WP8: Analysis of economic evaluation methods for hospital-based assessment

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Agenda

- Rationale

- Conceptual framework

- Methods and preliminary results

- Deliverables

- Timeline

- Collaborations

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Rationale

Conceptual framework

Clinical decision making

T 8.3 (Studying variability)

T 8.2 (Ensuring Trasferability)

Value of health technologies

Organizational Factors

T 8.3 (Studying variability)

- Formal structure (vertical / horizontal)
- Processes specialization
- Competence
- Cooperation/communication
- Centralization/decentralization
- Formalization
- Management tools

T 8.1 (Relevant org factors)

Hospital Performance

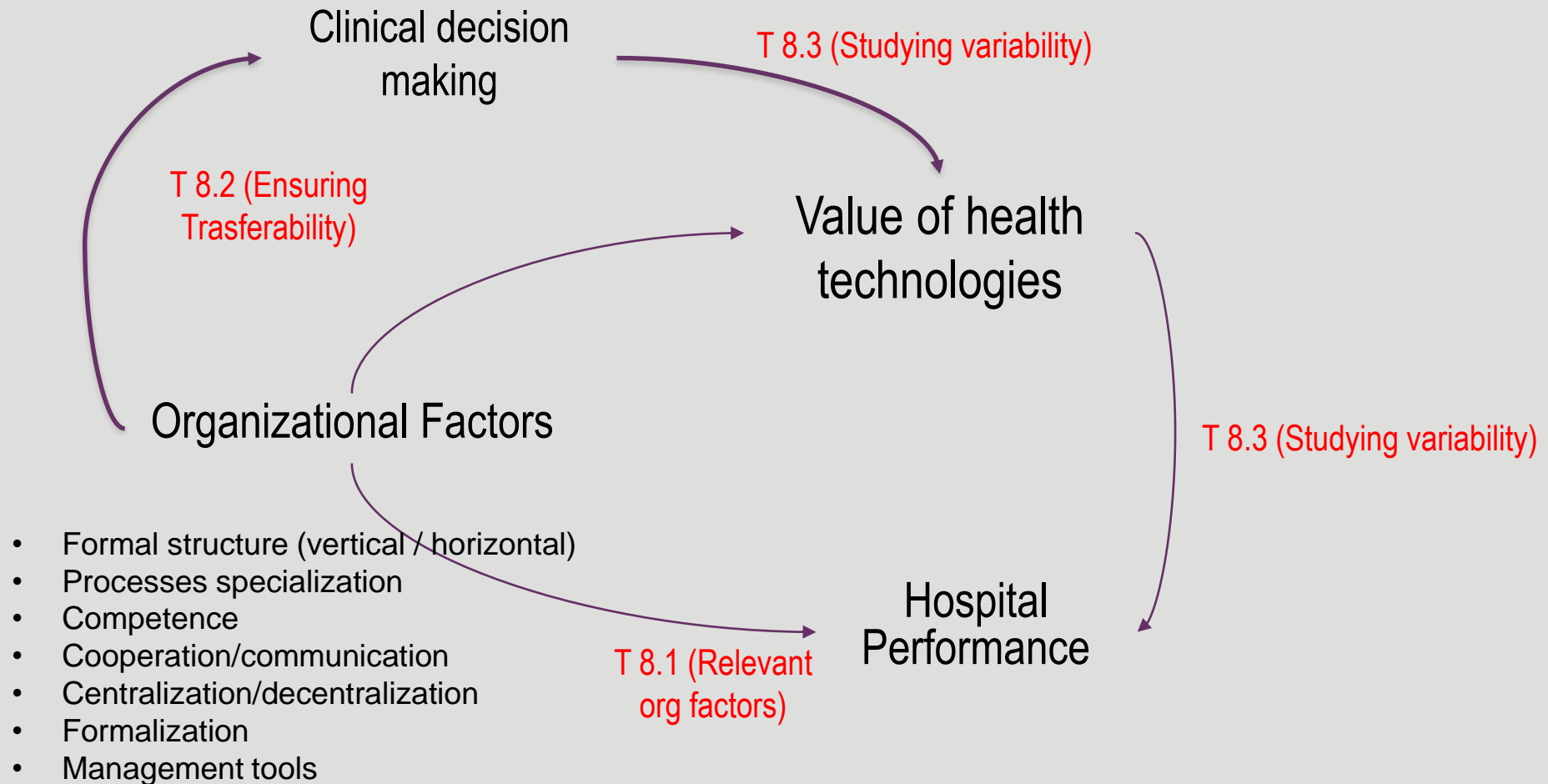İMPACT HTA
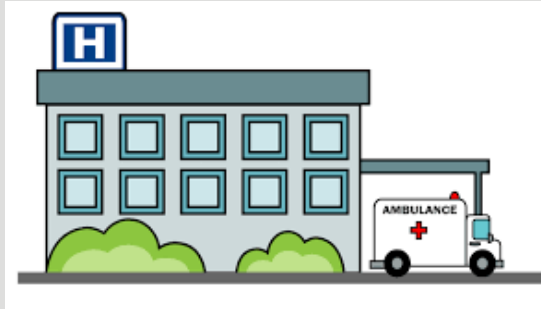
Task 8.1

Which contextual factors characterize hospitals?

- Previous study

What dimensions do performance indicators concern?

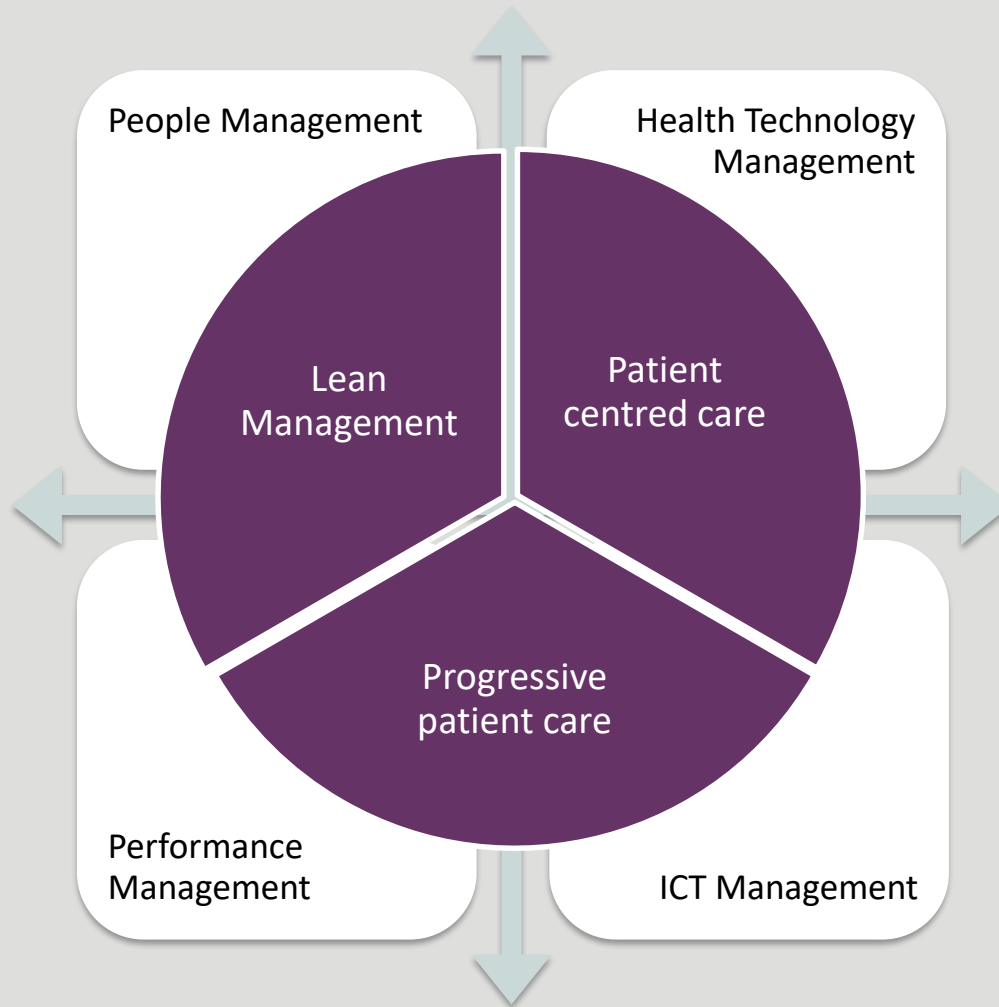- Literature review

Which performance indicators?

- Analysis of International Agencies

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Task 8.1
Organizational factors affecting performance

MA	Responsibility centers
	Costing tools
	Budgeting process
HRM	Selection and allocation
	Training
	Evaluation (position, people, performance)
	Compensation incentives
	Career path design
	Retaining strategies and working conditions
	New key professional roles
ICT	Specific ICT tools
	Typology of information collected
	Level of ICT integration
	Safety and precision in communication flows
HTA	Presence of HB HTA unit and relevance in H
	Entity of investment in technology
	Professional figures involved in expression of needs, assessment, adoption decision
	Characteristics of technology uptake process

Diagram labels: People Management, Health Technology Management, Performance Management, ICT Management, Lean Management, Patient centred care, Progressive patient care

I Gabutti, D Mascia, A Cicchetti. "Exploring "patient-centered" hospitals: a systematic review to understand change." BMC health services research, 2017.

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Task 8.1 Literature review (Results 1)

23 full text:

- 6 systematic reviews;

- 15 observational studies;

- 2 case studies.

SYSTEMATIC REVIEWS	Gandjour A, 2002	Veillard J, 2005	Groene I, 2008	Copnell B, 2009	Beyan OD, 2012	Simou E, 2014
Acceptability					X	
Accessibility					X	
Appropriateness					X	
Clinical Effectiveness		X	X	X	X	X
Continuity					X	
Competence or capability					X	
Development						
Efficiency	X	X	X	X	X	X
Equity				X	X	
Expenditure or cost					X	
Patient Centeredness		X	X	X	X	X
Patient Experience / Satisfaction						
Resources and capacity						X
Safety		X	X	X	X	X
Employee satisfaction						
Staff orientation		X	X			X
Sustainability					X	
Timeliness				X	X	X
System integration and management innovation						

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Task 8.1 Literature review (Results 2)

PRIMARY STUDIES	Kazandjian VA, 2003	Yap C, 2005	Berg M, 2005	Kazandjian VA, 2005	Sunol R, 2009	McConchie S, 2009	Mears A, 2011	Stausberg J, 2011	Klazinga N, 2011	Liu H, 2013	Davis P	McNatt Z, 2015	Azami-Aghdash S, 2015	Gu X, 2016	Backman C, 2016	Anhang Price R, 2018	Nguyen MC, 2018
Acceptability																	
Accessibility															X		
Appropriateness	X																
Clinical Effectiveness			X		X		X			X	X		X	X	X	X	
Continuity																	
Competence or capability																	
Development													X				
Efficiency	X	X					X				X	X		X		X	
Equity											X						
Expenditure or cost																	
Patient Centeredness					X									X			
Patient Experience / Satisfaction		X					X		X	X			X	X	X	X	
Resources and capacity													X				
Safety			X	X	X	X	X	X	X	X			X	X	X	X	X
Employee satisfaction											X			X			
Staff orientation																	
Sustainability																	
Timeliness																	
System integration and management innovation		X															

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Task 8.1 International Agencies

Results

583 indicators (92, 15.8%) reported by more than one agency).

Most frequently reported dimensions

- Accessibility (133 indicators, 25,0%),
- Effectiveness (36, 6,8%),
- Safety (23, 4,3%).

Most frequently addressed Specialties

- Surgery (307 indicators; 57.8%);
- Cardiology (80; 15.1%);
- Emergency (62; 11.7%).

Agencies

- National Agency for Regional Health Services, AGENAS (Italy);
- Australian Institute of Health and Welfare, AIHW;
- Canadian Institute for Health Information, CIHI;
- Agency for Healthcare Research and Quality, AHRQ (USA);
- National Health Service - MyNHS tool, NHS (England);
- Organisation for Economic Co-operation and Development, OECD
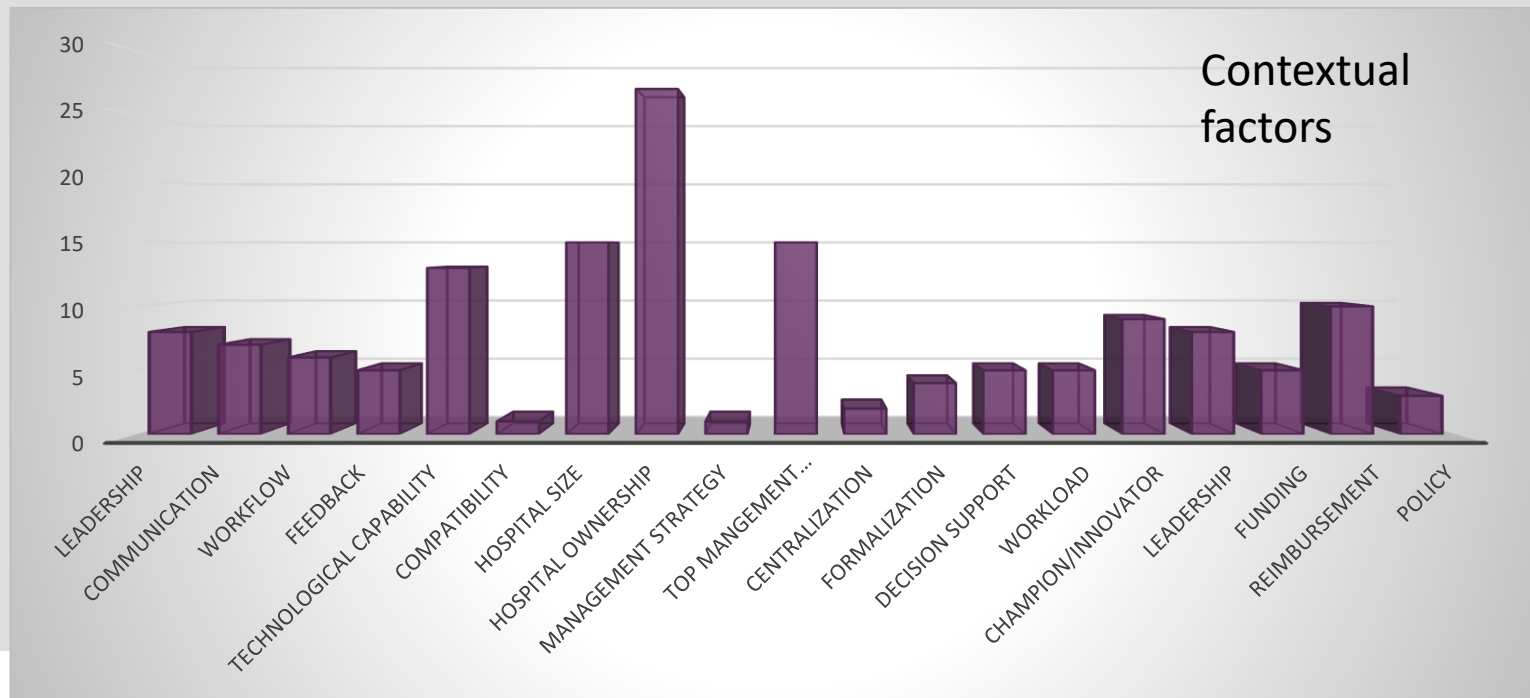
**Missing emphasis
on patient
centered care!**

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Task 8.2

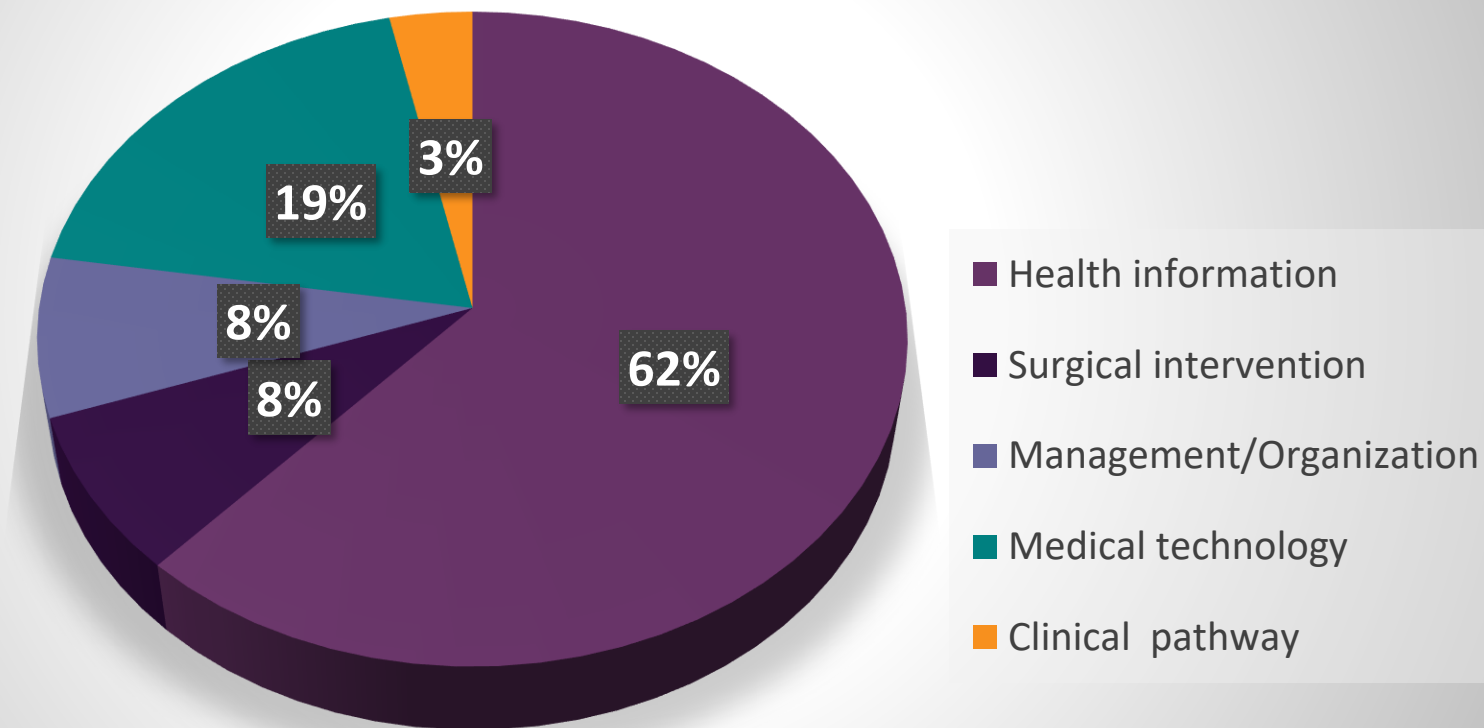Which contextual factors may have an impact on technologies' creation of value?

• Literature review

Which technologies have been addressed in concrete?

• Literature review

Contextual factors

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Task 8.2

Type of technologies assessed (%)

- Health information — 62%
- Surgical intervention — 8%
- Management/Organization — 8%
- Medical technology — 19%
- Clinical pathway — 3%

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Task 8.3

- Literature review: Results from 30 articles included in the analysis out of 715 articles identified.
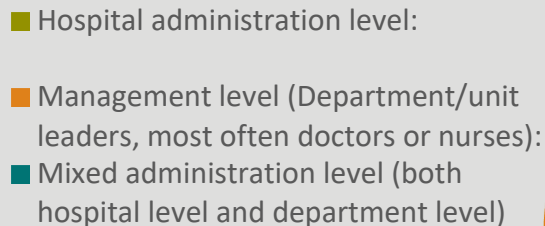
DISTRIBUTION OF PARTICIPANT'S

- ■ Physician's
- ■ Nurse's
- ■ Administration
- ■ Management
- ■ Physical therapist's
- ■ Occupational therapist's
- ■ Dietician's
- ■ Other health care provider's
- ■ IT or library manager's
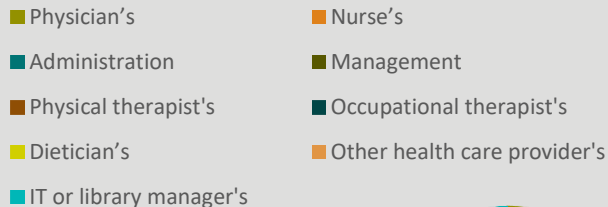
Nurse's (37%),
Physician's (11%),
Management (10%),
Administration (9%)

DISTRIBUTION OF ORGANIZATIONAL BODY

- ■ Hospital administration level:

- ■ Management level (Department/unit leaders, most often doctors or nurses):
- ■ Mixed administration level (both hospital level and department level)

Identified organizational factors that influence clinical decision making (divided in themes).

Resources:	Time, Funding, Staff, workload, Equipment, Librarian/library access, IT, Knowledge and structure
Leadership:	Emotional support: Encouragement and role modelling. Strategic support: Communication, best practice, planning, educating, goal setting, teamwork and values.
Organization:	Culture and Policy

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Framework and analytical tools located

Frameworks	Tools
Advancing Research and Clinical practice through close Collaboration (ARCC) model.	The Barriers Scale
Iowa Model of Evidence Based Practice to Promote Quality Care.	The Quality Work Competence questionnaire.
The National Health Service Sustainability Model	Alberta Context Tool (ACT).
Developed the Leadership Behaviors Supportive of EBP Institutionalization" (L-EBP)	The Organizational Readiness for Implementing Change (ORIC).
A conceptual framework named Supporting the Uptake of Nursing Guidelines (SUNG).	The Organizational Readiness to Change Assessment (ORCA).
PARISH framework	Evidence-based Practice Beliefs scale (EBPB).
Content, Context, and Process model	Evidence based Practice Implementation scale (EBPI)
	Organizational Culture & Readiness for System-wide Implementation of EBP scale (OCRSIEP).
	Evidence-Based Medicine in Primary Care.

Deliverables

D8.1 & 8.2 (M33) - UCSC
- Toolkit including a list of relevant indicators to capture hospital performance variability
- Toolkit to assess the transferability of evidence produced in other jurisdictions and decision-making levels
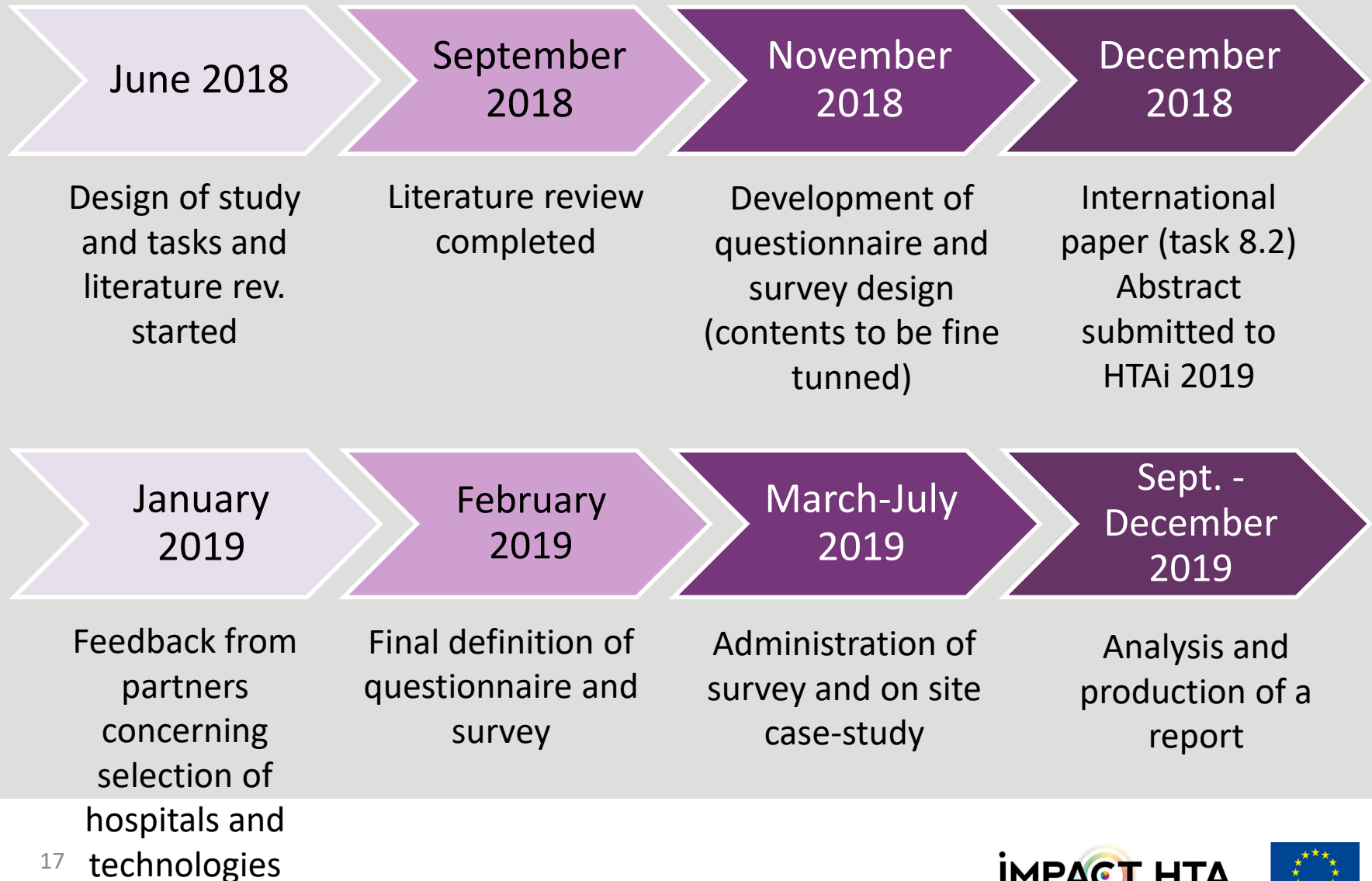
⮕ Evidence based indicators will be developed to measure the hospitals performance in terms of efficiency and health outcomes, the schedule of assessment and the threshold value will also be defined. A set of items describing the hospitals organization in terms of legal status, size, degree of specialization, uptake of innovation and methods used for decision making upon health technologies will be identified. The relation between the mentioned elements will be explored. As a second section of the deliverable, a focus on the assessment of health technologies will be done constructing a standard methodology to assess the transferability of evidence used to inform decision making.
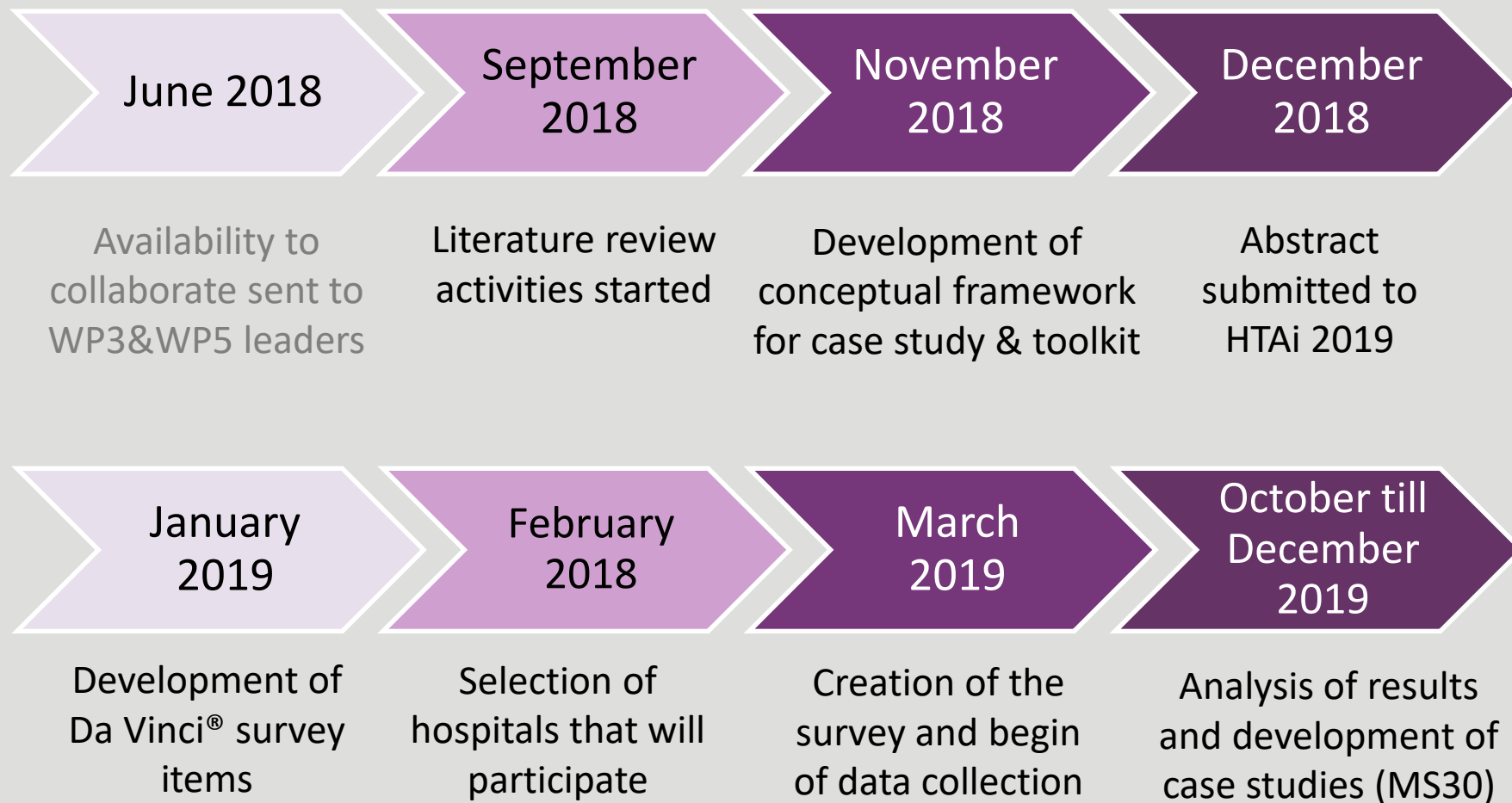
D8.3 (M33) - ISS

Toolkit of instruments to identify the clinical variability and its impact on the use of health technology.

⮕ Development of a toolkit, which will include among others a checklist and a projection model, aimed at analysing the different factors (i.e. behaviour of healthcare professionals and organizational issues) further to the technical Associated with document characteristic of technology that contribute to clinical variability. The toolkit will thus support local decision-makers in identifying those actions which are most likely to enable an effective and appropriate use of health technologies.

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Timeline (Task 8.1 & 8.2)

June 2018	September 2018	November 2018	December 2018
Design of study and tasks and literature rev. started	Literature review completed	Development of questionnaire and survey design (contents to be fine tunned)	International paper (task 8.2) Abstract submitted to HTAi 2019

January 2019	February 2019	March-July 2019	Sept. - December 2019
Feedback from partners concerning selection of hospitals and technologies	Final definition of questionnaire and survey	Administration of survey and on site case-study	Analysis and production of a report

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Timeline (Task 8.3)

June 2018	September 2018	November 2018	December 2018
Availability to collaborate sent to WP3&WP5 leaders	Literature review activities started	Development of conceptual framework for case study & toolkit	Abstract submitted to HTAi 2019

January 2019	February 2018	March 2019	October till December 2019
Development of Da Vinci® survey items	Selection of hospitals that will participate	Creation of the survey and begin of data collection	Analysis of results and development of case studies (MS30)

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Collaborations (Tasks 8.1 & 8.2)

ALL PARTNERS*:

- Selection of 2 or 3 hospitals (partners will be asked to provide main info on hospital and a contact person)
- Specification of the kind of support partners are available to offer (i.e. further support in administering the survey)**
- Selection of technologies (see Appendix 1)
- Indication of «Patient Centered Care Indicators» (see Appendix 2)

ONE PARTNER (PSE):

- Support for ethnographic case study

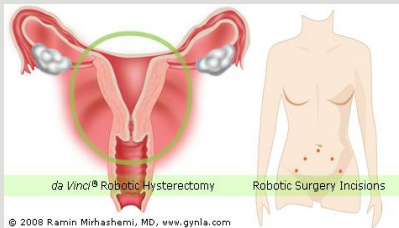*All partners will receive an email after the meeting and will be asked to reply within 31st January 2019.
** EASP and AOTMiT should have dedicated resources in this WP

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Collaborations (Task 8.3)

In order to prepare a case study on the use of the Da Vinci Robot (MS 30 due in December 2019) a **survey to understand and describe different variables (clinical and organizational) and to analyze results in terms of hospital performance will be performed**.

Gynecology (Hysterectomy)

da Vinci® Robotic Hysterectomy   Robotic Surgery Incisions

© 2008 Ramin Mirhashemi, MD, www.gynla.com

Urology (Prostatectomy)

ALL PARTNERS *(partners will receive an email after the meeting and will be asked to reply within 31st January 2019)*

- Indentify a contact person with knowledge on utilization of the robot that will be willing to participate in a survey

- Department of interest: Gynecology and Urology

- Selection of 4 hospitals in total where the Da Vinci Robot is being used.

- Survey will include questions regarding: Frequency of use, type of surgery, duration of surgery, frequency of conversion to open surgery, staff in operation theater, number of surgeons performing robotic surgery, work load, training, support, etc.

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