



Evaluating Tarmed, the Swiss tariff for ambulatory medical services

Methodological approach



Overview

1. Context of the evaluation
2. Understanding...
 - the structure of a medical tariff
 - the way the tariff is applied
3. Choosing...
 - the best methods
 - the case studies
4. Project management
5. Results and recommendations
6. Conclusion



1. Context of the evaluation

- Health spending in Switzerland is 12.4 % of GDP second behind US (17.2%) – average OECD (~9 %)
- Competence to steer the health system quite divided (Confederation, cantons, physician, insurers)
- Tarmed : Medical tariff for ambulatory medical services ≠ DRG for stationary services (overnight stay in hospital)
- National tariff replaced 24 regional tariffs in 2004: a long lasting project which began in 1990
- Tarmed: a very detailed tariff (2000 pages, 4600 items) fee-for-service and no flat rates
- Medical services invoiced on the basis of Tarmed amount to €10 billion so far



Main questions

1. Are the goals for Tarmed achieved?
2. Do the tariffs cover the effective costs?
3. Are necessary adjustments made timely?
4. Should federal authorities be more active in the maintenance of the tariff?

2. Understanding a tariff

First, picture a physician's bill...

Dokument		101 7333.0 24.02.2004 14:11:00.00						Seite		1							
Rechnungsteller	EAN-Nr.	7601000133333		Arztkategorie		Adresse		Fac: 01 - 9999999		E-mail:							
	ZSR-Nr.	L555555		Tel: 01 - 999 99 99		4005 Basel											
Leistungserbringer	EAN-Nr.	7601000133333		Dr. med. Hans Muster		Fac: 061 - 111 11 11		E-mail:									
	ZSR-Nr./NF-Nr.	L555555		Tel: 061 - 111 11 11													
Patient	Name	Beispiel						EAN-Nr.									
	Vorname	Peter															
	Strasse	Mustergasse 1															
	PLZ	4099															
	Ort	Basel															
	Geburtsdatum	10.10.1942															
	Geschlecht	M															
	Unfalldatum																
	Unfall-/Verfügungsnr.																
	Art-Nr.																
	Menschen-Nr.	100.100.000.															
	Betriebs-Nr./Name																
	Kanton	BS															
	Rechnungskopf	Nein															
	Vergütungsart	TG															
Gesetz	KVG																
Behandlungsgrund	Krankheit																
Behandlung	22.01.2004						3		Rechnungs-Nr. 7333								
Erbringungsart	Praxis								Rechnungs-/Meldedatum 24.02.2004								
Auftraggeber	EAN-Nr./ZSR-Nr.	8															
Diagnose	N9 7																
EAN-Liste	7601000133333																
Bemerkung	HMO ÖKK																
Datum	Tarif	Tariffaktor	Bezugsfaktor	SI	SE	Anzahl	TP AL / Pack	HAL	TPW AL	TP TL	ITL	TPW TL A	V	P	M	Betrag	
22.01.2004	001	00.0010		1		1	9.57	0.93	8.19	0.93	1	1	0	3		16.52	
							+ Konsultation, erste 5 Min. (Grundkonsultation)										
22.01.2004	001	00.0020	00.0010	1		1	9.57	0.93	8.19	0.93	1	1	0	3		16.52	
							+ Konsultation, letzte 5 Min. (Konsultationsschluss)										
22.01.2004	001	00.0030	00.0010	1		1	4.78	0.93	4.10	0.93	1	1	0	3		8.26	

Structure of the tariff

Second, consider the tariff catalogue...

«Consultation»
 – a central item

00.0010	Konsultation, erste 5 Min. (Grundkonsultation)	00.0010
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quant. Dignität	qual. Dignität		Sparte		Anästhesie-Risikoklasse
AL (inkl. Assistenz) 9,57 TP	Alle Assistenz	Dotation Assistenz	Sprechzimmer Leistung i.e. Sinne 5 min.	Vor- und Nachbearbeitung	Bericht Leistungsbezogene ärztliche Zusatzzeit
TL 8,19 TP	Raumbelegung 5 min.				Wechsel
Beschlecht	Leistungstyp Hauptleistung	Behandlungsart	Zuschlag- / Reduktionsfaktor AL 1.00		Zuschlag- / Reduktionsfaktor TL 1.00

AL
 Physician's services

TL
 Technical services

Interpretation
 Beinhaltet alle ärztlichen Leistungen, die der Facharzt in seiner Praxis oder der Arzt bei ambulanten Patienten im Spital ohne oder mit einfachen Hilfsmitteln (etwa Inhalt 'Besuchskoffer') am Patienten hinsichtlich der Beschwerden und Erscheinungen erbringt, derentwegen dieser zum Facharzt kommt, bzw. gebracht wird und hinsichtlich der Beschwerden und Erscheinungen, die während der gleichen Behandlungsdauer auftreten.

Beinhaltet Begrüssung, Verabschiedung, nicht besonders tarifierte Besprechungen und Untersuchungen, nicht besonders tarifierte Verrichtungen (z.B.: bestimmte Injektionen, Verbände usw.), Begleitung zu und Übergabe (inkl. Anordnungen) an Hilfspersonal betreffend Administration, technische und kurative Leistungen, Medikamentenabgabe (in Notfallsituation u/o als Starterabgabe), auf Konsultation bezogene unmittelbar vorgängige/anschliessende Akteneinsicht/Akteneinträge.

Regeln
 Alter: -
 Menge: max. 1 mal pro Sitzung -
 Seite: -
 Gesetz: -
 Nicht kumulierbar mit: [\(00.0060\)](#), [\(00.0110\)](#), [\(02.0010\)](#), [\(02.0020\)](#), [\(02.0030\)](#), [\(02.0040\)](#), [\(02.0050\)](#), [\(08.0500\)](#), [\[LG-12\]](#).

Mögliche Zuschlagsleistungen: [\(00.0020\)](#), [\(00.0030\)](#), [\(00.0040\)](#).

Leistungsgruppen: [\[LG-18\]](#), [\[LG-58\]](#).

References of the tariff

Third, consider the tariff structure:

Is it logical? Are the values of the references up-to-date?

AL: Physician's services

- Reference earnings
- Annual working hours
- Dignity (years of study)
- Productivity
- Assistance

TL: Technical services

- Local
- Use rate
- Interest rate
- Amortization
- Material, drugs
- Maintenance
- Interest on own capital
- Payroll
- Other fixed or variable costs

Cost per minute x time x value of tariff point = price of services

Testing the references...

Understanding the importance of each single reference
 With Excel...

1	Betriebsstelle:										INFRA - Berechnungsmodell										ZBKIREF	175.30	ZINSSATZ	5.00%
2	Sparte																				ZBKIVIB	164.50	SOZ SATZ	15.80%
3																					ZBKIRI	130.10	SUK SATZ Sparte	70.00%
4																					ZBKINFRA	155.70	SUK SATZ Norm	70.00%
5																					LKPIINFRA	104.00	Verteilzeit Norm	5.00%
6																					LKPTARIF	104.10		
7																					ANK BECH			
8																					NMF	50.00 m²	Abschreibung	
9																					URFAKT	1.63		
10																					BGF	81.50 m²		
11																					BKP 2	4024 Fr./m²		
12																					± BKP 1	Fr. 6'559.12	Fr.	131.18
13																					± BKP 2 R	Fr. 9'827.68	Fr.	1'836.55
14																					± BKP 2 HT	Fr. 236'128.32	Fr.	11'806.42
15																					± BKP 3	Fr. 16'397.80	Fr.	819.89
16																					± BKP 4-5	Fr. 26'236.48	Fr.	524.73
17																					± BKP 7-8	Fr. 110'000.00	Fr.	13'500.00
18																					± BKP 9	Fr. 6'559.12	Fr.	655.91
19																					INV Tot 91	Fr. 493'708.52	Fr.	29'274.68
20																					ANLAGEN, GERÄTE UND APPARATE			
21																					Nr. Bezeichnung			
22																					Preis Anz. Betrag 4/97 Abschr.			
23																					4/97 Jahre			
24																					Abschr. pro Jahr			
25																					GRUND KO			
26																					INV Tot 91G			
27																					INV Tot 97			
28																					INV Tot 97 G			
29																					INV Tot 86			
30																					KAP D INV			
31																					AM INV			
32																					KAP GR INV			
33																					ANK TOT 4/97			
34																					ANK TARIF			
35																					ANKK			
36																					KAP BKP 7 + 8			
37																					16'250.00			
38																					16265.625			
39																					Fr. 0.13			
40																					EE BECH			
41																					BETR TAG T			
42																					REVI TAG			
43																					BEUB TAG			
44																					QS TAG			
45																					BETR TAG			
46																					T MIN			
47																					TV MIN			
48																					TN MIN (Q)			
49																					LEER MIN(UA)			
50																					IND MIN			
51																					BEZ MIN			
52																					540 135'000			
53																					20 5'000			
54																					20 5'000			
55																					0 -			
56																					500 125'000			
57																					0.925926			
58																					PERSONALDOTIERUNG 1.841			
59																					Kat. Raum- u. W.-Z. Tagesarbeits-Z. Tagesnachb.-Z. Indirekte Zeiten			
60																					Pers.(1) PE Pers.(2) PE Pers.(3) PE Pers.(4) PE			
61																					PROD_MINPA TOTAL PE PRERSKOTAR			
62																					86'242 1.058 Fr. 78'635.45 Fr. 83'215.42			
63																					86'242 0.783 Fr. 58'793.67 Fr. 46'016.71			
64																					86'242 0.000 Fr. 78'635.45 Fr. -			
65																					86'242 0.000 Fr. 78'635.45 Fr. -			
66																					PERSONAL KOSTENSATZ FR. Personal 1.03 Kapital 0.30 SUK 0.93 Verteilzeit 0.12			
67																					Total 2.386			
68																					Korr. 0.000			
69																					TARIFIERUNG TEST			
70																					LNR_kurz LName Sparte TL_Zel TL_Total			
71																					18.0 25 59.45			
72																					PERSKOBENZ SUK SUK TOTAL TOTAL VERTEILZEIT			
73																					Fr. 129'232.13 Fr. 1.03			
74																					5.00% Fr. 0.93			
75																					5.00% Fr. 2.27			
76																					5.00% Fr. 0.12			
77																					Korrekturfaktor 2.38590			

Use of the tariff

**Fourth, consider the use of the tariff:
 How do physicians invoice their services?**

**Bill for a consultation
 to determine myopia...**

A mix of ~10 positions
 (time, service and items)

Not all physicians charge
 the same way

**EMPIRISCHE ZUSAMMENSETZUNG DER SITZUNGEN MIT TRIGGERPOSITION REFRAKTIONS-
 BESTIMMUNGEN 08.0040 IN OPHTHALMOLOGISCHEN PRAXEN KANTON BERN**

Position	Bezeichnung	Empirisch CHF	TARMED CHF	Gewicht
00.0010	Konsultation, erste 5 Min.	15.09	15.27	0.99
00.0020	+ Konsultation, weitere 5 Min.	1.83	15.27	0.12
00.0030	+ Konsultation, letzte 5 Min.	3.70	7.64	0.48
08.0040	Refraktionsbestimmung, subjektiv	46.59	46.45	1.00
08.0050	+ Erweiterte Refraktionsbestimmung	10.18	30.97	0.33
08.0090	Prüfung des Binokularsehens durch den Facharzt	0.92	19.36	0.05
08.0220	Applanationstonometrie	22.47	30.97	0.73
08.1230	Spaltlampenuntersuchung der vorderen ...	10.55	11.61	0.91
08.3010	Biomikroskopie des zentralen Fundus	11.22	19.36	0.58
08.3020	+ Zuschlag für eingehende Untersuchung	2.90	11.61	0.25
Gesamt		125.45		



The way the tariff is adopted

Fifth, consider how the tariff is applied:

Decision-making competence, involving all actors

- Four partners elaborate and update the tariff:
 - private health insurers
 - physicians
 - hospitals
 - social insurances

A small private outfit in charge of administration
- The federal government must approve the tariff
 - to get reimbursed, a medical service needs to be «effective, appropriate and economical»



3. Choosing the best methods...

Five methods

1. Expert Interviews (60!)
2. Document analysis
3. Process analysis
4. Case-studies, mandated (11)
5. Statistical time series analysis
(development of general ambulatory health and case study's costs)
6. Comparison with former regional tariffs

Working with a support group of stakeholders



Defining the case studies...

Tarmed: 4600 tariff items and 17 types of physicians
– how define the 11 case studies?

Criteria for the choice of medical specialties

- Mix of technical and intellectual services
- High- / low-income
- Sufficient number of physicians
- Four social insurance schemes

Selected: general practitioners, ophthalmologists,
gynecologists, otolaryngologists (ORL)



Choosing the case studies...

Criteria for selected cases

- Proposed by the stakeholders, both physicians and private insurers
- Service package – not just a single tariff position
- Before/after comparison possible
- Financial importance
- Helpful in answering our questions

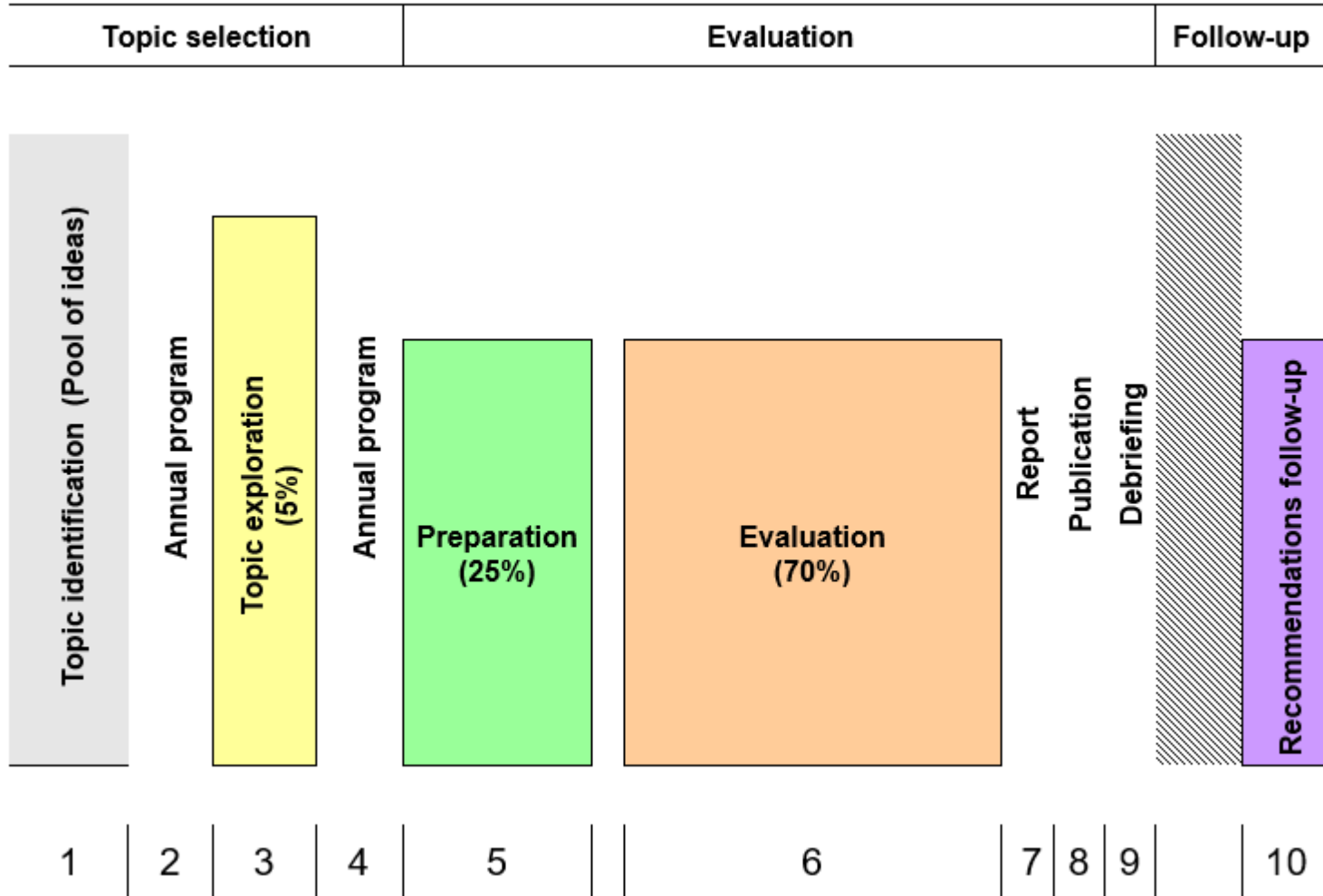


Selected cases and findings

	General practitioners	Ophthalmology	Gynecology	ORL
Consultation	1 Consultation + medical service in the absence of patients (for regular working hours without first consultation and urgency surcharge) (22 + 10 min.)			
Consultation (+)	2 Consultation with emergency and inconvenience flat rates (10 min.)	5 Consultation with refraction determination (subjective) = myopia	8 Examination by specialist in gynecology and obstetrics	
Consultation + technical service	3 Consultation with ECG	6 Consultation with tonometry (pressure measurement)	9 Second ultrasound examination in pregnancy	11 First hearing aid expertise
«Intervention»	4 25 minutes visit with a ride of 2x5 minutes	7 Cataract surgery	10 Curettage with hysteroscopy	

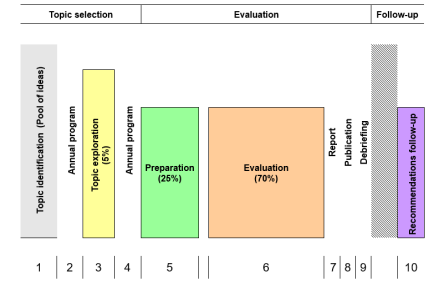
Rather too low – blue
 Reasonable – green
 Rather too high – red
 No Rating possible – gray

4. Project management



Project management

Not a standard project
 Planning is not easy...



Preparation		Evaluation	
Budgeted	spent	budgeted	spent
90 days (Norm SFAO: 50)	161 days	330 days (Norm SFAO: 200)	564 days

Working with an external expert (case studies)

5. Results : the tariff itself

- Tarmed is as complicated as some Swiss watches...
- ...but it is logical and precise
- Some references are not transparent (i.e. time required for a service)
- The reference values are very old (1995)
- Huge room for maneuver for physicians
- The bills are incomprehensible to an average citizen



Way of adoption

Blocked update and revision

- No consensus among negotiating partners, therefore only minor revisions
- Difficult to add new medical techniques to the catalogue, therefore billing by analogy is allowed!
- Insurers are blocking – little interest in finding solutions
- Swiss medical federation cannot impose tariff reductions onto their different members
- Very formal approval procedure at the federal government

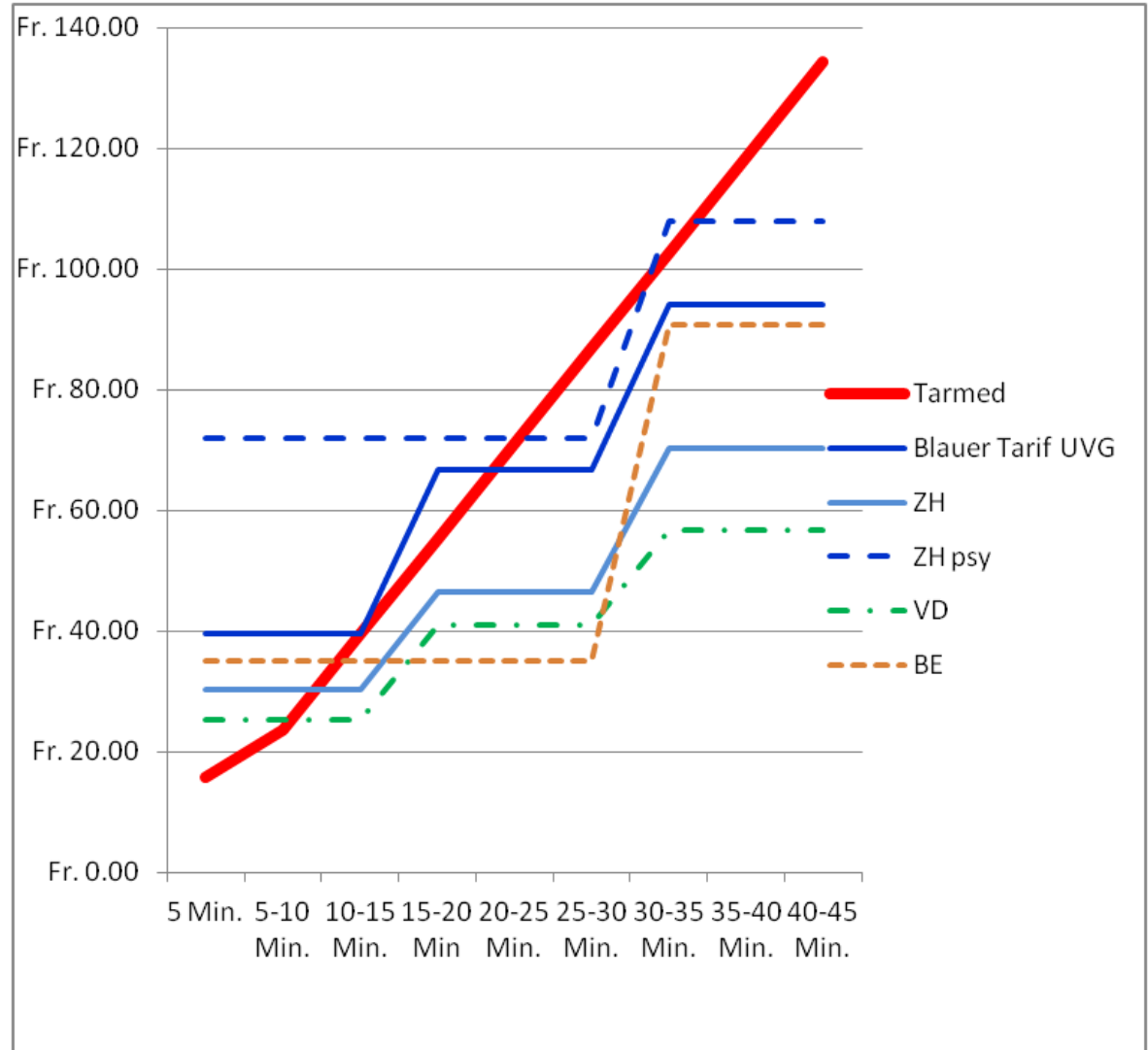
Results : before - after

Comparison with old tariffs (consultations)

Goal of financial upgrading of medical services in comparison with technical services:

Not really achieved, with the exception of psychiatry.

While longer consultations are remunerated slightly better than in the past, the income differences between technical specialists and basic suppliers is increasing rather than decreasing.





Six recommendations

1. Establish useful and appropriate criteria for tariff revision
2. Change law towards granting the government more competence when partners disagree *
3. Prohibit synonymous tariff positions (billing by analogy)
4. Observation status to the Swiss price regulator in Tarmed Committee
5. Establish concept for analyzing and monitoring available data*
6. Make billing more transparent to citizens

* Implemented. The higher competences have since proven very important in solving serious issues concerning the tariff.

6. Conclusions

- Complexity
 - => focusing on topic
 - => working with case studies
 - => combining different methods
 - => ev. work with experts
- Special difficulty in Switzerland due to the extensive competences for private actors (access to data, weak support from Federal health agency etc.)
- Medical tariffs are an important topic for SAI!
- Potential for international comparisons (Parallel Evaluations!)