Communication and Information Exchange Between Practices and Hospitals: a Survey Among Primary Care Practitioners in Central Switzerland

Supplementary Material

Supplementary Material

Supplementary Table 1: Checklist for Reporting Of Survey Studies (CROSS)

Section/topic	Item	Item description	Reported on page #
Title and abstract			
Title and abstract	1a	State the word "survey" along with a commonly used term in title or abstract to introduce the study's design.	*1*
	1b	Provide an informative summary in the abstract, covering background, objectives, methods, findings/results, interpretation/discussion, and conclusions.	*1-2*
Introduction			
Background	2	Provide a background about the rationale of study, what has been previously done, and why this survey is needed.	*3-4*
Purpose/aim	3	Identify specific purposes, aims, goals, or objectives of the study.	*4*
Methods			
Study design	4	Specify the study design in the methods section with a commonly used term (e.g., cross-sectional or longitudinal).	*4*
Data collection methods	5a	Describe the questionnaire (e.g., number of sections, number of questions, number and names of instruments used).	*4*
	5b	Describe all questionnaire instruments that were used in the survey to measure particular concepts. Report target population, reported validity and reliability information, scoring/classification procedure, and reference links (if any).	*5*
	5c	Provide information on pretesting of the questionnaire, if performed (in the article or in an online supplement). Report the method of pretesting, number of times	*N.A.*

		questionnaire was pre-tested, number and demographics of participants used for pretesting, and the level of similarity of demographics between pre-testing participants and sample population.	
	5d	Questionnaire if possible, should be fully provided (in the article, or as appendices or as an online supplement).	*N.A.*
Sample characteristics	6a	Describe the study population (i.e., background, locations, eligibility criteria for participant inclusion in survey, exclusion criteria).	*5*
	6b	Describe the sampling techniques used (e.g., single stage or multistage sampling, simple random sampling, stratified sampling, cluster sampling, convenience sampling). Specify the locations of sample participants whenever clustered sampling was applied.	*5*
	6c	Provide information on sample size, along with details of sample size calculation.	*6*
	6d	Describe how representative the sample is of the study population (or target population if possible), particularly for population-based surveys.	*6*
Survey administration	7a	Provide information on modes of questionnaire administration, including the type and number of contacts, the location where the survey was conducted (e.g., outpatient room or by use of online tools, such as SurveyMonkey).	*5*
	7b	Provide information of survey's time frame, such as periods of recruitment, exposure, and follow-up days.	*5*
	7c	Provide information on the entry process: –>For non-web-based surveys, provide approaches to minimize human error in data entry. –>For web-based surveys, provide approaches to prevent "multiple participation" of participants.	*N.A.*
Study preparation	8	Describe any preparation process before conducting the survey (e.g., interviewers'	*N.A.*

		training process, advertising the survey).	
Ethical considerations	9a	Provide information on ethical approval for the survey if obtained, including informed consent, institutional review board [IRB] approval, Helsinki declaration, and good clinical practice [GCP] declaration (as appropriate).	*5*
	9b	Provide information about survey anonymity and confidentiality and describe what mechanisms were used to protect unauthorized access.	*N.A.*
Statistical analysis	10a	Describe statistical methods and analytical approach. Report the statistical software that was used for data analysis.	*5-6*
	10b	Report any modification of variables used in the analysis, along with reference (if available).	*N.A.*
	10c	Report details about how missing data was handled. Include rate of missing items, missing data mechanism (i.e., missing completely at random [MCAR], missing at random [MAR] or missing not at random [MNAR]) and methods used to deal with missing data (e.g., multiple imputation).	*5-6*
	10d	State how non-response error was addressed.	*5-6*
	10e	For longitudinal surveys, state how loss to follow-up was addressed.	*N.A.*
	10f	Indicate whether any methods such as weighting of items or propensity scores have been used to adjust for non-representativeness of the sample.	*N.A.*
	10g	Describe any sensitivity analysis conducted.	*N.A.*
Results			
Respondent characteristics	11a	Report numbers of individuals at each stage of the study. Consider using a flow diagram, if possible.	*N.A.*
	11b	Provide reasons for non-participation at each stage, if possible.	*N.A.*

	11c	Report response rate, present the definition of response rate or the formula used to calculate response rate.	*6*
	11d	Provide information to define how unique visitors are determined. Report number of unique visitors along with relevant proportions (e.g., view proportion, participation proportion, completion proportion).	*6*
Descriptive results	12	Provide characteristics of study participants, as well as information on potential confounders and assessed outcomes.	*6*
Main findings	13a	Give unadjusted estimates and, if applicable, confounder-adjusted estimates along with 95% confidence intervals and p-values.	*6*
	13b	For multivariable analysis, provide information on the model building process, model fit statistics, and model assumptions (as appropriate).	*4*
	13c	Provide details about any sensitivity analysis performed. If there are considerable amount of missing data, report sensitivity analyses comparing the results of complete cases with that of the imputed dataset (if possible).	*N.A.*
Discussion			
Limitations	14	Discuss the limitations of the study, considering sources of potential biases and imprecisions, such as non-representativeness of sample, study design, important uncontrolled confounders.	*11*
Interpretations	15	Give a cautious overall interpretation of results, based on potential biases and imprecisions and suggest areas for future research.	*12*
Generalizability	16	Discuss the external validity of the results.	*11*
Other sections			
Role of funding source	17	State whether any funding organization has had any roles in the survey's design, implementation, and analysis.	*13*

Conflict of interest	18	Declare any potential conflict of interest.	*13*
Acknowledgements	19	Provide names of organizations/persons that are acknowledged along with their contribution to the research.	*13*

Supplementary Table 2: PCPs' answer distributions regarding hospitals' admission notifications

	Aged 32-45	Aged 47-58	Aged 59-69	p	Overall
N	35	38	36		109
Hospital A sends admission notifications (%)	10 (28.6)	16 (42.1)	11 (30.6)	0.414	37 (33.9)
Hospital B sends admission notifications (%)	23 (65.7)	30 (78.9)	28 (77.8)	0.366	81 (74.3)
Hospital C sends admission notifications (%)	5 (14.3)	6 (15.8)	6 (16.7)	0.962	17 (15.6)
Hospital D sends admission notifications (%)	6 (17.1)	9 (23.7)	7 (19.4)	0.778	22 (20.2)
Hospital F sends admission notifications (%)	1 (2.9)	3 (7.9)	3 (8.3)	0.578	7 (6.4)
Hospital G sends admission notifications (%)	1 (2.9)	3 (7.9)	2 (5.6)	0.641	6 (5.5)
I receive admission notifications from other hospitals (%)	2 (5.7)	2 (5.3)	2 (5.6)	0.996	6 (5.5)
No hospital sends such notifications (%)	4 (11.4)	3 (7.9)	2 (5.6)	0.664	9 (8.3)

Supplementary Table 3: PCP's rating of the importance of included topics in the hospital's discharge summary

Question	Mean	Median	Statistical mode (peak)	N responses	Percent of total	Response	N responses	Percentage of all who responded
4.1a How important is the diagnosis list to you?	4.8	Very important (5)	Very important (5)	109	100.0	Unimportant (1)	4	3.7
						Of little importance (2)	0	0.0
						Moderately important (3)	0	0.0
						Important (4)	6	5.5
						Very important (5)	99	90.8
4.1l How important is information on the medication list and therapy to you?	4.8	Very important (5)	Very important (5)	109	100.0	Unimportant (1)	3	2.8
						Of little importance (2)	1	0.9
						Moderately important (3)	1	0.9
						Important (4)	3	2.8
						Very important (5)	101	92.7
4.1n How important are hospitalists' recommendations for follow-up care to you?	4.8	Very important (5)	Very important (5)	109	100.0	Unimportant (1)	2	1.8
						Of little importance (2)	4	3.7
						Moderately important (3)	0	0.0
						Important (4)	6	5.5
						Very important (5)	97	89.0
4.1k How important is the clinical assessment to you?	4.6	Very important (5)	Very important (5)	109	100.0	Unimportant (1)	3	2.8
						Of little importance (2)	1	0.9
						Moderately important (3)	5	4.6
						Important (4)	17	15.6
						Very important (5)	83	76.1
4.1p How important are all combined recommendations for follow-up care to you?	4.5	Very important (5)	Very important (5)	109	100.0	Unimportant (1)	3	2.8
						Of little importance (2)	2	1.8
						Moderately important (3)	8	7.3
						Important (4)	25	22.9
						Very important (5)	71	65.1
4.1e How important are reports on CT scans, MRI or interventional radiology to you?	4.2	Important (4)	Very important (5)	109	100.0	Unimportant (1)	1	0.9
						Of little importance (2)	3	2.8
						Moderately important (3)	15	13.8
						Important (4)	41	37.6
						Very important (5)	49	45.0
4.1c How important are laboratory values to you?	4.1	Important (4)	Very important (5)	109	100.0	Unimportant (1)	2	1.8
						Of little importance (2)	5	4.6
						Moderately important (3)	18	16.5

							Important (4)	36	33.0
							Very important (5)	48	44.0
4.1o	How important are other services' recommendations for follow-up care to you?	4.0	Important (4)	Very important (5)	109	100.0	Unimportant (1)	2	1.8
							Of little importance (2)	9	8.3
							Moderately important (3)	17	15.6
							Important (4)	39	35.8
							Very important (5)	42	38.5
4.1d	How important are X-ray imaging reports to you?	4.0	Important (4)	Very important (5)	109	100.0	Unimportant (1)	1	0.9
							Of little importance (2)	7	6.4
							Moderately important (3)	26	23.9
							Important (4)	36	33.0
							Very important (5)	39	35.8
4.1g	How important is a focussed anamnesis to you?	3.6	Important (4)	Important (4)	109	100.0	Unimportant (1)	6	5.5
							Of little importance (2)	16	14.7
							Moderately important (3)	23	21.1
							Important (4)	37	33.9
							Very important (5)	27	24.8
4.1b	How important are reports on clinical findings to you?	3.4	Moderately important (3)	Important (4)	109	100.0	Unimportant (1)	3	2.8
							Of little importance (2)	23	21.1
							Moderately important (3)	29	26.6
							Important (4)	34	31.2
							Very important (5)	20	18.3
4.1m	How important are the vital signs at discharge to you?	3.4	Moderately important (3)	Important (4)	109	100.0	Unimportant (1)	4	3.7
							Of little importance (2)	20	18.3
							Moderately important (3)	33	30.3
							Important (4)	34	31.2
							Very important (5)	18	16.5
4.1i	How important are social service reports to you?	2.8	Moderately important (3)	Of little importance (2)	109	100.0	Unimportant (1)	9	8.3
							Of little importance (2)	42	38.5
							Moderately important (3)	28	25.7
							Important (4)	24	22.0
							Very important (5)	6	5.5
4.1f	How important is a comprehensive anamnesis to you?	2.7	Moderately important (3)	Of little importance (2)	109	100.0	Unimportant (1)	6	5.5
							Of little importance (2)	48	44.0
							Moderately important (3)	32	29.4
							Important (4)	19	17.4
							Very important (5)	4	3.7
							Unimportant (1)	10	9.2

4.1h	How important are physiotherapy reports to you?	2.5	Of little importance (2)	Of little importance (2)	109	100.0	Of little importance (2)	53	48.6
							Moderately important (3)	32	29.4
							Important (4)	12	11.0
							Very important (5)	2	1.8
4.1j	How important are nursing reports to you?	2.1	Of little importance (2)	Of little importance (2)	109	100.0	Unimportant (1)	28	25.7
							Of little importance (2)	46	42.2
							Moderately important (3)	27	24.8
							Important (4)	7	6.4
							Very important (5)	1	0.9

Supplementary Table 4

Outcome: female

Variable	OR	(95% CI)	Stat. sign.
Aged 32-45	Ref		
Aged 47-58	0.63	(0.18,2.04)	
Aged 59-69	0.20	(0.05,0.69)	*
Not own practice	Ref		
Work in own practice	0.15	(0.04,0.50)	*
One PCP working in practice	Ref		
Two PCPs working in practice	1.56	(0.46,5.56)	
Three or more PCPs working in practice	1.08	(0.30,3.94)	
Urban practice location	Ref		
Suburban practice location	0.92	(0.32,2.66)	
Small-town practice location	0.65	(0.12,3.31)	
Rural practice location	0.19	(0.04,0.70)	*

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1

Supplementary Table 5

Outcome: male

Variable	OR	(95% CI)	Stat. sign.
Aged 32-45	Ref		
Aged 47-58	1.60	(0.49,5.48)	
Aged 59-69	4.94	(1.44,18.92)	*
Not own practice	Ref		
Work in own practice	6.72	(2.02,25.67)	*
One PCP working in practice	Ref		
Two PCPs working in practice	0.64	(0.18,2.19)	
Three or more PCPs working in practice	0.93	(0.25,3.32)	
Urban practice location	Ref		
Suburban practice location	1.09	(0.38,3.17)	
Small-town practice location	1.54	(0.30,8.34)	
Rural practice location	5.22	(1.43,22.32)	*

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1

Supplementary Table 6

Outcome: urban practice location

Variable	OR	(95% CI)	Stat. sign.
Females	Ref		
Males	0.58	(0.23,1.45)	
Aged 32-45	Ref		
Aged 47-58	5.65	(1.74,21.19)	*
Aged 59-69	6.61	(1.95,26.02)	*
Not own practice	Ref		
Work in own practice	1.67	(0.51,5.89)	
One PCP working in practice	Ref		
Two PCPs working in practice	1.95	(0.59,6.72)	
Three or more PCPs working in practice	2.62	(0.79,9.26)	

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1

Supplementary Table 7

Outcome: preferred communication by phone, fax or postal mail

Variable	OR	(95% CI)	Stat. sign.
Females	Ref		
Males	0.62	(0.19,1.94)	
Aged 32-45	Ref		
Aged 47-58	7.24	(1.46,55.59)	*
Aged 59-69	6.31	(1.18,50.86)	*
Not own practice	Ref		
Work in own practice	1.92	(0.40,11.98)	
One PCP working in practice	Ref		
Two PCPs working in practice	0.48	(0.11,1.92)	
Three or more PCPs working in practice	1.03	(0.27,4.00)	
Urban practice location	Ref		
Suburban practice location	1.27	(0.36,4.48)	
Small-town practice location	1.22	(0.15,7.42)	
Rural practice location	1.50	(0.31,6.84)	

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1

Supplementary Table 8

Outcome: EpicCare Link is easy to use

Variable	OR	(95% CI)	Stat. sign.
Females	Ref		
Males	1.52	(0.51,4.72)	
Aged 32-45	Ref		
Aged 47-58	0.35	(0.08,1.35)	
Aged 59-69	0.17	(0.03,0.77)	*
Not own practice	Ref		
Work in own practice	0.80	(0.19,3.76)	
One PCP working in practice	Ref		
Two PCPs working in practice	1.34	(0.36,5.14)	
Three or more PCPs working in practice	0.26	(0.05,1.13)	
Urban practice location	Ref		
Suburban practice location	0.52	(0.14,1.82)	
Small-town practice location	11.53	(1.90,105.60)	*
Rural practice location	0.62	(0.15,2.41)	

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1

Supplementary Table 9

Outcome: prefer EpicCare Link group training

Variable	OR	(95% CI)	Stat. sign.
Females	Ref		
Males	2.79	(1.02,8.37)	*
Aged 32-45	Ref		
Aged 47-58	3.00	(0.91,10.73)	
Aged 59-69	2.51	(0.73,9.15)	
Not own practice	Ref		
Work in own practice	0.24	(0.06,0.84)	*
One PCP working in practice	Ref		
Two PCPs working in practice	2.74	(0.76,10.99)	
Three or more PCPs working in practice	2.28	(0.64,9.04)	
Urban practice location	Ref		
Suburban practice location	0.62	(0.20,1.88)	
Small-town practice location	0.65	(0.13,3.03)	
Rural practice location	1.10	(0.32,3.76)	

OR: odds ratio
95%CI: 95% confidence interval
Stat. sign.: statistically significant
Ref: reference=1