

An eHealth business model for independent living systems

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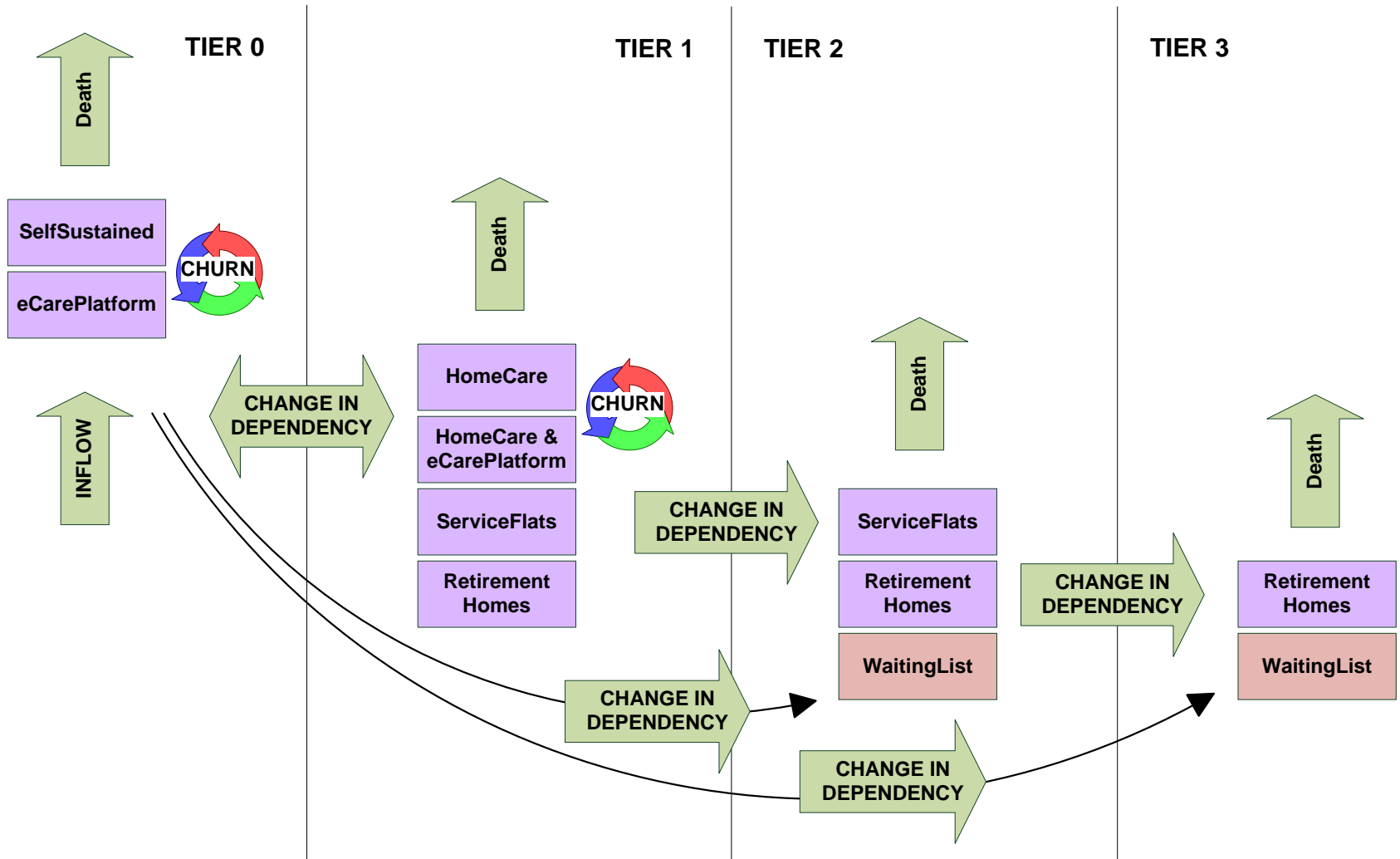
COST605 meeting, Athens
February 17th, 2010



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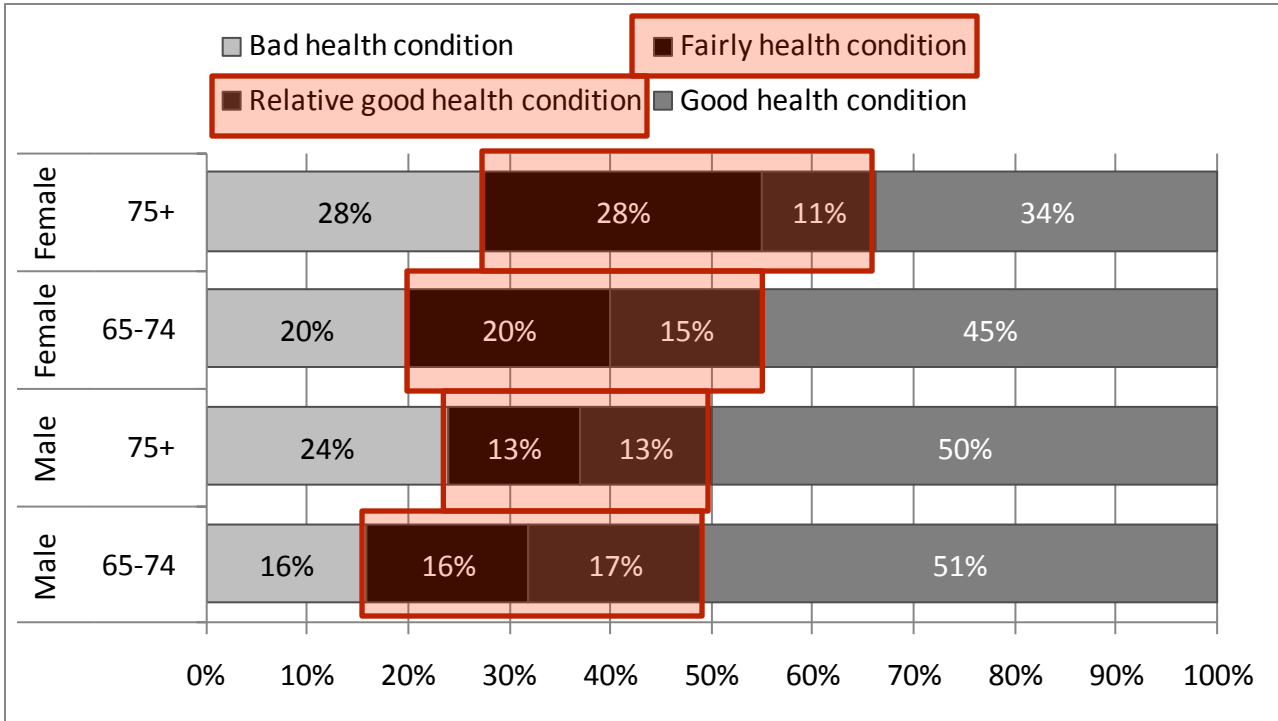
INTRODUCTION

Competing (e)Care model



■ Adoption model

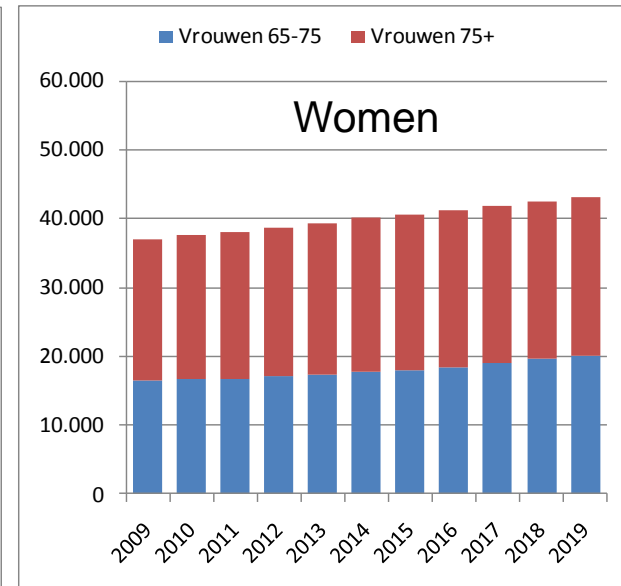
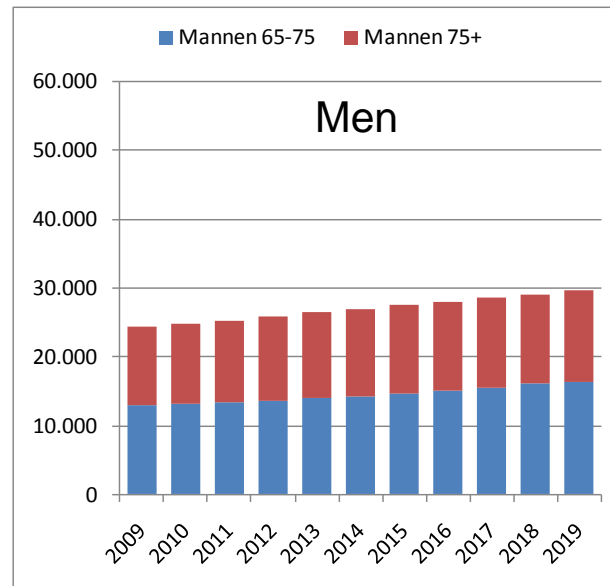
- Relevant market
 - Elderly people in fairly – relative good health condition



Adoption model

Relevant market

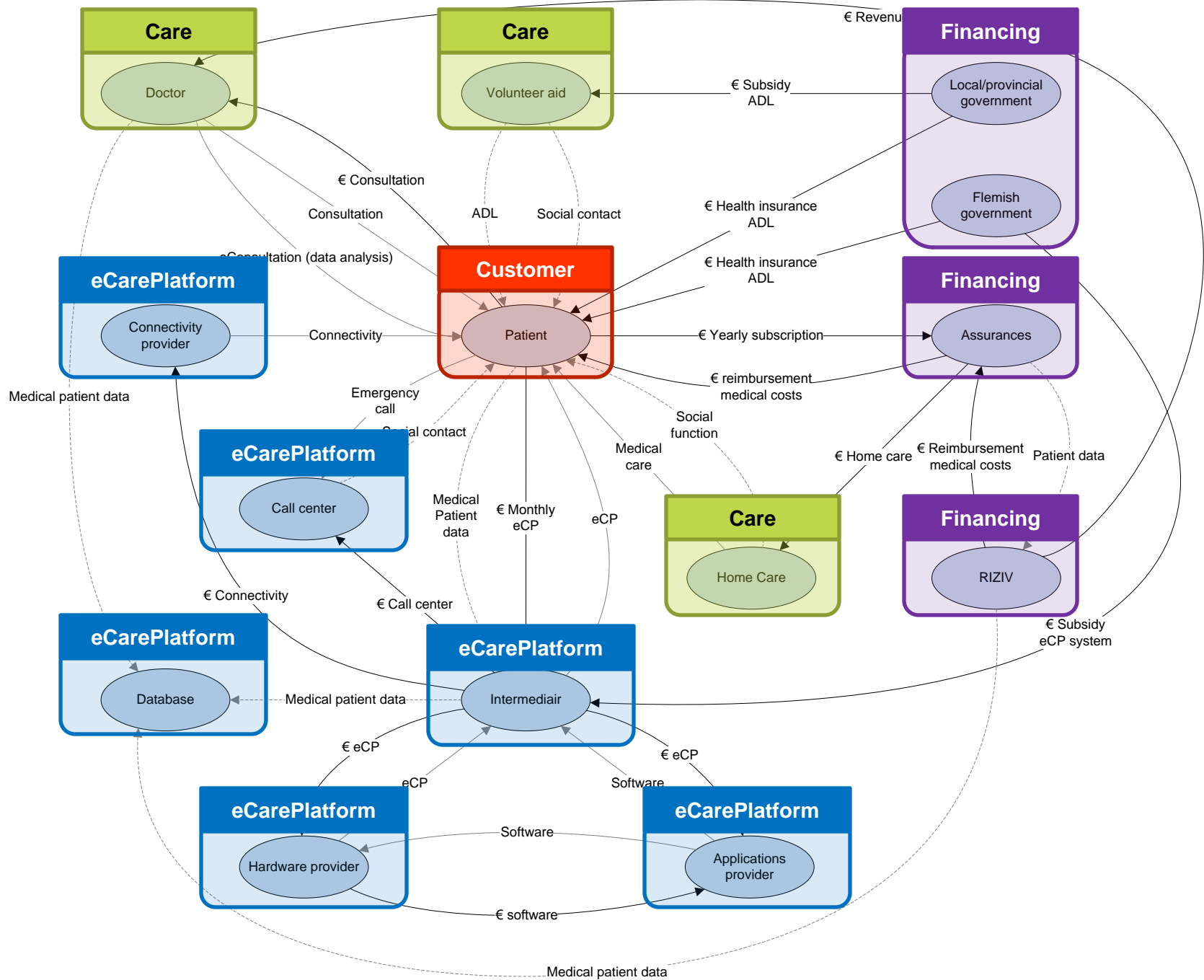
- Elderly people in fairly – relative good health condition
- Living alone or with invalid partner
- Having physical conditions such as high blood pressure, hart problems, dizziness and/or diabetes





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BUSINESS MODEL



■ Actor expectations

Profit

- Hardware provider
- Call center
- Telecom operator
- Data center

Break-even

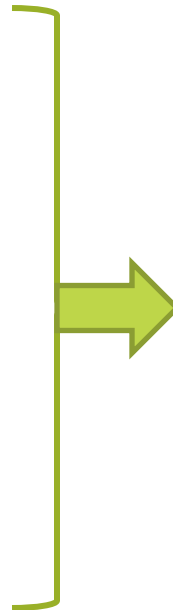
- Non-profit insurance companies

Loss

- Government (subsidies)
- Patient

Social profit

- General practitioner
- Home care
- Voluntary aid
- Government
- Non-profit organizations
- Waiting lists for retirement homes





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TECHNO-ECONOMIC MODEL

eCarePlatform

Box

- CapEx
 - eCarePlatform box
 - Upfront costs
- OpEx
 - Maintenance / repair
 - Call center
 - Data storage
 - Connectivity

Call center

- CapEx
 - Upfront costs
- OpEx
 - Personnel

eCarePlatform

Data center

- CapEx
 - Upfront costs
- OpEx
 - One-off fee
 - Licence fee

Network

- CapEx
 - Installation fee
- OpEx
 - Network connection



Care

- General practitioners
 - Decrease in consultations (in practice, patient's home)
 - eConsultations

- Home care
 - Decrease in visits
 - Decrease in time per visit

- Retirement homes
 - Decrease in waiting lists

■ Finance

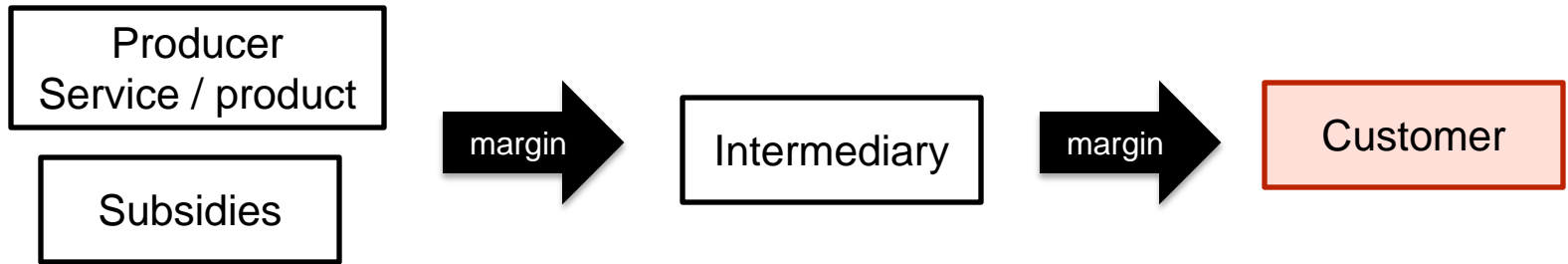
- Government: subsidies
 - Subsidies box
 - Health insurance repayment schemes

- (Non-profit) health insurance
 - Change in functionality and operations

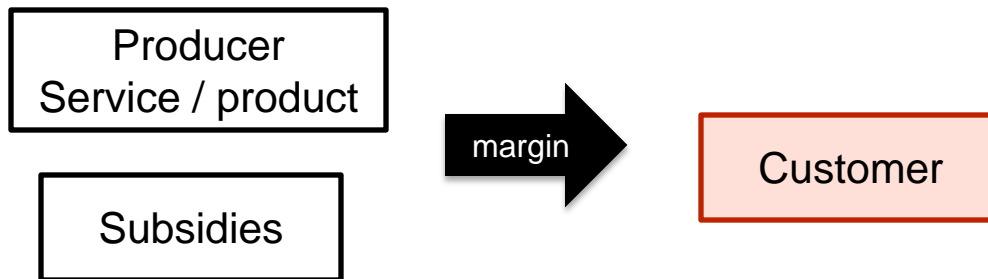
- Patients
 - Willingness to pay

Scenarios

■ Intermediary model



■ Direct model



Scenarios

		HW prov.	Conn. Prov.	Insurance	Government
eCare Platform					
CapEx					
Ontwikkelingskosten eCP	HP	HP	HP	HP	HP
Productiekost eCP	HP	HP	HP	HP	HP
Ontwikkelingskosten eCP software	AP	AP	CP	AP	AP
Licentiekosten	AP	AP	CP	AP	AP
OpEx					
OA&M eCP	HP	HP	HP	HP	HP
OA&M eCP software	AP	AP	CP	AP	AP
CRM	HP	HP	CP	PA	G
Call center					
Call center	CC	CC	CP	CC	G
Database					
Opstartkost	G	G	G	G	G
Licentiekosten	G	G	G	G	G
Jaarlijkse kosten	G	G	G	G	G
Connectiviteit					
Connectiviteit	CP	CP	CP	CP	CP
Subsidies					
Subsidie box overheid	G			G	G

Scenarios

		Intermediary	Direct
eCare Platform			
CapEx			
Ontwikkelingskosten eCP	HP	HP	HP
Productiekost eCP	PA	PA	C
Ontwikkelingskosten eCP software	AP	AP	AP
Licentiekosten	PA	PA	C
OpEx			
OA&M eCP	PA	PA	C
OA&M eCP software	PA	PA	C
CRM	PA	PA	C
Call center			
Call center	PA	PA	C
Database			
Opstartkost	G	G	G
Licentiekosten	PA	PA	C
Jaarlijkse kosten	PA	PA	C
Connectiviteit			
Connectiviteit	C	C	C
Subsidies			
Subsidie box overheid	PA	PA	C

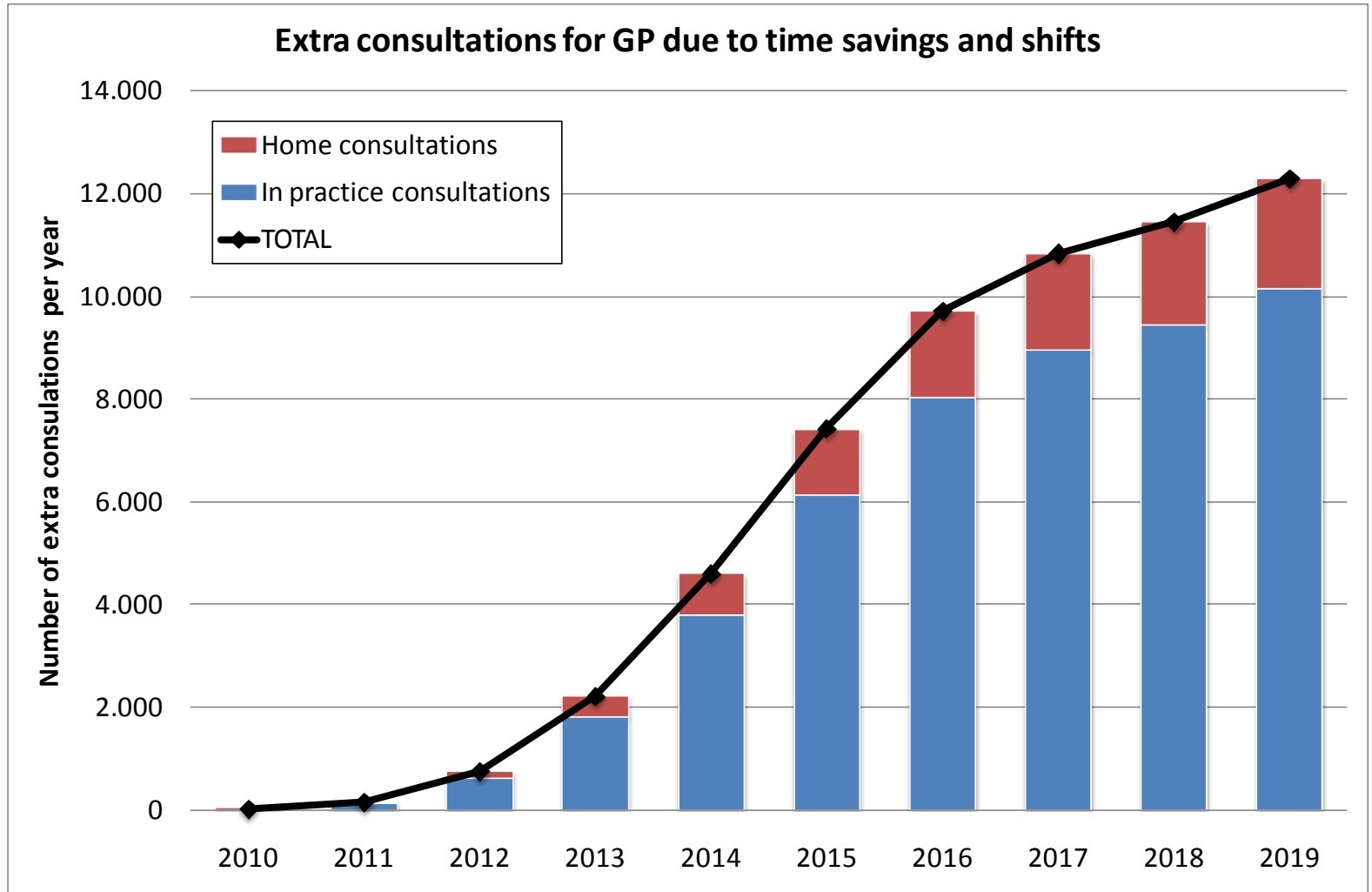
HP	Hardware provider
AP	Application provider
CC	Call center
PA	Private assurance
G	Government
GA	RIZIV
CP	Connectivity provider
DP	Database provider
C	Customer



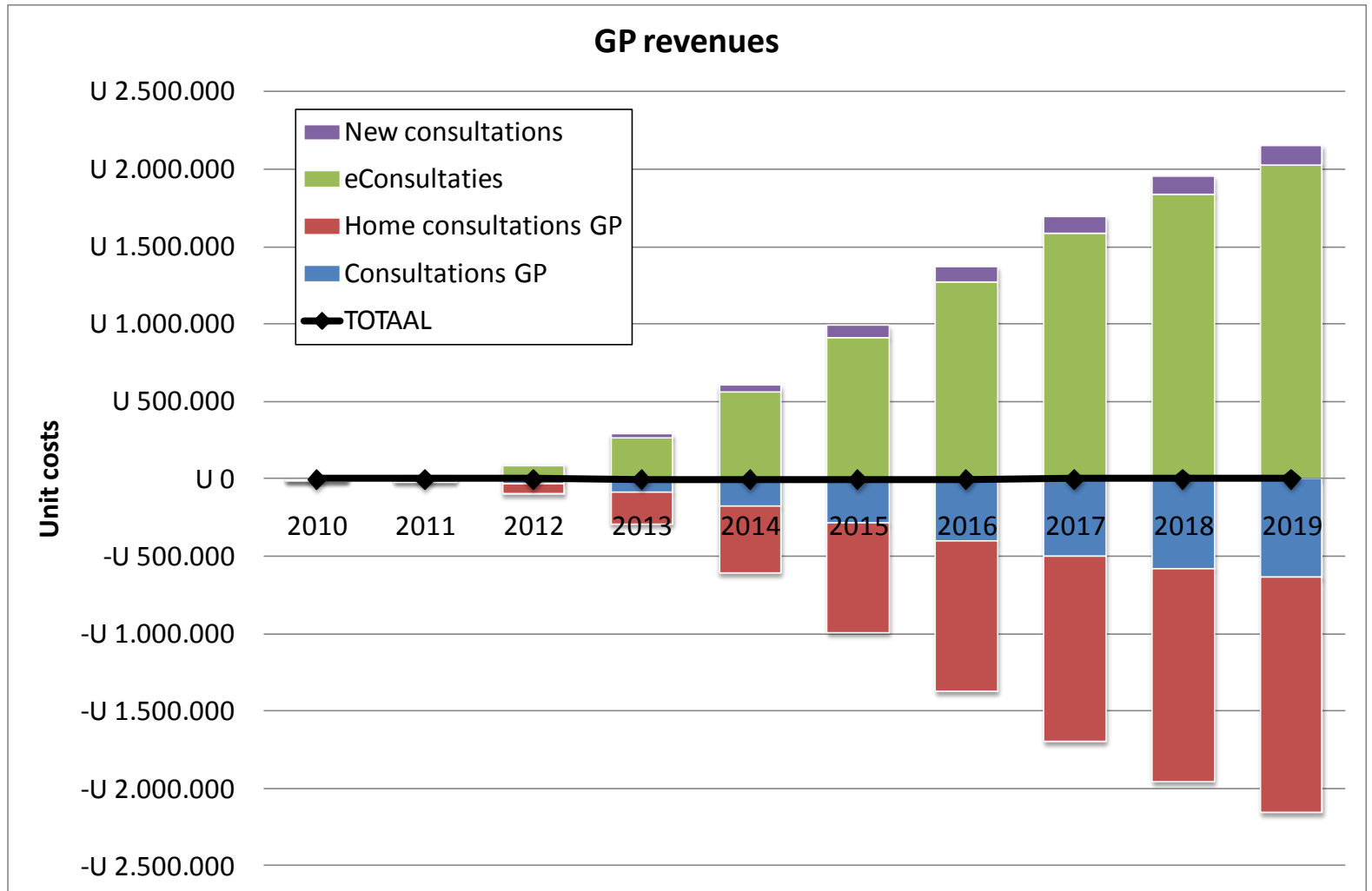
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RESULTS

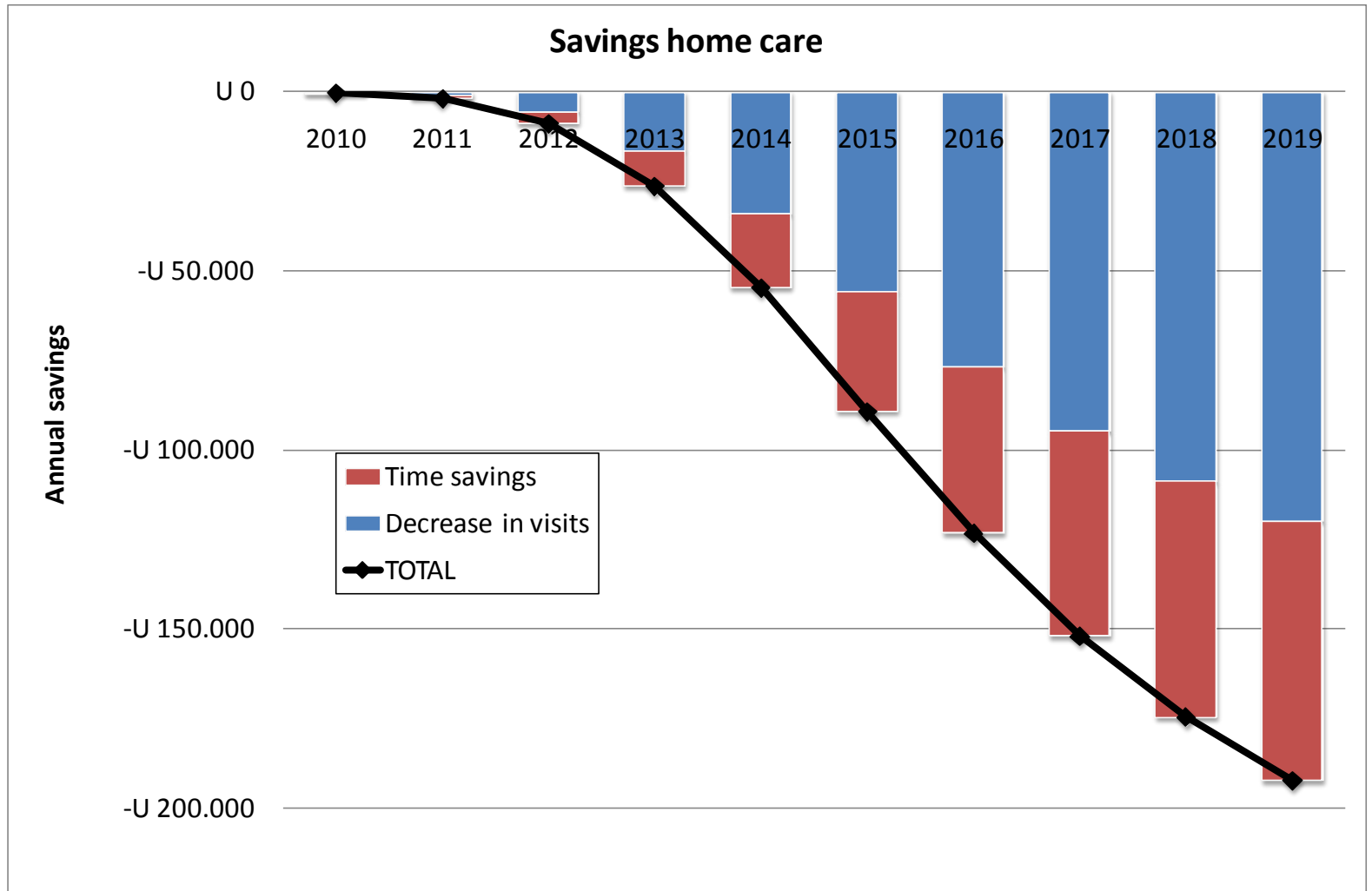
General practitioners



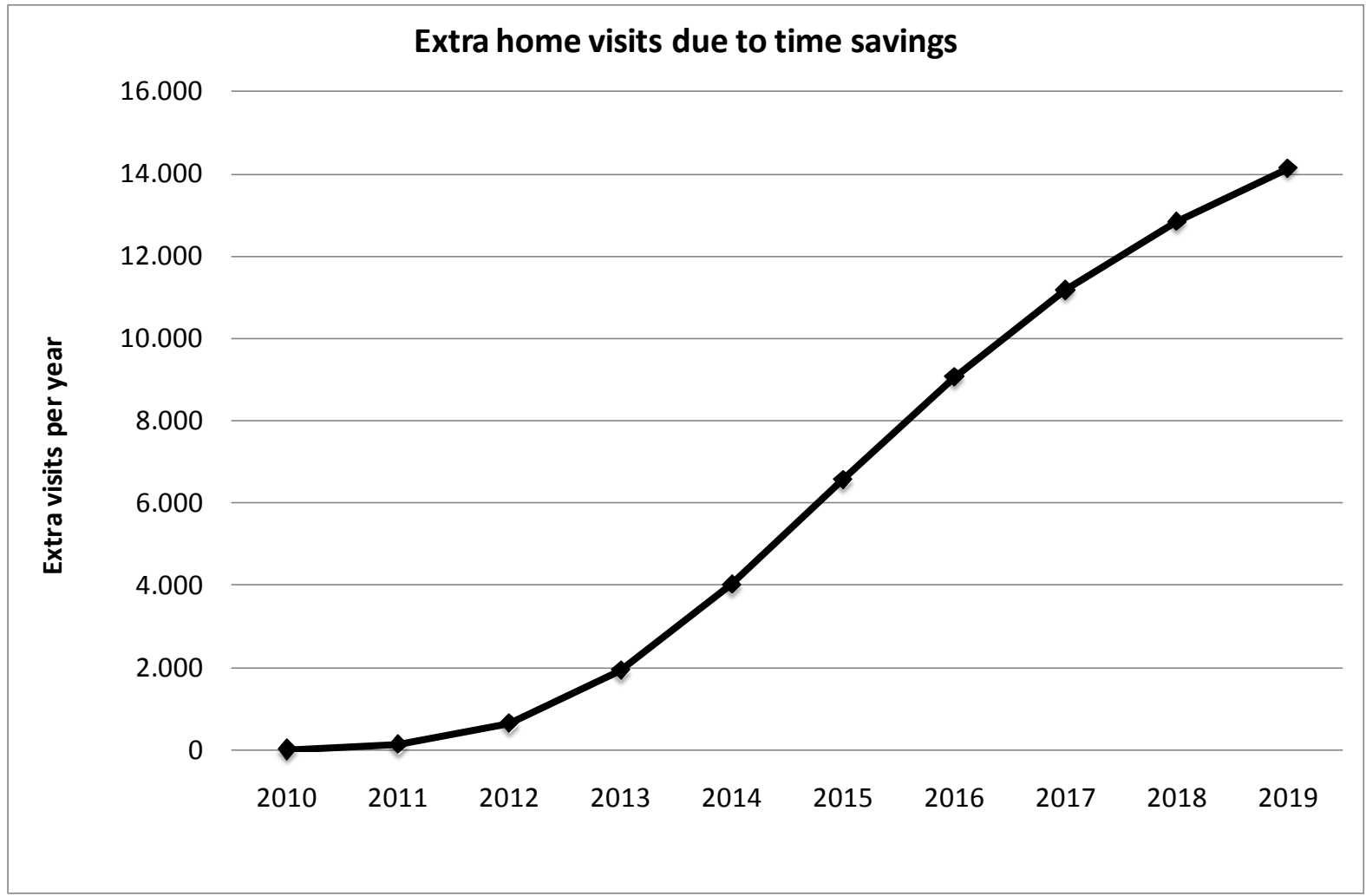
General practitioners



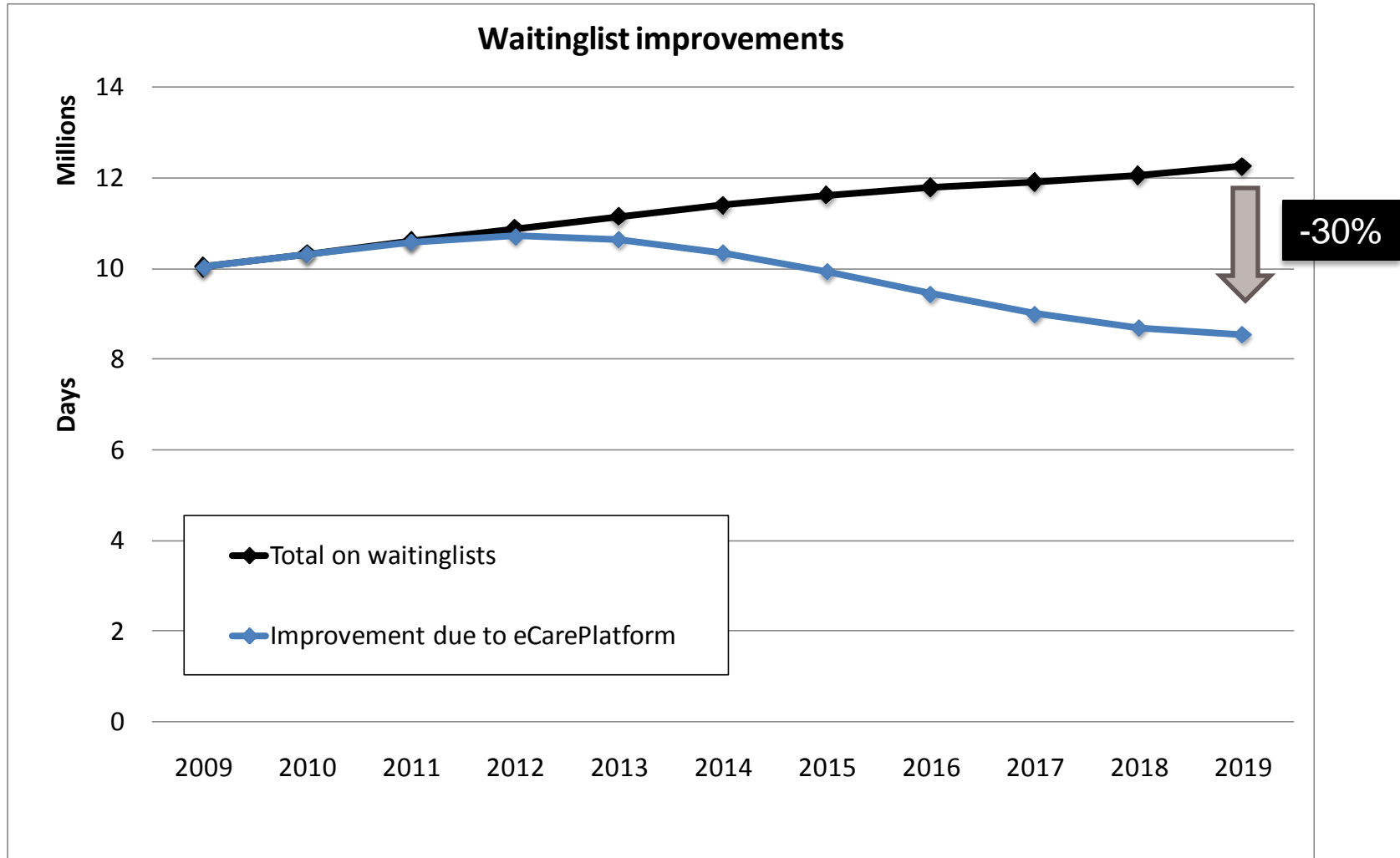
Home care



Home care

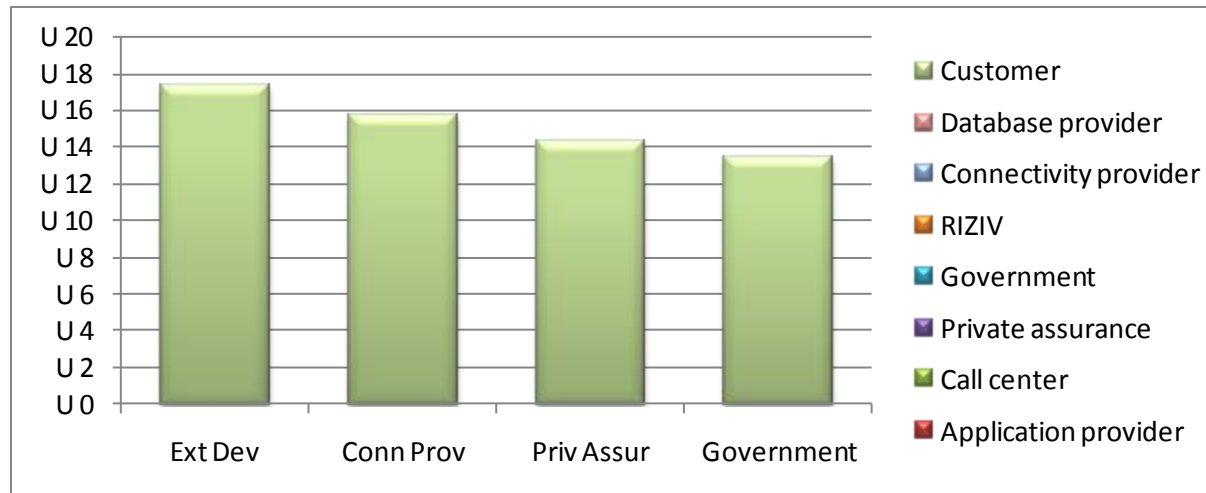
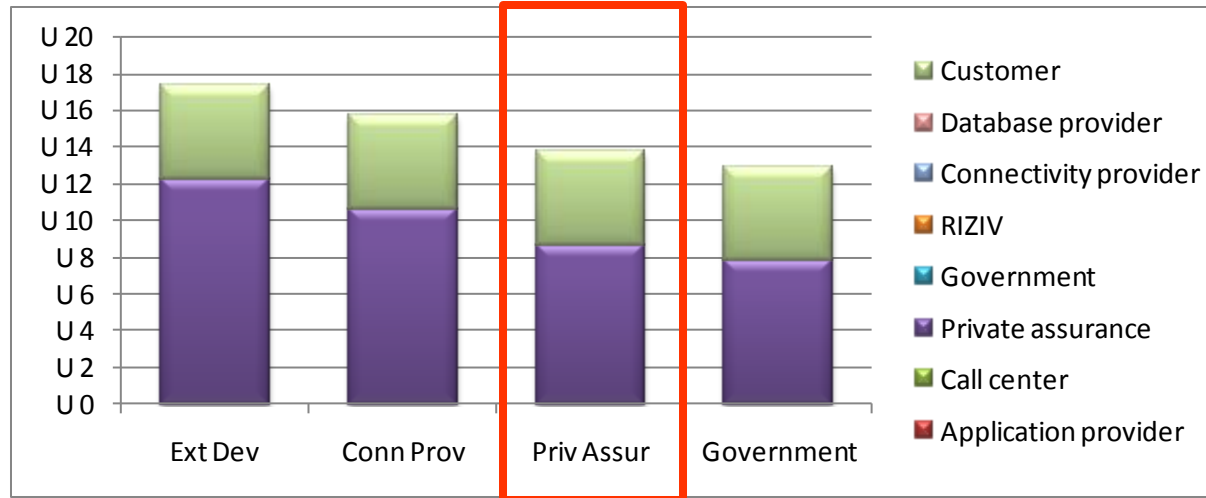


Waiting lists



Scenario comparison

Monthly cost for the patient



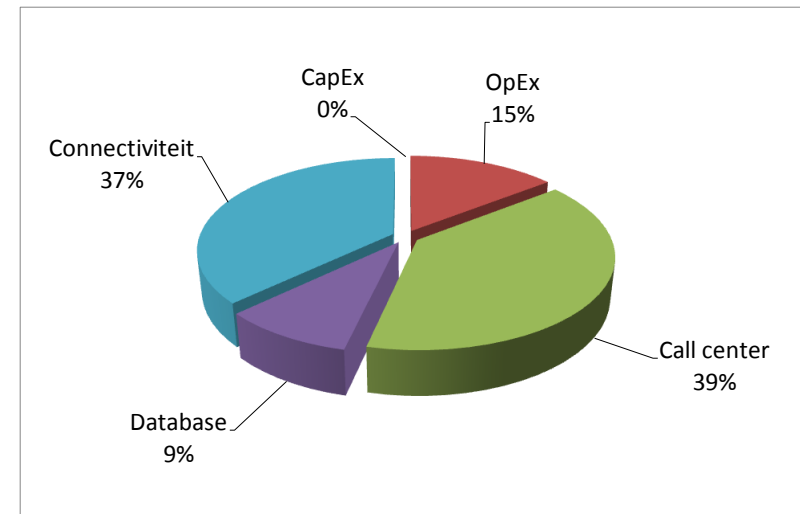
Cost overview per patient

GE cost changes (yearly)

In practice consultations	+ U 7
Home consultations	+ U 14
eConsultations	- U 21

Monthly subscription

	Unit
eCare Platform	
CapEx	U 0,0
OpEx	U 2,0
Call center	U 5,4
Database	U 1,3
Connectiviteit	U 5,1
Subsidies	U 0,0





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CONCLUSIONS FUTURE WORK

Conclusies

Actor	+	-
Patient	Better care service Social contacts	Cost per month
GE	eConsultations Time savings → new patients Better track record of patients → Break even	Threshold for more IT applications
Home care	Time savings → new patients Better track record of patients	

Conclusies

Actor	+	-
Hardware provider	Sales of eCarePlatform → Profit	
Private / non profit insurances	Distribution eCarePlatform → new customers → Break even	Improvement of distribution system
Call center	→ Profit	
Telecom op.	→ Profit	
Government	Data center → Break even	Subsidizing eCarePlatform boxes and/or other services

■ Future work

- Extension of the model
 - Verification of parameter values
 - Calculation of new business models
- Introduction of QALY
 - Standardized evaluation method in health sector
 - Problem: Difficult to estimate

9th Conference of Telecommunication, Media and Internet Techno-Economics

Call for papers:

Techno-economic areas

- Customer Behavior
- Telecom Market Analysis
- Cost Optimization
- Investment Analysis
- Multi-actor Analysis
- Techno-economic Tooling and Concepts

Application areas

- Mobile and wireless networks
- Optical network technologies
- Distributed architectures
- New media and content applications
- Green ICT
- ...

**Ghent, Belgium
June 7-9, 2010**



[http://www.ctte-conference.org/
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**Thank you for
your attention**

Questions ?



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