Visitatie of medical specialists: studies on its nature, scope and impact
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Quality Consultation offered to Dutch medical specialists enhances implementation of visitatie recommendations: results of a multifaceted site-specific intervention

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Quality Consultation offered to Dutch medical specialists enhances implementation of visitatie recommendations: results of a multifaceted site-specific intervention.
Objective: To evaluate the effect of external management support (Quality Consultation - QC) on the implementation of visitatie recommendations and to gain insight in the factors obstructing implementation.

Design: Data collection through a postal survey amongst 205 medical specialists, representing 50 hospital based specialist groups in The Netherlands.

Setting: Under the auspices of the specialty societies of surgeons, pediatricians and gynaecologists, 25 groups were offered ~ 20 h of management consulting to support the implementation of visitatie recommendations and 25 specialist groups did not receive the management consulting. The specialist groups were randomly allocated to the intervention/non-intervention groups.

Intervention: The management consulting (QC) took a site-specific multifaceted implementation approach.

Main measures: Self-reported degree of implementation of visitatie recommendations, assessment of implementation result and process; experienced obstructing factors in implementing recommendations.

Results: The response rate was 54% (n=110). The supported specialist groups were more successful in implementing visitatie recommendations. 66.1% of the supported specialist groups partially or fully implemented the recommendations, against 53.8% of the non-supported groups. The implementation result and process were also rated significantly higher for the supported groups. The supported groups reported significantly less (p < 0.005) obstructing factors. The experienced obstructing factors are strongly related with the degree of implementation (spearman rho 0.57 ~ 32.5%), the assessment of the implementation results (spearman’s rho = 0.65) and the process (spearman’s rho = 0.62).

Conclusions: This study suggests that QC is a powerful strategy in implementing visitatie recommendations. The results confirm the successfulness of combined and site-specific strategies. It is advisable that interventions to improve implementation of visitatie recommendations are targeted at the set of 14 obstructing factors investigated in this study. The QC approach has a moderating effect on the identified set of obstructing factors, but the effect seems largest for the barriers lack of implementation knowledge/skills and support, assessed self-efficacy and expected (limited) gains/advantages of implementation efforts.
The end of any form of external (peer) review should be the beginning of change. Change however is not self-evident. Many strategies have therefore been developed to promote the implementation of change. Research has produced much evidence and many clues about which implementation strategies work and which don’t. (1) From all the research, the message is clear: no one approach is convincingly superior. The challenge is to creatively integrate all the evidence and experiences and offer context-specific approaches. (2-4) One example of such an approach is Quality Consultation (QC). It is a multifaceted site-specific intervention that is being offered to Dutch medical specialist groups to support them in implementing visitatie recommendations.

Visitatie is a doctor-owned external peer review model. The key characteristics of visitatie are described in figure 1. In The Netherlands, where visitatie originated, the visitatie system produces hundreds of collegial site-visits to specialist groups and thousands of recommendations for quality improvement yearly. (5) Without implementation of the recommendations visitatie can not be called successful. Therefore, the specialty societies of surgeons, pediatricians and gynaecologists developed QC as an intervention to further enhance implementation. Members of these societies received support for their implementation efforts by experienced management consultants. In the period 1999-2001 the intervention was offered to 25 specialist groups. QC can be summarized as follows:

• QC started where visitatie ended: with the practice-specific recommendations for improvement as formulated by medical peers on behalf of the specialty society.

• Specialist groups were offered approximately 20 hours of management consulting to support implementation of one or a few visitatie recommendations.

• All recommendations were eligible for support. The specialist group and the consultant together decided in a first meeting to which recommendation(s) the implementation efforts were to be directed.

• The QC toolkit consisted of various support methods, both non-participatory (activities undertaken by the consultant which did not require the specialist group to act or even to be directly involved, such as sending educational materials and writing practice-specific documents) and participatory (requiring the participating specialists to be actively involved in the implementation activity, such as meetings with the consultant, filling out evaluative questionnaires and co-writing documents). All specialist groups were offered multiple interventions. Which interventions were applied depended on the recommendations to be implemented, the local context, the specialist group and the consultant.

1 On hospital level medical specialists of the same specialty are organized in specialist groups. The daily provision of care, including i.e. taking call, patient related meetings, as well as the strategic issues are primarily dealt with by the group. Medical specialists (groups) can be employed by the hospital or be paid on a fee-for-service basis. The latter are referred to as ‘partnerships’. Approx. 70% of all medical specialists are independent entrepreneurs.
Participation in the QC project was voluntary and without cost for the specialist groups; the specialty societies recommended their members to participate in the project. The practice-specific results of the QC were confidential.

For the 25 specialist groups QC was offered under the auspices of the three participating specialty societies. The support was conducted by 2 experienced management consultants, one of whom is an author of this paper (MJMH). The Dutch Ministry of Health financially supported the intervention. QC has been qualitatively evaluated and described in detail elsewhere. (6) This paper's objective is to evaluate the effect of the intervention QC. In particular we address the following questions:

1. What is the effect of Quality Consultation in terms of the implementation of visitatie recommendations?
2. Which factors are obstructing the implementation of visitatie recommendations?

As part of this second question we explicitly looked at the medical specialists' attitude towards visitatie. In general it is known that the attitudes of professionals may interfere with implementation. We assume that a positive attitude towards visitatie is related to more successful implementation.

**Figure 1** Key characteristics of the Dutch peer assessment (visitatie) model

- **International context**
  Visitatie has acquired a position next to health care accreditation, the International Organization for Standardization's ISO 9000 standards and the European Foundation for Quality Management (EFQM) excellence model. (14-15)

- **Owner**
  Each of the 27 Dutch specialty societies administers and executes its own visitatie program. Attunement is coordinated by the umbrella organization of all societies.

- **Funding**
  The Department of Health pays specialty societies per visitatie

- **Purpose**
  The assurance and improvement of the quality of patient care

- **Standards**
  Each specialty society sets its own discipline-specific quality standards. Some hospital broad standards are shared by all specialty societies.

- **Scope**
  Specialist groups (incl. partnerships) in non-teaching practices

- **Survey team**
  2-4 peers from different hospitals.

- **Visitatie cycle**
  Every 3 to 5 years.

- **Visitatie process**
  Paper evaluation prior to site-visit. Site-visit: interviews, on-site observations, review of medical records and verbal preliminary report. (16)

- **Results**
  Every visitatie report contains practice-specific recommendations for improvement. There is no pass/fail judgement system (i.e. certificates, awards). (17-18)

- **Confidentiality**
  Visitatie findings are only provided to the reviewed specialist groups.

- **Sanctions**
  No formal sanctions. Some specialty societies revisit a practice after 1 or 2 years, in case safe or state-of-the-art practising is seriously doubted.

- **Legal context**
  Participation in the visitatie program of one's specialty society is one of the requirements for re-registration of individual medical specialists.
**Methods**

**Sample**
Of all the specialist groups of surgeons, gynaecologists and pediatricians that had been mandatorily surveyed by their respective specialty societies in the period September 1998 to November 1999, 58 specialist groups were invited to participate in a visitatie implementation study. The specialist groups were randomly allocated to an intervention and a non-intervention group. The intervention group was formed by 31 specialist groups who were offered a limited number (~ 20) of hours of management support with the implementation of one or several visitatie recommendations. 25 specialist groups (10 pediatric, 8 ob/gyn and 7 surgery) agreed to participate. The other 27 specialist groups are referred to as the non-intervention group. All but 2 of these specialist groups (one surgery, one pediatric) were willing to participate.

For the (remaining) 50 specialist groups (205 medical specialists) a total of 464 recommendations were formulated. Surgery specialist groups received significantly less recommendations (average number of 6.2) than gynaecologists (10.3) and pediatricians (10.8). (7) For the intervention group the consultant and the specialist group together decided to which recommendation(s) the QC intervention was to be directed.

**Measures**

To determine the implementation results a postal survey was undertaken. In the period February 2000 to June 2001 a total of 205 questionnaires were sent to the participating medical specialists. The questionnaire was anonymous except for the work location (hospital) of the respondents. Non-responders were reminded through (up till 3) phone calls and/or facsimile message.

**Design of the questionnaire**

The questionnaire consisted of three parts. The first part relates to the first research question of this paper: the effect of Quality Consultation in terms of the implementation of visitatie recommendations. This part of the questionnaire was practice-specific: the recommendations for improvement were copied from the original visitatie reports into the questionnaire followed by 3 questions. In the first question the specialists were asked to assess the actual degree of implementation of the recommendations. The implementation rate was scored on a 5-point action scale stating that no action had been taken to implement the recommendation; the recommendation had been discussed, but no actions were planned; actions had been planned, but not yet executed; the recommendations had been partially or fully implemented. The second and third questions involved assessing the implementation result as well as the implementation process, using a 10-point scale (1 to 10).

Secondly, in reference to the second research question, the questionnaire aimed at determining perceived barriers to the implementation of visitatie recommendations. We constructed an implementation obstruction scale consisting of 14 statements related to
implementation barriers. This part too was practice-specific. Each recommendation was followed by the 14 statements. The statements were based on what is known from the literature about factors limiting implementation of innovations. They were formulated in terms of the actual situation, performed actions, and experienced behaviours. The implementation obstruction scale was found to be reliable (Cronbach’s alpha 0.81). The statements were responded to on a 4-point scale (1 = strongly agree, 4 = strongly disagree).

Lastly, the questionnaire focused on the attitude of respondents towards visitatie. We used a visitatie attitude scale consisting of 16 visitatie statements. All statements were responded to on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The instrument was found to be valid and reliable. (7).

**Statistical analysis**

Results were entered into a database and analysed using SPSS. Analyses of the implementation results and the obstructing factors were performed on both specialist group and individual level, comparing the results for the intervention and non-intervention groups. The specialist group results were determined as the average of the results of the individual members of the specialist group. Intraclass correlation coefficients were determined. Medical specialists’ attitudes towards visitatie were analysed on an individual level. Correlations were calculated using Spearman’s test.

**Results**

**Response**

From the total sample of 205 surveys mailed, 110 were returned, an overall response rate of 54%. The response rates were 60% (n = 61; representing 23 specialist groups) for the respondents in the intervention group and 47% (n = 49; representing 22 specialist groups) for the non-intervention group. This significant difference can be explained by the high response rate for the pediatricians in the intervention group. The response rate for this group was 82% versus 51% for the gynaecologists and 46% for the surgeons in the intervention group. Based on explicit statements of participating medical specialists, we can explain 35% of the non-response. The reasons for not returning questionnaires were absence due to retirement (n = 1), maternity leave (n = 1) or sickness (n = 1); the discontinuance of a partnership (n = 2) or a practice (n = 1) and a lack of time (n = 4) or interest (n = 2). Seven respondents filled out the questionnaire on behalf of their colleagues (n = 21). We assume the rest of the non-response can be mostly ascribed to a lack of time, especially given the length of the questionnaire, and/or interest.

**Implementation status**

The degree of implementation of the visitatie recommendations is shown in table 1. The percentages mentioned are based on a total of 402 observations (one score per specialist group per recommendation). For each recommendation, the average of the answers given
by the individual specialists were used since, as expected, the answers they provided were highly correlated: the range in intraclass correlation coefficient was 0.60 to 0.68. The results show that the specialist groups supported by the management consultants (the intervention group) report being significantly (t-test p=0.0002) more successful in partially or fully (scores 4 and 5) implementing the visitatie recommendations than their colleagues working in non-supported practices; 66.1% versus 53.8%. This positive effect on the implementation degree has been reported by two of the three specialties. For pediatricians the implementation rates (scores 4 and 5) are 68.9% (intervention group) versus 48.7% (non-intervention group) and for surgeons 68.3% versus 51.5%. For gynecologists the score was 61.0% (intervention group) versus 63.2% (non-intervention). Further, the supported specialist groups show significantly higher rates than their peers in non supported practices on both the assessment of the implementation results (t-test p=0.0003) and the rating of the implementation process (t-test p=0.0006). (Table 2) The data analyses on individual and specialist group level show comparable results.

The above results indicate at least a general correlation between Quality Consultation and the implementation of recommendations. Additionally we searched our data set for more specific evidence of the potential positive effects of management support. Within the intervention group we compared the results for supported recommendations with non supported recommendations. Of the 14 practices available for this comparison, 11 practices reported a higher rate of implementation for supported recommendations. Lastly, we compared practices in the intervention and non-intervention group with regards to the implementation results of one specific type of recommendation (the recommendation to write a practice oriented policy plan). Three out of three supported practices reported partial or full implementation of the recommendation (average score 4.8); in the non-intervention group one out of seven practices (from 2 practices no data were available) reported the same result (average score 2.7). Further, the intervention group rated the implementation results with a 8.4 and the process with a 8.1. For the non-intervention groups these numbers were 4.7 and 4.9. These specific intra- and inter practice comparisons suggest a positive effect of management support on the implementation of specific recommendations.

Obstructing factors

Table 3 shows the experienced implementation barriers for the non-intervention and intervention group. The percentages mentioned are based on a total of 389 observations (one score per specialist group per recommendation). The results show that the specialist groups in the intervention group report significantly (p < 0.005) less obstructing factors than the groups in the non-intervention group. There is a strong relation between the experienced obstructing factors and the implementation status (spearman correlation coefficient 0.57); over 32% of the variance of the implementation status can be explained by the factors listed in table 3. The relation between the set of obstructing factors and the assessment of the implementation results and process is even stronger; it explains 42% (spearman’s rho = 0.65) respectively 38% (spearman’s rho = 0.62) of the variance.
Table 1  Implementation status of recommendations, as reported by specialist groups. Overall (total) and per specialty: pediatrics, obstetrics/gynaecology and surgery. For intervention (I.) and non-intervention (N.I.) groups. Numbers are percentages.

<table>
<thead>
<tr>
<th>The 5 categories expressing the degree of implementation</th>
<th>Total (n=402)</th>
<th>Pediatrics (n=197)</th>
<th>Gynaecology (n=131)</th>
<th>Surgery (n=74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No action has been taken wrt implementation</td>
<td>2.9 9.4</td>
<td>1.7 15.4</td>
<td>4.9 0</td>
<td>2.4 9.1</td>
</tr>
<tr>
<td>2. The recommendation has been discussed within the specialty group and/or with others, but no follow up has been planned yet</td>
<td>12.4 16.9</td>
<td>13.5 15.4</td>
<td>9.8 20.4</td>
<td>14.6 15.2</td>
</tr>
<tr>
<td>3. Implementation activities have been planned, but not yet executed</td>
<td>18.6 20.0</td>
<td>16.0 20.5</td>
<td>24.4 16.3</td>
<td>14.6 24.2</td>
</tr>
<tr>
<td>4. The recommendation has been partially implemented</td>
<td>30.6 29.4</td>
<td>34.5 25.6</td>
<td>26.8 38.8</td>
<td>26.8 24.2</td>
</tr>
<tr>
<td>5. The recommendation has been fully implemented</td>
<td>35.5 24.4</td>
<td>34.5 23.1</td>
<td>34.2 24.5</td>
<td>41.5 27.3</td>
</tr>
</tbody>
</table>

Table 2  Assessment of the implementation results and appreciation of the implementation process, as reported by specialist groups. Per specialty: pediatrics, obstetrics/gynaecology and surgery. For intervention (I.) and non-intervention (N.I.) groups. Numbers are mean scores on a 10 point scale.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of the implementation results</td>
<td>6.7 5.4</td>
<td>6.6 5.9</td>
<td>6.2 6.0</td>
</tr>
<tr>
<td>Assessment of the implementation process</td>
<td>6.8 5.9</td>
<td>6.8 5.9</td>
<td>6.7 6.3</td>
</tr>
</tbody>
</table>
Table 3  Reported experienced obstructing factors in implementing practice-specific recommendations; overall (total) and per specialty: pediatric (p), obstetrics/gynaecology (g) and surgery (s). Intervention (int.) and non-intervention (non-int.) group. Percentage of specialist groups where the mean score > 3.5.

<table>
<thead>
<tr>
<th>Statements asking for obstructing implementation factors</th>
<th>Total</th>
<th>P</th>
<th>G</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I disagree with this recommendation.</td>
<td>28.8</td>
<td>34.0</td>
<td>29.1</td>
<td>33.8</td>
</tr>
<tr>
<td>2. This recommendation is not applicable for our situation.</td>
<td>26.7</td>
<td>35.3</td>
<td>23.9</td>
<td>33.8</td>
</tr>
<tr>
<td>3. The advantages of implementing this recommendation do not outweigh the expected disadvantages, efforts or discomfort.</td>
<td>25.8</td>
<td>31.4</td>
<td>29.1</td>
<td>36.5</td>
</tr>
<tr>
<td>4. Implementation of this recommendation will limit my (professional) autonomy.</td>
<td>8.9</td>
<td>8.5</td>
<td>11.1</td>
<td>8.1</td>
</tr>
<tr>
<td>5. I am not convinced that my group will be able to implement this recommendation.</td>
<td>34.3</td>
<td>44.4</td>
<td>32.5</td>
<td>45.9</td>
</tr>
<tr>
<td>6. My partners/colleagues have a negative attitude towards the implementation of this recommendation.</td>
<td>20.3</td>
<td>17.0</td>
<td>18.8</td>
<td>17.6</td>
</tr>
<tr>
<td>7. I am lacking certain knowledge and/or skills to implement this recommendation.</td>
<td>17.4</td>
<td>24.2</td>
<td>19.7</td>
<td>29.7</td>
</tr>
<tr>
<td>8. I do not expect that implementation of this recommendation will actually improve my practice(keeping).</td>
<td>28.8</td>
<td>39.9</td>
<td>33.3</td>
<td>39.2</td>
</tr>
<tr>
<td>9. I have negative experiences with the subject of this recommendation.</td>
<td>9.7</td>
<td>13.1</td>
<td>10.3</td>
<td>10.8</td>
</tr>
<tr>
<td>10. I find it difficult to change my routines.</td>
<td>14.8</td>
<td>16.3</td>
<td>17.1</td>
<td>14.9</td>
</tr>
<tr>
<td>11. I did not have enough time to implement this recommendation.</td>
<td>34.7</td>
<td>38.6</td>
<td>32.5</td>
<td>33.8</td>
</tr>
<tr>
<td>12. Colleagues, hospital management and/or supporting staff are not cooperative in implementing this recommendation.</td>
<td>47.9</td>
<td>54.2</td>
<td>44.4</td>
<td>45.9</td>
</tr>
<tr>
<td>13. I was not assigned sufficient expertise support to implement this recommendation.</td>
<td>28.8</td>
<td>34.0</td>
<td>29.1</td>
<td>31.1</td>
</tr>
<tr>
<td>14. The available (financial) means to implement this recommendation are not sufficient.</td>
<td>36.4</td>
<td>39.2</td>
<td>32.5</td>
<td>28.4</td>
</tr>
</tbody>
</table>

Mean score 3.6 3.5 3.6 3.5 3.7 3.4 3.6 3.7
Attitude towards visitatie

The responses on the visitatie attitude scale generally show a positive attitude towards visitatie. The theoretical scale range was 16-80. The mean score was 64.9 (minimum 54, maximum 77) and the median score 64.9. No significant differences were observed between the three specialties nor between the intervention and non-intervention group. However, the responses to the individual statements do vary and are shown in table 4. Respondents’ attitudes towards visitatie were not correlated with the implementation status of the recommendations.

Discussion

Methods
This study has its limitations. Firstly, the implementation results are self-reported and therefore subject to bias. Under ideal circumstances we would have applied both self-report and objective measures to determine the results. (8) However, obtaining the additional data was not possible in the context of this project. Secondly, inherent to the QC design, the implementation projects and the multiple interventions offered were not ad randomly selected. Selection was done by the specialist groups and the management consultant together. Lastly, response rates were excellent for the pediatricians in the intervention group, but modest for others. Although most specialist groups are represented in the study, the modest response rates may have introduced a selection effect. In general, respondents with a negative attitude towards their implementation efforts or results may not have participated in the survey. Also, participants in the intervention group with a less positive attitude to the QC intervention or the management consultant that supported them may not have responded.
We are well aware that this study was not designed as a trial. No causative relations can therefore be established between QC and the implementation of visitatie recommendations.

Quality Consultation effective in realizing change
Our study suggests that Quality Consultation is a powerful strategy in implementing visitatie recommendations. With a relative difference of over 22% between the implementation rates of the intervention and non-intervention group, the results seem to confirm the successfulness of combined and site-specific strategies, as has been established before (9). It is also consistent with previous findings about the effectiveness of facilitators in changing practice (10-12).
Table 4  Specialists’ opinions about visitatie. Overall (total) and per specialty: pediatrics (p), obstetrics/gynecology (g) and surgery (s). Presentation for the intervention (I.) and the non-intervention (N.I.) group. Numbers are between parentheses. Percentage of respondents (strongly) agreeing (Likert scale score 4 and 5).

<table>
<thead>
<tr>
<th>Visitatie statements</th>
<th>Total</th>
<th>Total</th>
<th>P</th>
<th>P</th>
<th>G</th>
<th>G</th>
<th>S</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Visitatie almost always results in practice improvement.</td>
<td>81.7</td>
<td>85.7</td>
<td>82.1</td>
<td>88.2</td>
<td>68.4</td>
<td>83.3</td>
<td>100</td>
<td>85.7</td>
</tr>
<tr>
<td>2. I am well informed about the purpose of visitatie, the way a visitatie committee conducts a survey and the visitatie policy of my specialty society.</td>
<td>85.3</td>
<td>95.9</td>
<td>85.7</td>
<td>94.1</td>
<td>89.5</td>
<td>100</td>
<td>78.6</td>
<td>92.9</td>
</tr>
<tr>
<td>3. The visitatie recommendations are carefully formulated.</td>
<td>78.3</td>
<td>87.8</td>
<td>82.1</td>
<td>88.2</td>
<td>89.5</td>
<td>83.3</td>
<td>53.9</td>
<td>92.9</td>
</tr>
<tr>
<td>4. All specialists should participate in visitatie, also when this is not mandatory.</td>
<td>87.9</td>
<td>100</td>
<td>85.7</td>
<td>100</td>
<td>88.9</td>
<td>100</td>
<td>91.7</td>
<td>100</td>
</tr>
<tr>
<td>5. At the end of the survey day, the visitatie committee has a realistic picture of the reviewed practice.</td>
<td>61.0</td>
<td>77.6</td>
<td>67.9</td>
<td>82.4</td>
<td>61.1</td>
<td>72.2</td>
<td>46.2</td>
<td>78.6</td>
</tr>
<tr>
<td>6. * Visitatie is not threatening to the professional autonomy of individuals.</td>
<td>90.0</td>
<td>93.9</td>
<td>85.7</td>
<td>100</td>
<td>100</td>
<td>94.4</td>
<td>84.6</td>
<td>85.7</td>
</tr>
<tr>
<td>7. Visitatie reveals ‘blind spots’ and old routines.</td>
<td>76.7</td>
<td>64.6</td>
<td>75.0</td>
<td>82.4</td>
<td>73.7</td>
<td>52.9</td>
<td>84.6</td>
<td>57.1</td>
</tr>
<tr>
<td>8. * To participate in visitatie is not a waste of time.</td>
<td>100</td>
<td>95.9</td>
<td>100</td>
<td>94.1</td>
<td>100</td>
<td>94.4</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>9. It is crucial that visitaties are conducted by peers.</td>
<td>93.4</td>
<td>93.9</td>
<td>89.3</td>
<td>88.2</td>
<td>94.7</td>
<td>100</td>
<td>100</td>
<td>92.9</td>
</tr>
<tr>
<td>10. Visitatie is a good method to assess and improve the quality of a practice.</td>
<td>90.0</td>
<td>89.9</td>
<td>85.7</td>
<td>94.1</td>
<td>89.5</td>
<td>83.3</td>
<td>100</td>
<td>92.9</td>
</tr>
<tr>
<td>11. Visitatie increases the trust in the medical profession.</td>
<td>80.0</td>
<td>79.6</td>
<td>71.4</td>
<td>70.6</td>
<td>84.2</td>
<td>83.3</td>
<td>92.3</td>
<td>85.7</td>
</tr>
<tr>
<td>12. It is crucial that during a visitatie others involved in the practice, such as colleagues, GP’s, assistants, hospital management and nurses, are being interviewed.</td>
<td>96.7</td>
<td>100</td>
<td>92.9</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>13. The assurance and improvement of professional quality is an important task of the specialty societies.</td>
<td>96.7</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>94.7</td>
<td>100</td>
<td>92.9</td>
<td>100</td>
</tr>
</tbody>
</table>
Although our study shows that the multifaceted QC is likely to be effective in realizing change, it remains unclear which combination of interventions is effective and complementary as well as which components of the multifaceted strategy are effective under different settings. Given the substantial heterogeneity of the 25 QC projects (including variables related to the practice-specific visitatie recommendations, the specialist group, the local context, the consultant and the interventions) it will be extremely difficult to reveal QC’s ‘black box’.

What we do know is that the QC approach has a moderating effect on the selected obstructing factors, since the supported specialist groups consistently report to experience less barriers in implementing the visitatie recommendations. This mitigating effect is visible throughout all the identified factors (table 3), but seems largest for the barriers lack of implementation knowledge/skills and support, assessed self-efficacy and expected (limited) gains/advantages of implementation efforts.

Contrary to our expectations, medical specialists’ attitudes towards visitatie were not correlated with the implementation results. Apparently, factors other than the acceptance of the visitatie model determine the implementation success. From this study we learn that the set of 14 obstructing factors we investigated in relation to the implementation of visitatie recommendations, turn out to be a good selection in approaching the success of implementation. It explains a great deal (~32% of the variance) of the (lack of) implementation results. Following these findings, it is advisable that in supporting the implementation of visitatie recommendations, interventions should (also) be targeted at the set of obstructing factors investigated in this study.

Investing in management capacities seems to lead to improved implementation of visitatie recommendations. For further and future implementation, the discussion remains in which format these capacities should best be offered. Given the costs involved, offering QC to specialist groups as a standard follow up service of a visitatie might not be attainable. Turning to independent management consultants might remain useful however, in particular situations and for specific problems, for example when mediation skills are required or
when strategic interests are at stake. Besides site-specific interventions, specialist groups might benefit from some training in the field of implementing change. Lastly, we suggest that hospital management becomes more involved in the implementation endeavours of specialist groups, preferably by facilitating them in terms of time, staff and other resources. (13) This seems particularly appropriate since visitatie relates for a great deal to the managerial and organizational aspects of delivering quality care (7).

**Conclusion**

The multifaceted site-specific QC strategy seems to be powerful in implementing visitatie recommendations. Although it remains unclear which (combination of) interventions or components of QC effect change, one potential explanation is the moderating effect that QC seems to have on implementation obstructing factors. Contrary to our expectations, the attitude of medical specialists towards visitatie was not related to the implementation results. For the end of visitatie to be the beginning of real change, we recommend that the focus of any strategy to implement visitatie recommendations also includes the identified obstructing factors.

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