

PriTecTool. DEVELOPMENT OF A PRIORITISATION SOFTWARE FOR CONTINUOUS ASSESSMENT OF HEALTH TECHNOLOGIES

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INTRODUCTION:

Many organizations have promoted the idea that HTA should establish efficient mechanisms to continuously assess healthcare technologies after coverage.

AIMS:

- ✓ To describe the prioritisation tools developed by avalia-t to select health technologies susceptible to post-introduction observation and identify potentially obsolete technologies.
- ✓ illustrate how the post-introduction observation application works

Prioritisation tool
PriTec
www.pripectools.com
www.pripectools.es
Spanish | English

avalia-t
Axencia de Avaliación de Tecnoloxías Sanitarias de Galicia

Technology observation ●
Obsolete technologies ●

About PriTec
The PriTec prioritisation tool has been developed by the Galician Health Technology Assessment Agency (avalia-t). PriTec is an automatically executable web application that has been developed to facilitate the prioritisation of technologies susceptible to post-introduction observation and the prioritisation of potentially obsolete health technologies. It can compare up to 50 technologies simultaneously and generate a report that includes the main results in the format of tables or charts. The methodology applied has been developed in two projects that have been carried out within the collaboration framework established by the National Health System Quality Plan according to the collaboration agreement signed between the Institute of Health Carlos III, an autonomous organism part of the Spanish Ministry of Health and Consumer Affairs and the Galician Health Administration School Foundation (FEGAS)

Prioritisation tool
Observation
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Technology name: list of technologies | Load Technologies

Technology / Indication: AAA | Keyword: A1

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score	Weighted score (base 100)
Frequency of use	When it is known or anticipated that the technology is going to be applied to a large number of patients	○	○	○	○	○	○	○	○	○	2	0.8	1.6
Burden of disease	The condition or indication for which the technology is used carries a high mortality, morbidity, disability or greatly impairs quality of life	○	○	○	○	○	○	○	○	○	3	0.8	2.4
Population/user impact	The technology can produce significant improvements in the health / welfare of the individuals or the population to which it applies (e.g. mass screening)	○	○	○	○	○	○	○	○	○	4	0.8	3.2
Vulnerable populations	The technology has been designed to be used fundamentally in highly sensitive groups (pregnant women, chronic patients)	○	○	○	○	○	○	○	○	○	4	0.8	3.2
Score: 13											12.64	28.13	

Technology

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score	Weighted score (base 100)
Innovative Technology	When the design, materials or operating are completely new and very different to other existing technologies and/or there are no prior alternative technologies for this clinical condition.	○	○	○	○	○	○	○	○	○	4	0.8	3.2
Invasive Technology	Technology that requires aggressive surgery or medical procedures for its application. Also implantable devices or systems designed to be partly or wholly introduced into the human body, with the intention to remain there after the procedure.	○	○	○	○	○	○	○	○	○	4	0.8	3.2
Different expectations of Use	Health technology can be susceptible to different applications in clinical practice and to be used in clinical indications other than those approved.	○	○	○	○	○	○	○	○	○	3	0.8	2.4
Score: 11											8.15	33.33	

Safety / adverse effects

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score	Weighted score (base 100)
Safety	There is evidence in the literature of adverse effects or/and they are expected due to the existence of adverse effects with similar technologies or procedures.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Potential adverse effects not detected	The available evidence is considered insufficient to have information about rare side effects. The studies include a small number of patients in total or for specific subgroups and / or the follow-up period of study is short to properly assess the occurrence of adverse effects in the medium to long term.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Risks	There is a possibility that health care workers suffer harm resulting from the use of the technology (eg radiation) or the technology poses an environment hazard.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Score: 15											13.89	50.00	

Costs and other

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score	Weighted score (base 100)
Learning requirements	Technologies that require an intensive period of training and whose outcomes are heavily dependent on the acquired knowledge and personal skills (learning curve).	○	○	○	○	○	○	○	○	○	4	0.8	3.2
Economic impact	Required investment in infrastructure, equipment and / or cost of consumables, maintenance or human resources.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Organizational or structural impact	Technologies that require a multidisciplinary approach, the creation of specific units.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Other implications	It is anticipated that the technology has an important impact on ethical, social, cultural and/or legal aspects.	○	○	○	○	○	○	○	○	○	5	0.8	4.0
Score: 14											7.78	31.25	

Score total: 61
Total score weighted: 50
Total score weighted base 100: 44

Clean | Load

Prioritisation tool
Observation
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Home | About PriTec | User guide | Calculation scores | Technology name | list of technologies

Technology name: list of technologies | Load Technologies

Name Technology	Select	Edit	View Results
AAA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BBB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CCC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mark All | None

Compare | Delete | Save

Comparison of up to 50 technologies

AUTOMATIC PDF REPORT

PriTec v 1.0 | #Priorization Report (comment)

PRIORITIZATION REPORT

Below are the results obtained using the prioritization tool for prioritization PriTec: see technologies.

The scores correspond to the following technologies:

1-AAA(A1)
2-BBB(B1)
3-CCC(C1)

In Figure 1 represents the total scores weighted base 100 for the selected technologies. These scores are the result of adding the total weighted scores of the 4 domains and then those into a wide base of 100.

Technology	Score
A1	33
B1	50
C1	97

Figure 1. Total weighted score for the different technologies

PriTec v 1.0 | #Priorization Report (comment)

In Figure 2 shows the cumulative score of the weighted total scores of 4 domains. This graph displays the relative importance of each domain in the total score.

Technology	Population/users	Technology	Safety / adverse effects	Costs and other	Overall
AAA	4	5.8	4	4.17	4.57
BBB	21	20.42	11.83	24.17	54.17
CCC	27	20.00	21.00	29.00	96.58

Figure 2. Cummulative score for the different technologies

CONCLUSIONS: The application provides quantitative results, very visual and easy to interpret, allowing for the objective comparison of different technologies

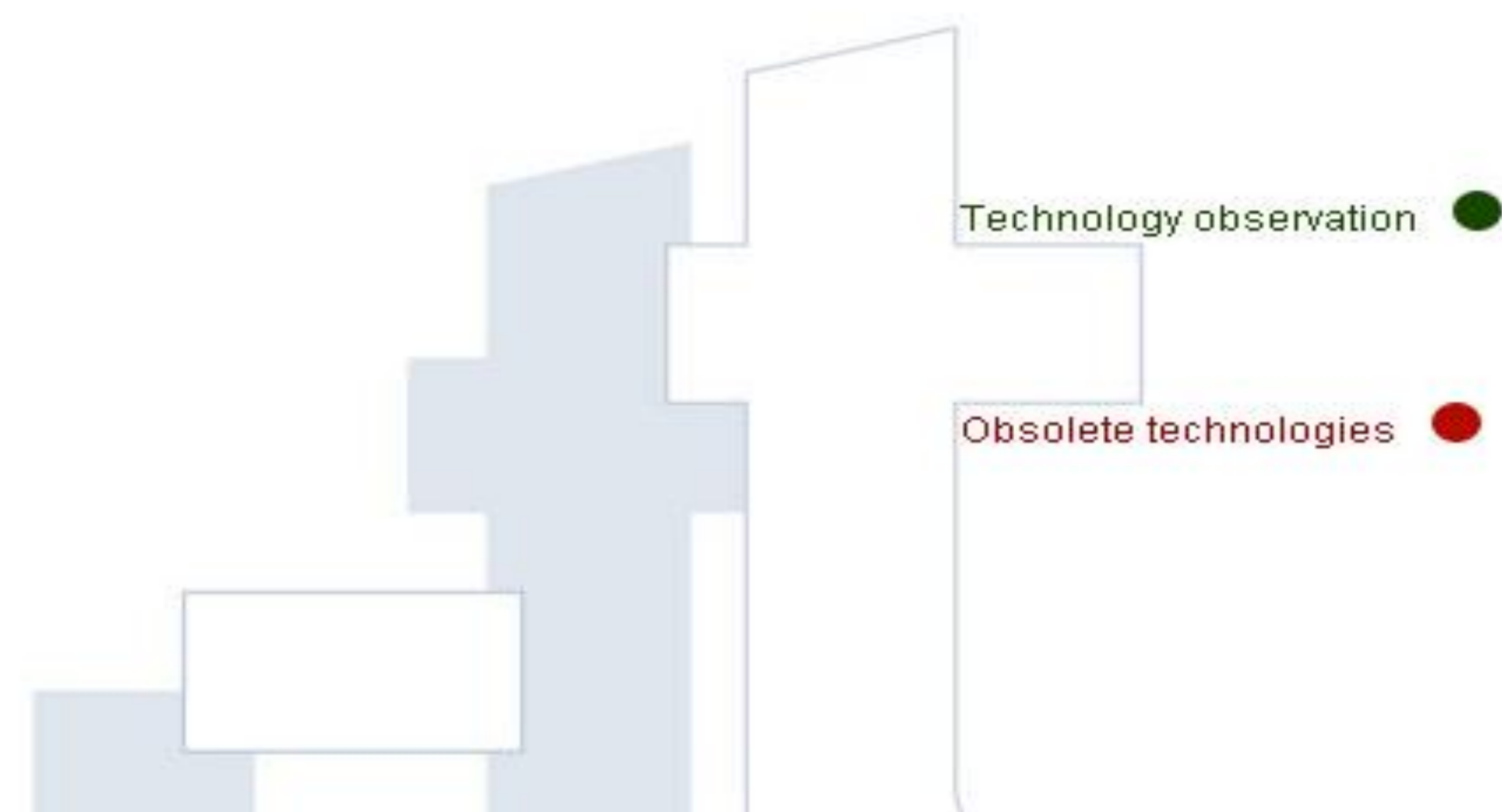
PriTecTool. DEVELOPMENT OF A PRIORITISATION SOFTWARE FOR CONTINUOUS ASSESSMENT OF HEALTH TECHNOLOGIES

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INTRODUCTION: The Galician HTA Agency has developed two prioritisation tools:

AIMS: To describe the prioritisation tool for prioritisation of technologies susceptible to post-introduction observation and illustrate how it works



About PriTec

The PriTec prioritisation tool has been developed by the Galician Health Technology Assessment Agency (avalia-t). PriTec is an automatically executable web application that has been developed to facilitate the prioritisation of technologies susceptible to post-introduction observation and the prioritisation of potentially obsolete health technologies. It can compare up to 50 technologies simultaneously and generate a report that includes the main results in the format of tables or charts. The methodology applied has been developed in two projects that have been carried out within the collaboration framework established by the National Health System Quality Plan according to the collaboration agreement signed between the Institute of Health Carlos III, an autonomous organism part of the Spanish Ministry of Health and Consumer Affairs and the Galician Health Administration School Foundation (FEGAS)

Observation

Technology name: AAA | Keyword: A1

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score				
Frequency of use	When it is known or anticipated that the technology is going to be applied to a large number of patients	0	0	0	0	0	0	0	0	0	2	0.64				
Burden of disease	The condition or indication for which the technology is used carries a high mortality, morbidity, disability or greatly impairs quality of life	0	0	0	0	0	0	0	0	0	3	0.96				
Population/user impact	The technology can produce significant improvements in the health / welfare of the individuals or the population to which it applies (e.g. mass screening)	0	0	0	0	0	0	0	0	0	4	1.28				
Vulnerable populations	The technology has been designed to be used fundamentally in highly sensitive groups (pregnant women, chronic patients)	0	0	0	0	0	0	0	0	0	4	1.28				
											Score	13	Weighted score	12.64	Weighted score (base 100)	28.13

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score				
Innovative Technology	When the design, materials or operating are completely new and very different to other existing technologies and/or there are no prior alternative technologies for this clinical condition.	0	0	0	0	0	0	0	0	0	4	0.64				
Invasive Technology	Technology that requires aggressive surgery or medical procedures for its application. Also implantable devices or systems designed to be partly or wholly introduced into the human body, with the intention to remain there after the procedure.	0	0	0	0	0	0	0	0	0	4	0.64				
Different expectations of Use	Health technology can be susceptible to different applications in clinical practice and to be used in clinical indications other than those approved.	0	0	0	0	0	0	0	0	0	3	0.48				
											Score	11	Weighted score	8.15	Weighted score (base 100)	33.33

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score				
Safety	there is evidence in the literature of adverse effects or/and they are expected due to the existence of adverse effects with similar technologies or procedures.	0	0	0	0	0	0	0	0	0	5	0.75				
Potential adverse effects not detected	The available evidence is considered insufficient to have information about rare side effects. The studies include a small number of patients in total or for specific subgroups and / or the follow-up period of study is short to properly assess the occurrence of adverse effects in the medium to long term.	0	0	0	0	0	0	0	0	0	5	0.75				
Risks	There is a possibility that health care workers suffer harm resulting from the use of the technology (eg radiation) or the technology poses an environment hazard.	0	0	0	0	0	0	0	0	0	5	0.75				
											Score	15	Weighted score	13.89	Weighted score (base 100)	50.00

Criteria	Explanation	1	2	3	4	5	6	7	8	9	Score	Weighted score				
learning requirements	technologies that require an intensive period of training and whose outcomes are heavily dependent on the acquired knowledge and personal skills (learning curve)	0	0	0	0	0	0	0	0	0	4	0.64				
Economic impact	Required investment in infrastructure, equipment and / or cost of consumables, maintenance or human resources.	0	0	0	0	0	0	0	0	0	5	0.75				
Organizational or structural impact	technologies that require a multidisciplinary approach, the creation of specific units.	0	0	0	0	0	0	0	0	0	5	0.75				
Other implications	It is anticipated that the technology has an important impact on ethical, social, cultural and/or legal aspects.	0	0	0	0	0	0	0	0	0	5	0.75				
											Score	14	Weighted score	7.78	Weighted score (base 100)	31.25

Summary:
 Score total: 61
 Total score weighted: 50
 Total score weighted base 100: 44

Observation

Technology name: list of technologies | Load Technologies

Name Technology	Select	Edit	View Results
AAA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BBB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CCC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mark All | None | Compare | Delete | Save

Comparison of up to 50 technologies

AUTOMATIC PDF REPORT

REPORT PRIORITIZATION OF NEW TECHNOLOGIES

Below are the results obtained using the prioritization tool for prioritization PriTec new technologies. The scores correspond to the following technologies:

- 1-AAA(A1)
- 2-BBB(B1)
- 3-CCC(C1)

In Figure 1 represents the total scores weighted base 100 for the selected technologies. These scores are the result of adding the total weighted scores of the 4 domains and then them into a wide base of 100.

Technology	Score
A1	33
B1	50
C1	97

In Figure 2 shows the cumulative score of the weighted total scores of 4 domains. This graph displays the relative importance of each domain in the total score.

Figure 2. Cumulative score for the different technologies

Technologies	Population/users	Technology	Safety / adverse effects	Costs and other	Overall
AAA	4	5.83	4.17	20.83	35.83
BBB	21	20.42	53.13	43.75	98.33
CCC	27	20.00	100.00	90.63	137.63

CONCLUSIONS: The application provides quantitative results, very visual and easy to interpret, allowing for the objective comparison of different technologies