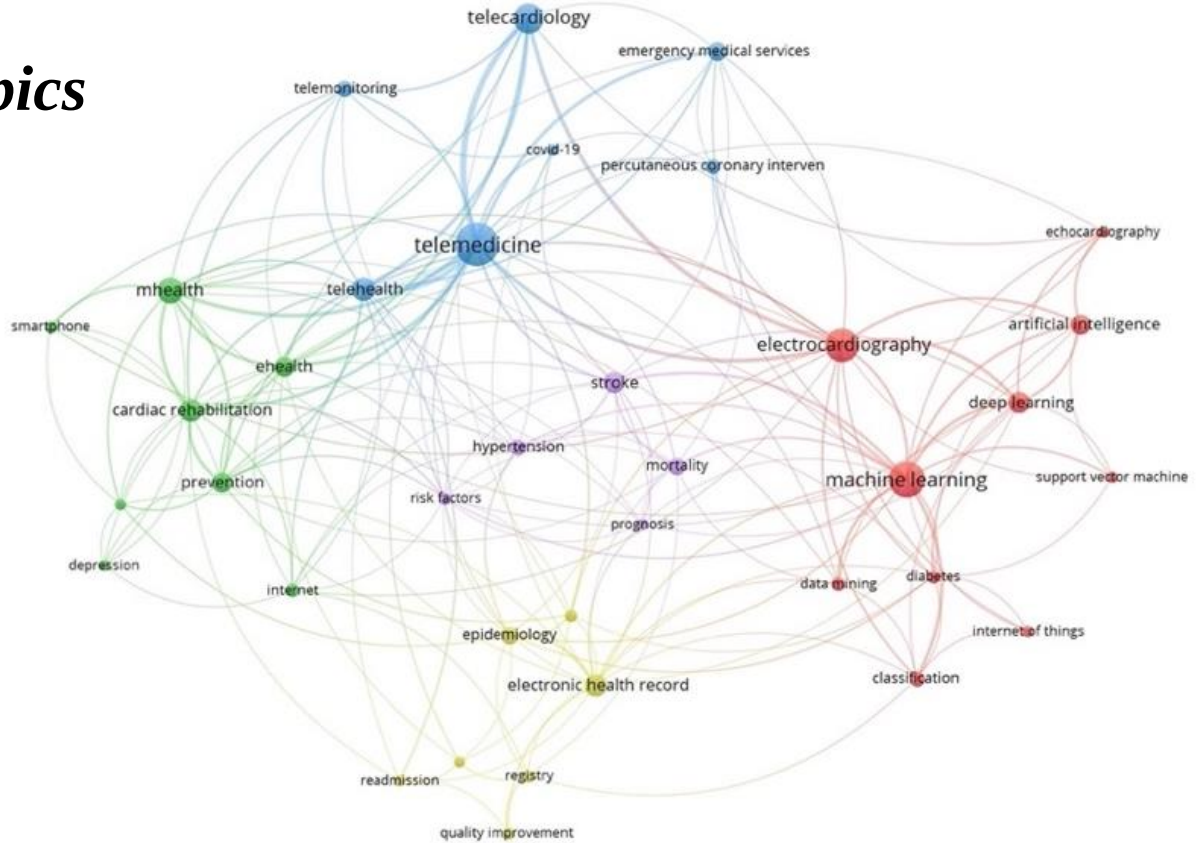
VOSviewer

2016.5 2017.0 2017.5 2018.0

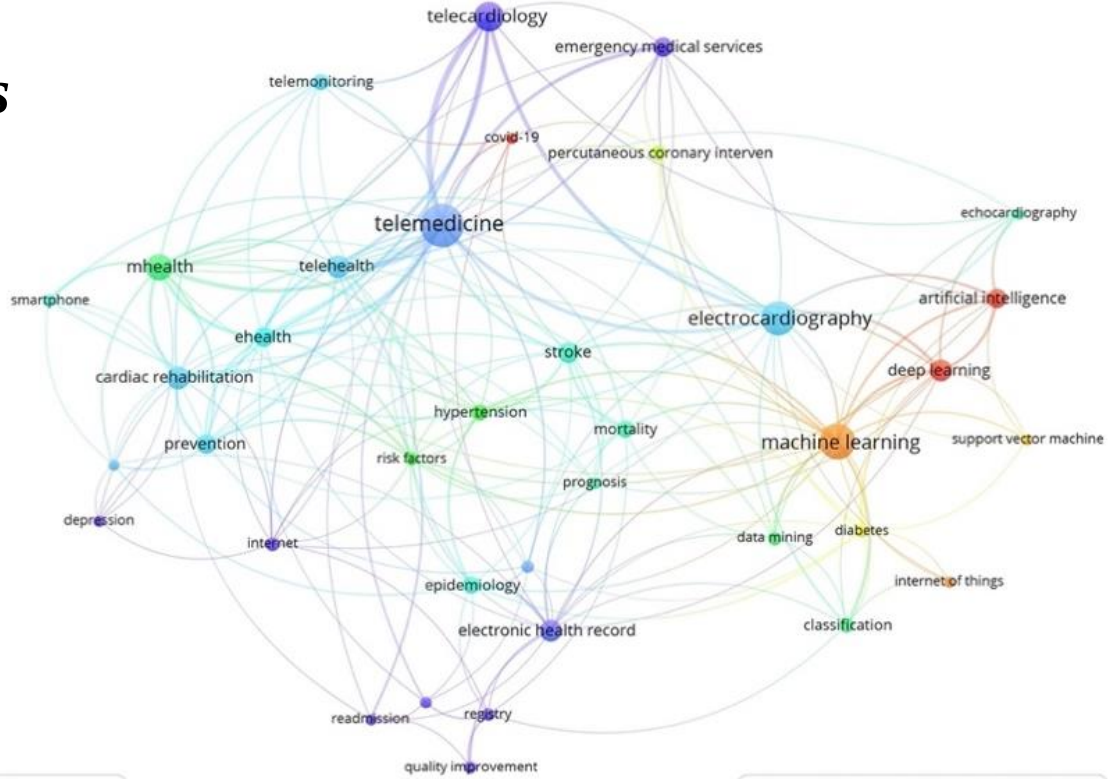
Results - *Publication trend, country analysis and journal analysis*



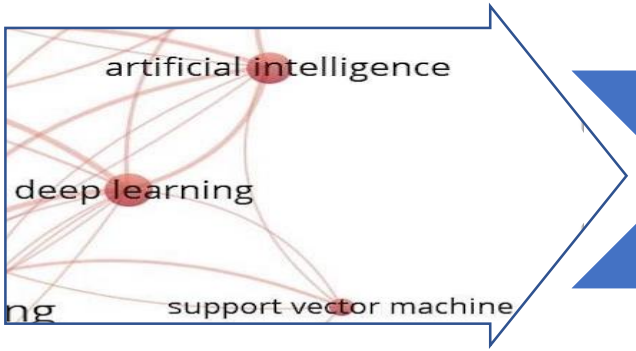
Results - *Research topics*



Results - *Emerging topics*



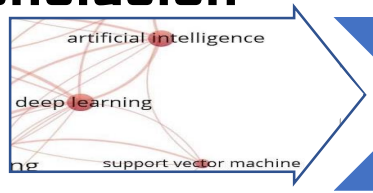
Implications and conclusion



Artificial intelligence and deep learning

Greater innovation in future years

Implications and conclusion



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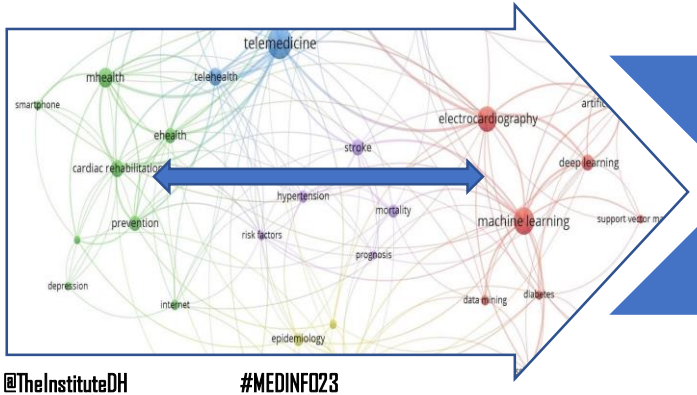
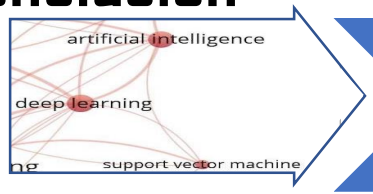


Gap in artificial intelligence used in mobile health

This gap should be bridged

Implications and conclusion



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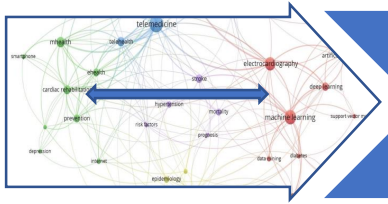

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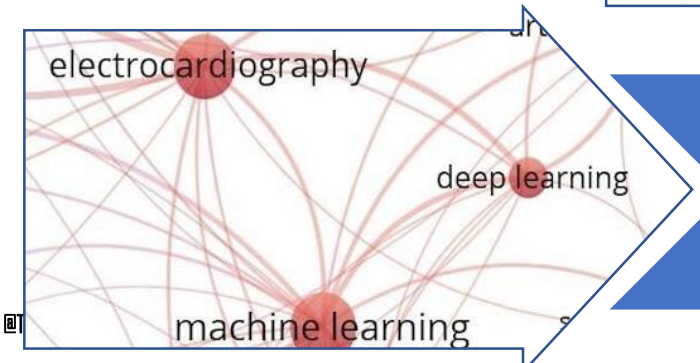
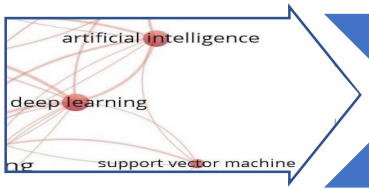


Connections can guide clinicians

Indicates research availability for certain topics

Implications and conclusion



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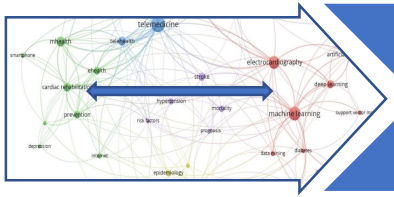

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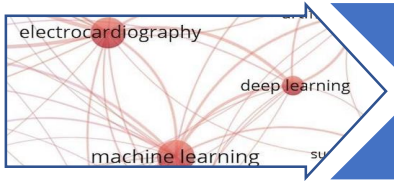

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References

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