



EKIV Newsletter 1/2011

edited by
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Editorial

In our quarterly newsletter we regularly report current results of various evaluation studies on *Gesundes Kinzigtal* Integrated Care (GKIC), one of the few ‘flagship projects’ of integrated health care in Germany. Furthermore, we present a short annual evaluation report. This annual report contains summaries of all current GKIC evaluation studies. Furthermore, we interpret these results with respect to the overall research questions of the GKIC evaluation. As to current interim results in 2010, our annual evaluation report has been posted online a few weeks ago. On page 3 we give you some introductory information on this evaluation report and present the web link from which you may download it.

On pages 4 to 7 we present some interim results of the SDM evaluation project (SDM stands for “shared decision-making”). In this project the focus is on patients’ satisfaction with their general practitioner and on patients’ health-related quality of life. A special target variable consists in patients’ (perceived) participation in medical decision-making. By way of a quasi-experimental controlled cohort study insurants’ perceptions in the Kinzigtal region are compared with insurants’ perceptions in a control region. First results of this study have been presented in EKIV Newsletter 1/2009 (in German).¹

On page 8 we present – as we always do in our newsletter – current data on *Gesundes Kinzigtal* Integrated Care (GKIC) including current numbers of enrolled assureds and the number of participants in GKIC’s preventive programmes. GKIC’s membership development will be analysed in the forthcoming issue of EKIV newsletter (no. 2/2011) in greater detail.

Your questions on our newsletter’s topics, as well as any other feedback, are always welcome. We look forward to answering your email (to info@ekiv.org or ekiv@medsoz.uni-freiburg.de) soon.

With best regards,

Achim Siegel & Ulrich Stoessel

¹ Cf. EKIV Newsletter 1/2009, p. 3-9. (http://www.ekiv.org/pdf/EKIV-Newsletter_2009-1.pdf.)

Evaluation of *Gesundes Kinzigtal* Integrated Care (GKIC):

EKIV evaluation report online now

Since a couple of weeks EKIV's current report on the evaluation of GKIC is online on our homepage. The report contains an overview of the current status and interim results of all GKIC evaluation studies (in German) as of December 2010. Furthermore, these interim results are summarised with respect to overall research questions.

You are welcome to download the report (in German) from our homepage. Please use the following link:

http://www.ekiv.org/pdf/EKIV-Evaluationsbericht_2010_Kurzbericht_fin_2011-02-24.pdf

In the report the interim results of the following evaluation studies are summarised:

- **SDM study:** A survey of insurants' overall satisfaction with their general practitioner's quality of care, patients' preferences concerning shared decision-making (SDM), the perceived extent of shared decision-making within physician-patient consultation, and on insurants' health-related quality of life. The study is conducted by Prof. Dr. Dr. Martin Härter, University Medical Centre Hamburg-Eppendorf, and his research team, first of all Lars Hölzel.
- **OUM study:** An analysis of over-, under-, and mis-utilisation of health services and of insurants' health status by analysing health insurers' administrative data (claims data). This study is conducted by PMV research group at the University of Cologne (head: Dr. Ingrid Schubert). Preliminary results of the OUM study have been presented in various issues of our newsletter, e.g. in EKIV Newsletter 2/2010 and 3/2010.²
- **PeGL study:** The German acronym PeGL stands for the term „process evaluation from health care providers' perspectives“. The study is conducted by Dr. Matthias Nübling, Gesellschaft für empirische Beratung, Denzlingen. Some interim results of this study have been presented in EKIV Newsletter 4/2009.³
- **AGil study:** AGil stands for „active health promotion among the elderly in the Kinzigtal region: process and outcome evaluation“. The study is conducted by Prof. Olaf von dem Knesebeck and his research team at the University Medical Centre Hamburg-Eppendorf. In the last issue of our newsletter (issue 4/2010) we have presented some results of AGil's process evaluation.⁴

The preliminary results of these four studies indicate in our opinion an overall positive tendency. This holds in particular for the OUM study and the PeGL study: Most indicators indicate a comparably high and most often increasing quality of health care in the Kinzigtal region.

In contrast, the results of the SDM study seem to be mixed: Whereas patient satisfaction is very high both among the Kinzigtal insurants and the insurants of the control region, results are less favourable (from Kinzigtal's perspective) as to patients' perceived participation in medical decision-making: Those insurants who chose to be a member of GKIC until spring 2007 perceived a significantly more pronounced decrease in participation in 2008 and 2009 as compared with insurants from a control region. In the following article we will discuss these surprising results in a more comprehensive way.

Achim Siegel, Ulrich Stößel

² Cf. http://www.ekiv.org/pdf/EKIV-Newsletter_2-2010_English_version.pdf and http://www.ekiv.org/pdf/EKIV-Newsletter_2010-3_English_version.pdf (in English).

³ Cf. http://www.ekiv.org/de/pdf/EKIV-Newsletter_4-2009.pdf (in German only).

⁴ Cf. http://www.ekiv.org/pdf/EKIV-Newsletter_4-2010_English-version.pdf (in English).

Evaluation of *Gesundes Kinzigtal* Integrated Care (GKIC):

Interim Results of the SDM study on patient satisfaction, shared decision-making (SDM), and health-related quality of life

Research questions, material, and method of the SDM study

The SDM study is conducted by Prof. Dr. Dr. Martin Härter and his research team, first of all Lars Hölzel (University Medical Centre Hamburg-Eppendorf and University Medical Centre Freiburg). The key research questions are: Does a regional integrated health care system of the Kinzigtal type plus a series of specific communication training sessions for primary care physicians lead to

- a more pronounced participation of patients in medical decision-making and to
- a higher satisfaction of patients with primary care?

The research team follows the heuristic model of shared decision-making (SDM), assuming the following hypotheses: A successful participation of patients in medical decision-making leads to a higher decisional confidence (i.e. to less decisional conflict) in patients so that the decision in question is a carefully considered and well-informed decision. A high decisional confidence in patients leads in turn to a high adherence of patients to treatment decisions and to a high satisfaction with the concerning physician. Ideally, the heightened adherence of patients brings about a higher probability of therapy success and, thus, an increasing health-related quality of life.⁵ Following this heuristic model, the research team collects data not only of patients' perceived degree of participation in medical decisions and their overall satisfaction but also of patients' health-related quality of life, their participation and information preferences as well as their perceived decisional conflict.

The SDM study follows the design of a three-arm (controlled) cohort study. The intervention cohort, consisting of all those insurants who had enrolled into GKIC before April 2007, was included in the form of a census so that 1.153 GKIC insurants ('GKIC cohort') were asked to take part in the study. A first control cohort ('NIC cohort') was sampled from all those insurants in the Kinzigtal region who *had not enrolled* before April 2007 (n=2.638). A second control cohort ('S-B cohort') consists of 2.711 insurants from a control region (the region around the towns Sigmaringen and Biberach), a region which is similar in many important respects to the Kinzigtal region. Both control samples were stratified with respect to four important variables according to their distribution in the intervention cohort. Thus all three cohorts (samples) are well comparable to each other. The variables used to stratify the samples included insurants' age, sex, insurant state and health care cost in the preceding year 2006.

Important interim results of the SDM study⁶

Up until now three surveys have been conducted (T0, T1, and T2) at intervals of about one year. Finally, 2.352 insurants responded to the T0 questionnaire (response rate 36%), and still 1.205 questionnaires could be analysed after the T2 survey (response rate relative to initial sample 18.4%). The response rate was significantly higher in the IC cohort than in the two control cohorts (p<0.05).

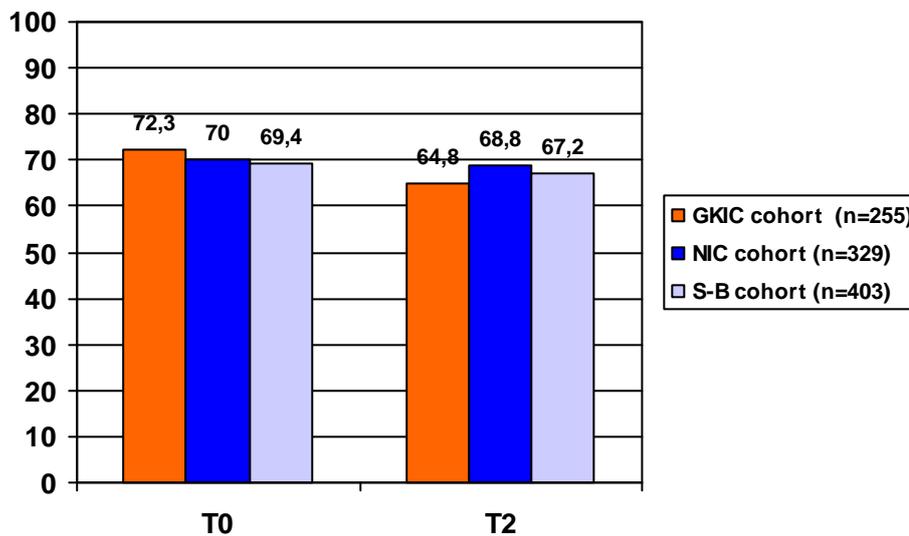
The data from the T0 and T1 surveys did not reveal any significant intervention effect. The data of the T2 survey, in relation to the data from the T0 survey, revealed one significant intervention effect

⁵ Cf. Härter M, Hölzel L, Kriston L, Ababneh M, chung BY, Engert I & Heizmann S (2008): T0-Erhebung zur Ermittlung der Einstellungen von Versicherten zur Versorgungsqualität, zur Patientenzufriedenheit und zum Shared Decision-making (SDM). [T0 survey of insurants' attitudes towards quality of primary care, patient satisfaction, and shared decision-making (SDM)]. Freiburg: unpubl. ms., p. 7f.

⁶ The results presented in this section have been extracted from the following report: Härter M, Hölzel L, Seebauer L, Kriston L & Chung BY (2010): T2-Untersuchung zur Ermittlung der Effekte des Projekts „Gesundes Kinzigtal“ auf Versorgungsqualität, Patientenzufriedenheit und Partizipativer Entscheidungsfindung [T2 survey of the effects of the GKIC project on quality of primary care, patient satisfaction, and shared decision-making (SDM)]. Freiburg: unpubl. ms.

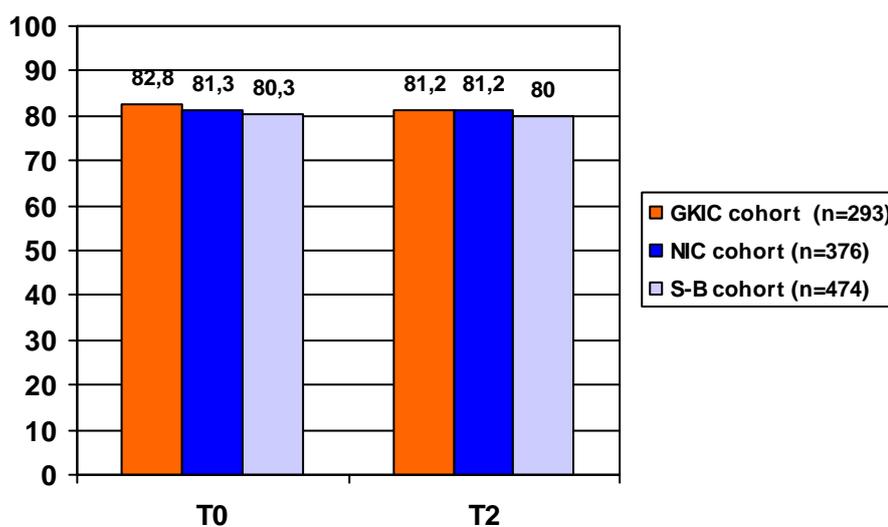
($p < 0.05$), i.e. a significantly different development of a target variable in the three samples: The perceived extent of patients' participation in medical decisions decreased somewhat in all three samples, but the extent of the decrease was significantly more pronounced among the insureds of the GKIC cohort – contrary to the research hypotheses and to our expectations. This result is illustrated in fig. 1.

Fig. 1: Patients' perceived participation in medical decision-making during their preceding GP (general practitioner) consultation (measured by PEF-FB, range: 0 – 100)



The significantly more pronounced decrease in perceived participation did however not lead to a significant worsening of GKIC insureds' overall satisfaction with their GP's primary care: There is no significant intervention effect as to patients' satisfaction, and the values measuring patients' satisfaction continue to be very high in the GKIC cohort (fig. 2).

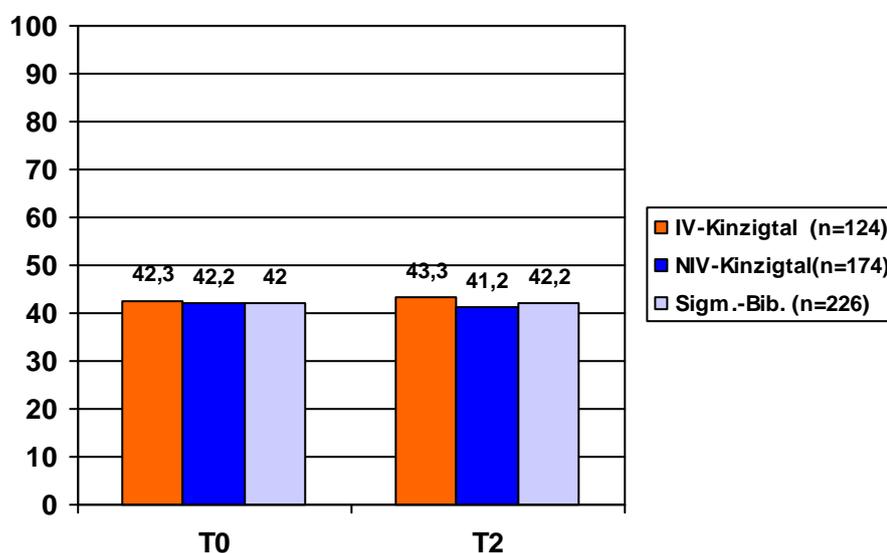
Fig. 2: Insureds' satisfaction with GP's primary care (measured by ZAV, range 0 – 100)



With respect to health-related quality of life (physical aspects), there are no significant differences between the three cohorts (cf. fig. 3). However, a significant intervention effect was narrowly failed ($p = 0.07$): As may be seen from fig. 3, the mean values increased a bit in the GKIC cohort whereas they decreased somewhat in the NIC cohort and remained constant in the S-B cohort. The results as

to psychic health-related quality of life (SF-12) had a similar tendency – i.e. a slightly more favourable development in the GKIC cohort –, but narrowly failed the level of statistical significance, too (without illustration).

Abb. 3: Physical health-related quality of life in the T0 and T2 surveys (measured by SF-12, range 0 – 100)



Discussion: The above-average decrease in perceived patient participation in the GKIC cohort – an attempt at an explanation

Whereas at least health-related quality of life within the three cohorts developed in the direction we had expected – without however reaching statistical significance –, the results as to perceived patient participation in medical decisions revealed a significant result *contrary* to our expectations: The extent of perceived participation decreased in all three cohorts, but the decrease was significantly more pronounced in the intervention cohort (GKIC cohort). Although the extent of this above-average decrease in the GKIC cohort does not seem to be dramatic or even „clinically relevant“, as the research team concludes (cf. Härter et al. 2010, p. 29), it is nevertheless a (significant) result contrary to our expectations, and as such requires an explanation. In principle, we see three ways to explain it.

(1) Considering an analogous study result of a Swiss research team (Busato et al. 2010), a first explanation would run as follows: The therapy options of medical practices which are part of a comprehensive physicians' network or even of an integrated health care system are usually based on structured, even trans-sector structured treatment paths – much more than a usual individual medical practice. For this reason the average patient perceives the available therapy options within a network practice to a greater extent as “fixed” or predefined than within a usual individual practice in which therapy options may seem to be more “self-determined” by the physician-patient-dyad or negotiable by the patient. This explanation implies, then, that the above-average decrease in perceived patient participation among the GKIC cohort correctly reflects an objectively decreased patient participation in medical decision-making.

(2) Contrary to this latter idea one could in principle assume that patients' perceptions in the GKIC cohort do not only reflect the extent of their (objective) participation in medical decisions but that they do contain a specific subjective component which might be explained thus: The ‘GKIC insureds’ had deliberately chosen to enrol into GKIC, a new form of health care organisation, because they were convinced of its higher quality of care and of being more patient-centred than usual care. (For the members of health insurer AOK BW there were *no financial incentives at all* to enrol into GKIC.) For

that reason alone the expectations with respect to patient-centredness and overall quality of care must have grown higher among the GKIC insurants, contrary to the other two cohorts. Furthermore, the comprehensive initial examinations for GKIC insurants and the mutual treatment agreements which had to be made between network physicians and GKIC insurants upon their enrolment could have led to particularly high expectations among the GKIC cohort. These expectations however, so we must assume, could not be fulfilled accordingly in the aftermath which should have led in turn to an at least partial disillusionment and to more critical judgements by GKIC insurants.

Please note that this latter explanation pattern (2) does not necessarily rule out the (partial) validity of explanation pattern (1): One could easily assume that both factors were effective in our case, i.e. that there was *both* an objective decrease in patient participation *and* higher expectations and a successively more critical attitude in the GKIC cohort. It seems however impossible to estimate the effect size of these supposed factors because patient participation was measured by a questionnaire which was fulfilled by the patients, i.e. an 'objective' component of patient participation had not been measured independently from patients' perceptions.⁷

(3) If we suppose that the above-mentioned 'high expectation bias' was indeed at work in the GKIC cohort but that we cannot quantify this bias and neither compare its size with the supposed above-mentioned effect of an 'objective' change in patient participation, then there is – in theory – still another pattern of explanation: One could assume that – in objective terms – patient participation had even *increased somewhat* within the physician-patient consultations of the GKIC patients (as there were indeed some SDM and similar advanced training sessions for the concerning physicians which must have had some 'objective' effect). If one indeed advocated such an argument, one would have to acknowledge at the same time that the supposed increase in objective patient participation had been so small that it had been dominated (over-compensated) by the effect of the above-mentioned 'high expectation bias', for the overall effect on patients' perceived participation was undoubtedly negative in the GKIC cohort, thereby significantly outperforming the 'secular' decrease in both control cohorts.

Unfortunately there are no data available giving us valid hints on which explanation pattern reflects the real causal mechanism best. Considering recent reviews and meta analyses of which advanced SDM training methods lead to an increase in objective patient participation in medical decisions⁸, one must be very sceptic towards explanation pattern (3): In face of the finding that it is very difficult to increase patient participation in medical decisions in objective terms (Légaré et al. 2010), it seems rather improbable to us that there was an objective increase in patient participation within the GKIC cohort. On the other hand, as we have good reason to suppose that a 'high expectation bias' was indeed at work in the intervention cohort, explanation pattern (2) seems the most plausible to us. In any case, however, for now we must deny the research hypothesis that an integrated health care system of the Kinzigital type leads to an increased perceived patient participation in medical decisions.

Irrespective of this specific result of the SDM study one should not forget that patients' overall satisfaction with their primary care physicians continues to be very high in the intervention cohort, and, moreover, remains unsurpassed by the two control cohorts. This latter result holds as well for the target variable 'health-related quality of life', with respect to both the physical and psychic aspect.

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⁷ The existence of this 'higher expectations bias' cannot be definitely proved. This kind of bias might have been effectively controlled only by a randomised controlled trial (RCT), which, however, could not be realised under the given conditions.

⁸ Légaré F, Ratté S, Stacey D, Kryworuchenko J, Gravel K, Graham IC & Turcotte S (2010): Interventions for improving the adoption of shared decision making by health care professionals (Review). Cochrane Database of Systematic Reviews 2010, Issue 5.

Current data on *Gesundes Kinzigtal* Integrated Care (as of March 25, 2011)

Number of actively enrolled assureds	7.417
- thereof AOK BW assureds	6.994
- thereof LKK BW assureds	423

Number of patients with higher morbidity risk	4.808
- thereof AOK BW assureds	4.493
- thereof LKK BW assureds	315

GKIC preventive programmes and extended national disease management programmes (DMPs)	no. of participants
AGil (Active health promotion in the elderly)	511
Smoking Cessation Programme	156
Prevention/treatment of congestive heart failure (CHF)	71
Lifestyle intervention for patients with metabolic syndrome	155
Prevention of osteoporosis and osteoporotic fractures	585
Early intervention by psychotherapists in cases of acute personal crises	208
Medical care for the elderly in nursing homes	81
„Better tuned“ – a programme for people with depression (established in late August 2010)	18
DMP diabetes mellitus type II	894
DMP coronary heart disease	295
DMP breast cancer	15
DMP asthma	114
DMP COPD	167

Physicians and other providers contracting with GKIC	81
- family physicians	22
- specialists	22
- pediatricians	5
- psychotherapists	3
- hospitals	6
- physiotherapists	7
- nursing homes	11
- outpatient nursing services	4
- social-therapeutic services	1
Other partners cooperating with GKIC	45
- pharmacies	16
- sports clubs	23
- fitness centres	6