

*INNOVATION AND ENTREPRENEURSHIP IN HEALTHCARE:
A SYSTEMATIC REVIEW AND RESEARCH AGENDA*



BABSON



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PRESENTATION OUTLINE

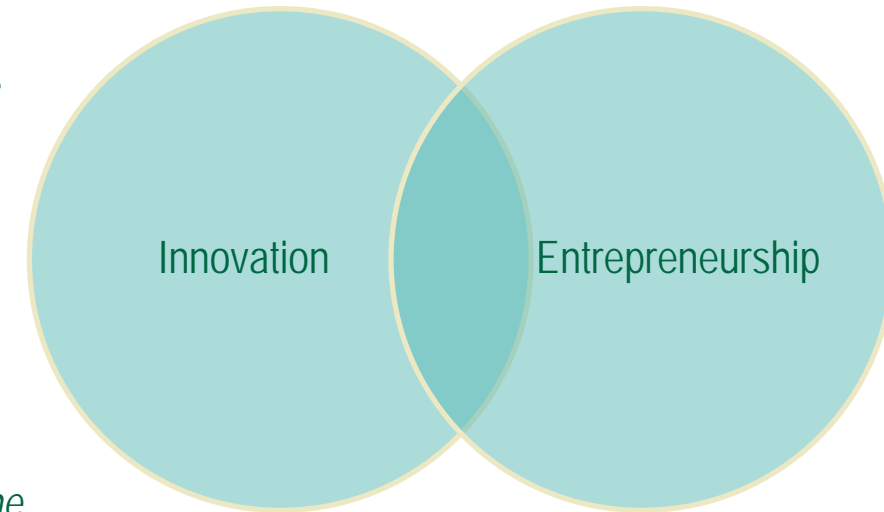
- Defining Innovation and Entrepreneurship
- Motivation for Research in Healthcare Innovation and Entrepreneurship
- Systematic Literature Review Methodology
- Healthcare Entrepreneurship Results
 - Contributing Factors, Public Health Intrapreneurship, Financing and Education
- Healthcare Innovation Results
 - Technology v. Process and Education
- Future Research Agenda

DEFINITIONS

- Healthcare innovation: identifies new or improved health policies, systems, products, technologies, services and delivery methods that improve people's health and wellbeing.

--World Health Organization

- Field of Entrepreneurship: the scholarly examination of how opportunities are discovered, evaluated, and exploited to create future goods and services. --Shane, S., & Venkataraman, S. (2000). *The Promise of Entrepreneurship as a Field of Research*. *The Academy of Management Review*, 25(1), 217-226. Retrieved from <http://www.jstor.org/stable/259271>



PRACTICAL MOTIVATION: WHY STUDY HEALTHCARE INNOVATION AND ENTREPRENEURSHIP?



UN Sustainable Development: Falling Behind on 2030 Goals

Infectious Diseases

Non-Communicable Diseases

Maternal and Newborn Health

Road Traffic Injuries

System Cost and Financing

ACADEMIC MOTIVATION: WHY STUDY HEALTHCARE INNOVATION AND ENTREPRENEURSHIP?

A seminal *Science* article by Morel et al. (2005) called for the further study of developing countries to build innovation and entrepreneurial capacity.

A recent editorial (Nembhard & Lee, 2017) calls for increased research in creativity and innovation to improve domestic health services and care coordination

SYSTEMATIC LITERATURE REVIEW

Our Aim:

- Conduct a systematic review of the healthcare entrepreneurship literature
- Review healthcare innovation literature to fill gaps from healthcare entrepreneurship literature
- Propose research agenda based on literature review findings

METHODOLOGY

Title Search for Keywords

- healthcare entrepreneurship
- health care entrepreneurship
- health entrepreneurship
- healthcare innovation
- health care innovation
- health innovation

Databases

- EBSCOhost
- ProQuest
- JSTOR
- Web of Science
- Science Direct
- PubMed - NCBI

Criteria

- +Entrepreneurship: included all
- Innovation: Implementation examples and frameworks

HEALTHCARE ENTREPRENEURSHIP RESULTS

- Only 7 results were returned for health and entrepreneurship, and healthcare and entrepreneurship
 - 2 commentaries, 5 articles
 - None studied healthcare entrepreneurship in low and middle income countries
 - Most were conceptual, theory building articles based on literature (2 empirical)
 - Emergent Themes
 1. Contributing factors to entrepreneurial success (1)
 2. Public health entrepreneurship (intrapreneurship) (1)
 3. Entrepreneurship education in healthcare (2)
 4. Financing entrepreneurship in healthcare (1)

HEALTHCARE ENTREPRENEURSHIP RESULTS

Contributing Factors to Entrepreneurial Success

- Predisposing Factors (Risk-taking)
- Enabling Factors (Resources)
- Reinforcing Factors (Financial or Social Motivation)

Intrepeneurship

- Strategic Partnerships
- Operational Efficiency
- Revenue Generation

Financing Entrepreneurship

- Shared Partnership Agreements
- Joint Ventures

Entrepreneurship Education

- Limited; more needed

HEALTHCARE INNOVATION RESULTS

More than 300 article titles contained heterogeneous results for health, healthcare and innovation.

Most studies were qualitative and descriptive of a specific innovation most commonly within a hospital setting

Themes:

1. Innovation Type: Technology v. Process Innovation
2. Frameworks

HEALTHCARE INNOVATION RESULTS

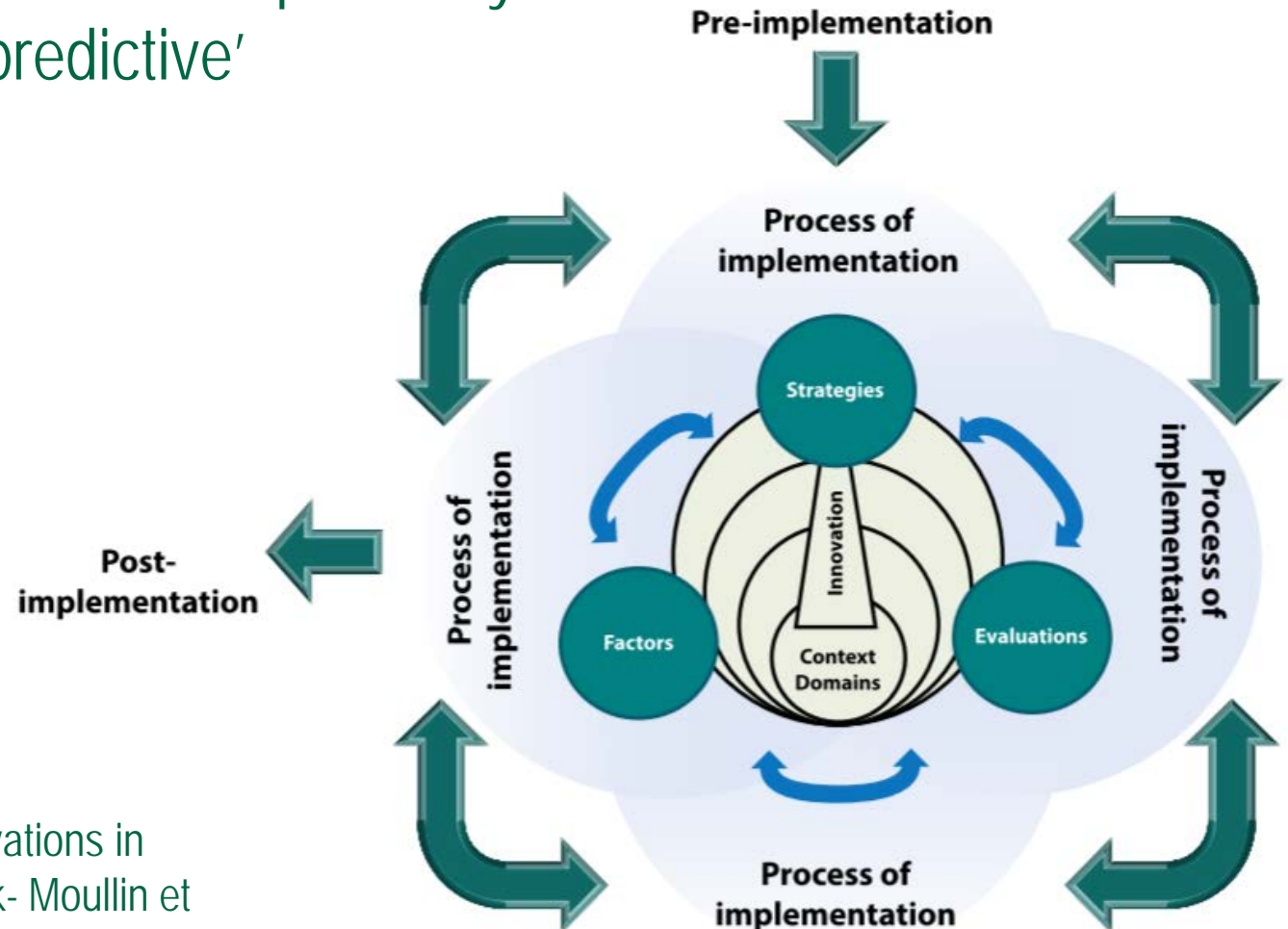
1. INNOVATION TYPE

- A large number of studies described the use of *technology*
 - e.g., example implementation of ehealth programs, telemedicine and electronic health records
- Other themes that have commonly been studied are the use of innovation in improving care *processes*
 - e.g., from quality improvement programs to new cancer screening technique to home care business models

HEALTHCARE INNOVATION RESULTS

2. FRAMEWORKS

- Overall 'frameworks were descriptive and explanatory more often than prescriptive and predictive'
- Define Implementation Stages
 - Development
 - Communication
 - Exploration
 - Installation
 - Operation
 - Sustainability



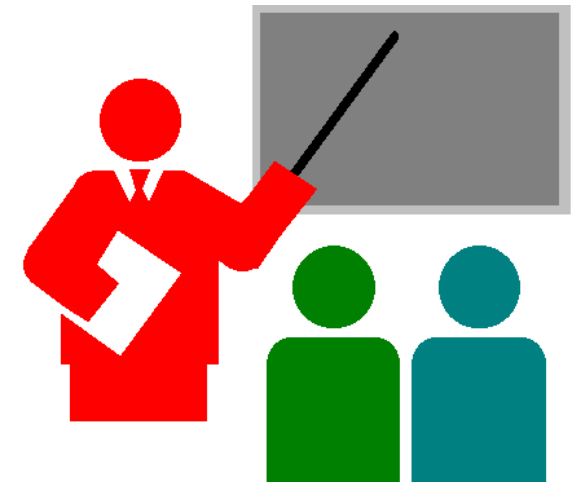
A systematic review of implementation frameworks of innovations in healthcare and resulting generic implementation framework- Moullin et al. Health Research Policy and Systems (2015) 13:16

SETTING A RESEARCH AGENDA

- Our systematic review revealed that there is a paucity of research in the field of healthcare entrepreneurship
- Recommendations for Theory Building and Theory Testing Research:
 - Refine Enabling and Reinforcing Factors
 - Examine Strategic Partnerships and Financial Models
 - Differentiate Technology v. Process Innovations
 - Within Process Innovations: Examine Success of Incremental v. Radical Innovations
 - Predictive Modeling for Improved Implementation

PRACTICAL IMPLICATIONS

- See challenges as opportunities for innovation and entrepreneurship
- Teach innovation and entrepreneurship in medical and public health schools





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THANK YOU!

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