

Table 1 The study's methodological aspects

Regulatory need					
Expected coverage	National standards and targets	Variables	Target population: # of people who should be intervened within a set period	Frequency of use: # of times the intervention should be received	
		Resolution 412 of 2000			
		Topical gel fluoride		5 to 19 years old	2 times a year
		Application of sealants on fissures		3 to 15 years old	2 times a year
		Bacterial plaque control and removal		2 to 19 years old	2 times a year
				Over the age of 20	1 time a year
		Agreement 029 of 2011			
		Topical fluoride varnish		1 to 17 years old	2 times a year
		Resolution 4505 of 2012			
		All screening activities at 100%			
Expressed need					
Variables	Prevalence - Ec / Nt	* Affiliated population	= # of necessary services to affiliates		
	Ec: # of existing cases at any given time regarding a diagnosis				
	Nt: City population				
Sources	Prevalence of ENSAB IV, RIPS				
Expected coverage was estimated from the prevalence of caries and periodontitis, diagnoses with representative prevalence for the city.					
At the city level					
Variables	# of patients treated, procedures and diagnoses.				
Sources	RIPS, Ministry of Health and Social Protection (SISPRO). Semi-structured interview with six HMOs: Direct consultation with OH referents on: care model, service network, induced demand, culture of use of services, epidemiological profile, opportunity of care, considerations on inclusions in the PBS, assessment of coverage goals achieved.				
Variables	# of patients treated by income level, age group, procedures and diagnoses.				
Sources	Records of access to OH services provided by three participating HMOs.				
Gap analysis					
Gap = Expected Coverage – Actual Coverage					

Source: by the authors

Table 2. Medellín: Expected coverage in specific OH protection and early detection actions, 2015

Activities	Target population	Number of users	Frequency of use a year	# Activities
Topical fluoride application	(5-19 years)	521,066	2	1,042,132
Fluoride varnish application	(0-5 years)	147,701	2	295,402
Sealants application	(3-15 years)	411,799	2	823,598
Bacterial plaque control	(2-19 years old)	597,732	2	1,195,464
Bacterial plaque control	(20 years and older)	1,873,617	1	1,873,617
Supragingival curettage	(12 years and older)	2,174,620	2	4,349,240
Total specific protection and early detection activities				9,579,453

Source: Resolution 412 of 2000 (modified by Resolution 4505/12) and SISPRO

Table 3. Medellín: Expected coverage for caries and periodontitis care, 2015 (Population to be treated according to diagnosis and dentition type)

Description of prevalence	Affiliated population	Prevalence (%)	Population to be served
Caries			
Prevalence of caries in primary dentition*	128,524	24.28	31,206
Prevalence of caries in mixed dentition**	253,539	36.60	92,795
Prevalence of caries in permanent dentition***	2,115,432	28.94	612,206
Periodontitis			
Periodontitis from 18 to 79 years of age	1,898,388	40.53	769,417
Total people			1.505.624

Source: ENSAB IV prevalence: * Temporal dentition: Reference population: 1, 3 and 5 years, ** Mixed dentition: Reference population: 5 and 12 years, and *** Permanent teething: Reference population: 12, 15, 18, 20 to 79 years. Periodontitis: includes mild, moderate, and severe classifications of the disease

Table 4. Medellín: Estimation of the OH procedures needed to address the prevalence of caries and periodontitis, 2015

Services and procedures	Caries						Periodontitis	
	Temporary dentition*		Mixed dentition***		Permanent dentition***		18 to 79 years old	
	Weighter*	Total activities	Weighter*	Total activities	Weighter*	Total activities	Weighter*	Total activities
First-time consultation for general dentistry	1.00	31,206	1.00	92,795	1.00	612,206	1.00	769,417
Dental sealing by surface, with amalgamation	0.19	5,773	0.20	18,559	0.21	129,788	0.07	53,859
Supragingival curettage	-	-	0.02	1,392	1.00	612,206	1.00	769,417
Dental plaque control ncoc	1.00	31,206	1.00	92,795	1.00	612,206	1.00	769,417
Dental sealing by surface, with photocuring resin	0.11	3,464	0.06	5,289	0.12	74,689	0.04	30,777
Individual health education, by dentistry	1.00	31,206	1.00	92,795	1.00	612,206	1.00	769,417
Topical gel fluoride	1.00	31,206	0.22	20,322	0.04	22,039	0.02	15,388
Millimeter periapical intraoral x-rays	0.02	530	0.03	3,062	0.07	41,018	0.02	15,388
Extraction of permanent multiradicular teeth	-	-	-	-	0.03	18,978	0.02	15,388
Unirradicular surgical extraction	-	-	-	-	0.02	12,244	0.02	15,388
Incisal angle reconstruction, with photocuring resin	0.02	499	-	-	0.02	9,795	0.01	7,694
Photocuring sealant application	1.00	31,206	1.00	92,795	-	-	-	-
Application of preventive resin	0.01	437	0.03	2,505	-	-	0.01	7,694
Topical varnish fluoride	1.00	31,206	-	-	-	-	-	-
Extraction of temporary teeth sod	-	-	0.02	1,670	-	-	-	-
Other services	0.05	1,498	0.07	6,496	0.07	43,467	0.10	76,942
Total		199,435		430,477		2,800,842		3,316,186

Source: Ministry of Health and Social Protection, Resolution 412 of 2000

*Weighter: Corresponds to the probability of performing each service (caries by type of teething and periodontitis)

**Activity frequency: Corresponds to the average of the activity

* Temporal dentition: Reference population: 1, 3 and 5 years, ** Mixed dentition: Reference population: 5 and 12 years, and *** Permanent dentition: Reference population: 12, 15, 18, 20 to 79 years.