

Restructuring Information of German Website about Methicillin-resistant Staphylococcus  
Aureus (MRSA) for the German General Public with Card Sort Method

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## Abstract

**Purpose:** Methicillin-resistant *Staphylococcus aureus* (MRSA) is a bacterium that has become antibiotic-resistant and is thus a major health issue all over the world. As the prevalence of MRSA in Germany is quite high compared to the Netherlands, INTERREG IIIa Euregio MRSA-net Twente/Münsterland project's goal was and still is to prevent the spread of MRSA transboundary in the Netherlands as well as in Germany. Hence, this research examined whether the existing information structure on the website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) still fits the needs of the German general public. Based on the data gathered in this study, the researchers recommend an adjustment to the website to better meet the target group's preferences and thereby simplify the website use. **Methods:** Participants were selected from the researchers' private network. Thirty-three participants with an age ranging from 18 to 84 ( $M = 44.61$ ,  $SD = 17.92$ ) took part in the study. The majority of them had a university degree, were male and employees. An online card sort with the 50 most searched for questions on the MRSA-net webpage was conducted. Participants had to sort the cards into what they considered to be meaningful categories and give each category a label. The outcomes were analysed with a content analysis and an additional similarity matrix. **Results:** All in all, 23 questions were mainly sorted into their original category, 22 questions were mainly sorted into an alternative category and five questions were equally often sorted into more than one alternative category. In total, eight categories, namely *MRSA Allgemein / Was ist MRSA?* ( $n=20$ ), *Behandlung / Allgemein* ( $n=11$ ), *Schwangerschaft und MRSA* ( $n=5$ ), *Verhaltensweisen* ( $n=6$ ), *Maßnahmen* ( $n=3$ ), *MRSA Allgemein / Definitionen* ( $n=2$ ), *MRSA in der Pflege* ( $n=2$ ), and *Ansteckung/Infektion* ( $n=1$ ) were established. **Conclusion:** Although some categories were sorted into their original categories, more than half of the questions were sorted into alternative categories. This conforms to previously conducted card sorts, in which it was discovered that the original categories remain alongside the newly established categories. This shows that prior studies about the information structure of the MRSA website were successful. However, in order to fit the changing needs of the target group, it is advisable to conduct a card sort on a regular basis to restructure the information on the website. Furthermore, an additional method e.g. analysing google search queries or conducting interviews should be executed in order to meet the additional interest of the general public and to further adjust the website to the expectations of the target group.

**Keywords:** Card Sort, MRSA, Germany, General Public, Website Restructure

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## **Introduction**

### **MRSA**

Methicillin-resistant *Staphylococcus aureus* (MRSA), also known as one of the most common ‘hospital germs’ (Meyer, Schröder, Gastmeier, & Geffers, 2014), is a bacterium that has become antibiotic-resistant and is thus a major health issue all over the world (Tarzi, Kennedy, Stone, & Evans, 2001). Generally speaking, this multi-resistant bacterium does not constitute a big danger for healthy people (Tarzi et al., 2001). However, senior citizens, weak people (Tarzi et al., 2001), as well as people with impaired immune systems are at risk (Demling & Waterhouse, 2007). The infection with this bacterium can cause major health issues such as progressive infections (Demling & Waterhouse, 2007), skin and soft tissue infections (King et al., 2006), pneumonia, sepsis and in extreme cases the infection with MRSA can lead to death (Klebens et al., 2007).

Some European countries have had good success in containing MRSA while others have not (Kappstein, 2006). In 2014, the MRSA prevalence in Germany was approximately 11.8% (European Centre for Disease Prevention and Control, 2018). Although the number of MRSA infections in German hospitals seems to have stabilized (Köck et al., 2011), the number of infections is still significantly higher compared to neighbouring countries like the Netherlands, which had an MRSA prevalence of 0.9% in 2014 (European Centre for Disease Prevention and Control, 2018; Tiemersma et al., 2004). The Netherlands is thus a role model for Germany and other European countries in terms of how best to contain and prevent MRSA (Kappstein, 2006).

In hospitals and other comparable facilities, MRSA is disseminated through direct contact with other patients (Bock-Hensley & Wendt, 2010) or with, for example, contaminated areas, which were not cleaned and disinfected properly, or even by the hospital staff themselves who lack the time to follow proper hygienic measures (Tarzi et al., 2001). In order to prevent the spread of MRSA, as a rule, the affected patients are isolated in single bedrooms until they are free of the infection (Bock-Hensley & Wendt, 2010; Tarzi et al., 2001). Achieving a better standard of hygiene in general patient care is an even more important preventative measure (Kappstein, 2006). However, both are expensive and there is a lack of knowledge among health professionals on how to correctly behave in situations involving the MRSA bacterium. Further, the general public like patients and relatives lack proper knowledge of the disease and need to be educated (van Gemert-Pijnen, Karreman, Vonderhorst, Verhoeven, & Wentzel, 2011; Verhoeven, Karreman, Bosma, Hendrix, & van Gemert-Pijnen, 2010). Thus, in addition to

effective medical care, adequate control, and early discovery, improved risk communication with the general public and with health professionals constitutes another necessary step for the prevention of MRSA (Pittet & Donaldson, 2006).

### **Risk Communication**

According to Fischhoff (1990), risk communication aims to provide ordinary people with the information required so they can independently evaluate the risks and dangers to the environment, health and general safety. When dealing with multi-resistant bacteria like MRSA, this kind of communication is designed to help members of the community to detect them more easily as well to become more conscious about them. Thus, people can learn how to apply prophylactical health as well as infection control measures (Morgan, Fischhoff, Bostrom, & Atman, 2002). One possibility for promoting risk communication is to inform the general public through webpages. This medium was chosen by the INTERREG IIIa Euregio MRSA-net Twente/Münsterland project for spreading awareness about MRSA, as the use of the Internet has fundamentally changed the knowledge and education of health issues (Atkinson, Saperstein, & Pleis, 2009; Verhoeven et al., 2010). Further, more and more people search for health information on their own and, as a return, there needs to be online information available not only for health professionals but also for the general public (Atkinson et al., 2009; Verhoeven et al., 2010).

### **The Website MRSA-net.nl/de**

As better risk communication is needed to educate the general population as well as health professionals like nurses, doctors, and other staff, the website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) was created by the INTERREG IIIa Euregio MRSA-net Twente/Münsterland project. Their goal was and still is to prevent the spread of MRSA across boundaries in the Netherlands as well as in Germany (Pittet & Donaldson, 2006; Verhoeven et al., 2008). Based on a user-centred design approach which included different techniques (document analysis, scenario testing, survey, screen mock-ups with semi-structured interviews, and card sort study), they designed this website according to the needs and abilities of the target group, comprised of both the general public and health care workers from different kinds of wards (Verhoeven et al., 2008).

Both groups can find information fitting their specific needs, as the website's information structure was developed in cooperation with stakeholders (Verhoeven et al., 2008).

The information for the public is structured in 12 main themes e.g. *MRSA Allgemein*, *Behandlung* and *Kontakt mit anderen*, whereas there are 10 main topics for health professionals e.g. *Screening*, *Schutzmaßnahmen* and *Aufnahme* (Wentzel, Müller, Beerlage-de Jong, and Gemert-Pijnen, 2016b).

### **Study of Protocol Website**

A study by Wentzel et al. (2016b) evaluated the robustness of the information architecture of the above-mentioned website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de). In the research, it was examined whether the information available on the mentioned webpage still matched the preferences and abilities of the target group of health care professionals and the general public from the Netherlands and Germany more than one year after its original publication. This study was conducted by integrating the target group into the design process, as it was possible that new issues would appear due to particular factors like altered context, regulations, or reports in the media. Again, this was done by using an open card-sorting task. The results showed that alongside the already existing categories, new ones were suggested by the participants, e.g. financial issues (Wentzel et al., 2016b).

Based on the results of the research, the webpage [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) was adapted to the current preferences of the target group by using a user-centred design approach. The researchers concluded that the Internet page's structure should be regularly evaluated in order to match the changing needs of its target group (Wentzel et al., 2016b). Moreover, it was already found that the German population has different preferences and needs compared to the Dutch population when it comes to MRSA (Wentzel et al., 2016b). Thus, it is advisable to test the preferences of the German target group separately from those of the Dutch.

Further, Wentzel, Beerlage-de Jong, and van der Geest (2016a) concluded that a restructure of a website may be more inevitable when lay people want to use it. Hence, when it comes to a website designed for the general public a redesign is needed periodically.

### **Study Aim**

This study aims to test whether the information structure on the German website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) still fits the needs of the current target group of the German general public. Therefore, a user-centred design is used to integrate the group's perspectives and, accordingly, evaluate whether the new information structure matches their preferences (Maguire, 2001). If necessary,

the results of this study will be used to restructure the website's information in order to facilitate the search for health issues around MRSA for the German general public.

### **Research Question**

As the research focuses on updating the information structure on the German language website about Methicillin-resistant Staphylococcus Aureus for the general public, the following research question was formulated: How does the existing information structure of the German website concerning MRSA match the needs of the general public?

## **Method**

### **Design**

The study design of this research was an open online card sort with 50 cards containing MRSA-related questions and phrases. The 50 cards were selected according to the terms most frequently searched for on [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de).

### **Participants**

Participants were selected from the personal network of the researchers in the time frame from the beginning of April until mid-April. The data was gathered during the period from the beginning of April until the end of April. A total of 34 participants took part in the research. As participants needed to be at least 18 years old, one participant was excluded from the research as the participant was under the age of 18. Thus, the data of 33 participants data was valid. All of the participants were German. The majority of the participants were male. The participants' ages ranged from 18 to 84 with a mean age of 44.61 ( $SD = 17.92$ ). Most of the participants held university degrees ( $n=18$ ) as their highest education. Furthermore, the majority of them ( $n=22$ ) were employed at the time of their participation.

Table 1

*Demographic Data (N=33)*

	%	n
Participants		
Female	45.45	15
Male	54.55	18
Educational Level		
Completed Vocational Training	9.09	3
Secondary Education	9.09	3
Vocational Baccalaureate Diploma (German <i>Fachabitur</i> )	9.09	3
Higher Educational Entrance Qualification (German <i>Abitur</i> )	18.18	6
Polytechnic Degree (German <i>Fachhochschulabschluss</i> )	18.18	6
Bachelor's degree	9.09	3
Master's degree	6.06	2
German University Diploma	18.18	6
State Examination	3.03	1
Profession		
Employer	3.03	1
Employee	66.67	22
Student	18.18	6
Pensioner	9.09	3
Other	3.03	1

**Materials**

To participate in the online questionnaire, participants needed to have an electric device with a functioning Internet connection. The website Optimal Workshop was used to create and execute the online card sort. More specifically, the Optimal Sort feature on the Optimal Workshop website was used, which allows for online card sorts to be created and conducted (Optimal Workshop, 2019). The software itself analyses the data and the different categories created, as well as creates and analyses standardization grids, similarity matrixes, dendrograms, and participant-centric analysis.

The card sort is a technique utilized to illustrate the structure of different topics and to obtain information about how stakeholders use facts, for instance, to reorganize a webpage (Maguire, 2001; Rosenfeld & Morville, 2002). There are two variations of card sorting, namely the closed card sort and the open card sort. In a closed card sort, users receive cards with predetermined categories on them, to which they have to sort other cards with different content such as topics or questions. In an open card sort, participants receive a set of various cards with



different content on them, which they need to arrange in matching groups. They subsequently must name each category they created (Rosenfeld & Morville, 2002). In both cases, after data is collected from different participants of the target group, the results are compared, analysed and are used in order to optimize and restructure for example the information on a website (Maguire, 2001).

In this study, an open card sort was selected so participants are not biased with predetermined categories as would have been the case in a closed card sort (Rosenfeld & Morville, 2002) and to allow them as much flexibility as possible in the grouping process (Wentzel et al., 2016b). In total, participants got a set of 50 different cards, which were previously selected by the researchers based on the most frequently searched topics on [www.MRSA-net.net/de](http://www.MRSA-net.net/de), e.g. *Was ist MRSA?*, *Ist MRSA auf Kinder übertragbar?*, and *Was sind die Folgen einer MRSA-Trägerschaft für mein Baby?*.

## **Procedure**

Prior to the study was created in March 2019, a request was submitted to the BMS ethics committee (EC), which approved the execution of this research on collecting data in order to restructure the information of the German website about MRSA. The ethical approval number is 190192. Furthermore, a pilot test was conducted with one volunteer from the researchers' personal network. Following the pilot test, small adjustments were made e.g. the introductory text was edited. Participants who decided to take part in the study had to first fill out an informed consent form before starting. In the informed consent form, it was indicated that each participant had the option to stop participating at the research at any time and without stating reasons. Moreover, they were informed that the data will remain anonymous and are treated confidentially. Each participant was then informed about the procedure of the task and the goal of the study. Participants were subsequently asked to fill in information about their demographic data (gender, age, educational level, and profession).

Afterwards, four steps for executing the card sort were explained briefly. The first instruction was to look at the questions on the left side of the screen and, after reading the instructions, to sort them into meaningful categories. It was stated that there is no minimum or maximum number of categories that can be created. Furthermore, it was stated that there is no right and no wrong answer in this task. The second instruction was to drag a question from the left side to the area on the right to form the first category. The next step was to click on the title

to give the category a label. The fourth and final step consisted of adding more questions to a category by dragging them to the top of the list. Moreover, to create new categories, the questions needed to be dragged to unused space. When the participant had finished, he/she should click on "Finished".

After getting the instructions, the same set of 50 cards in the online situation was shown to the participants. After sorting and labelling the cards, participants had to answer two post-study questions, namely if they perceived that questions/topics were missing in the card sort and if they are interested in the results of the study. When this was the case, they had the opportunity to give feedback and state their e-mail address in order to later receive information about the study results. For participants, on average the card sort took around 20 minutes to conduct, where the longest time was 03:50:51 hours and the shortest was 06:31 minutes.

### **Data Analysis**

The data gathered via Optimal Workshop were imported to the program IBM SPSS Statistics 25. Next, demographic data including age, gender, educational level, and profession were analysed using the program IBM SPSS Statistics 25.

The results of the card sort task were analysed via a content analysis performed on the categories created by the participants. The results of each individual card sort were entered into an online table. In this table, they were then contrasted with each other, a process completed by summarizing and standardizing all the created labels for the categories established by each participant. For example, the labels *Allgemeine Infos* and *Informationen* were coded into *MRSA Allgemein / Was ist MRSA?*; *Behandlungsfragen* and *Wie behandelt man MRSA?* were coded into the category *Behandlung / Allgemein*. Here, existing categories on [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) were used for standardization when appropriate (e.g. the category *Behandlung / Allgemein*).

Each question was ascribed to the category that was most frequently named for the question by the participants. In the following step, the category mentioned most frequently for a question was compared to the original category on the website. As on the website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) each question belongs to a main category and a subcategory, both categories were considered for the content analysis. For example, question 13 (Kann man an den Folgen von MRSA sterben?) was sorted into the category *Allgemeine Informationen* 19 times, but also sorted three times into the category *Was ist MRSA?* by the participants. As the

original category on the website is *MRSA Allgemein / Was ist MRSA?*, both answers count for the original category. Hence, 22 participants came up with this category.

If a question could not be unambiguously assigned to a category due to an even distribution over several categories, the results of the card sort were additionally analysed with a similarity matrix. This was the case for five of the 50 questions, as they were equally frequently sorted into two or three categories by participants. The similarity matrix was automatically generated by Optimal Workshop. The similarity matrix shows how often each question has been grouped into a category with each of the other questions used in the card sort.

As a rule, these five questions were assigned to the same category as the question with which they were grouped most frequently, e.g. question 16 was most often grouped with question 3. Thus, question 16 is assigned to the same category as question 3. However, the mentioned alternative categories for the five questions were also considered. This means that a question was always sorted into one of the two or three categories to which it was mostly assigned by the participants. So, if question A was grouped most often with question B that was assigned mainly to a different category than the two or three categories mentioned for question A, the category mentioned most often for question B was not considered for grouping question A. Instead, it was checked with which question, question A was second most often sorted. When the question was grouped into one of the two or three categories into which also question A was mainly sorted, this category was used as the final category.

Thus, the new categories that were established for restructuring the information on the website were mainly based on how often a label was mentioned for a question by the participants. If necessary, questions were ascribed to the category of the question with which it was grouped most often.

## **Results**

### **Content Analysis**

All in all, 23 questions were mostly sorted into their original category, 22 questions were mainly sorted into an alternative category and five questions were equally often sorted into two respectively three alternative categories.

### **Questions mainly sorted into their original category.**

Of the 23 questions sorted into their original categories, 12 were sorted into *MRSA Allgemein / Was ist MRSA*, five were sorted into *Behandlung / Allgemein*, four were sorted into the category *Schwangerschaft und MRSA*, and two were sorted into the category *MRSA Allgemein / Definitionen*. The original categories *Schwangerschaft und Säuglinge / Schwangerschaft und MRSA* as well as *Behandlung / Anwendung* were renamed as *Schwangerschaft und MRSA* and *Behandlung / Allgemein* as participants solely mentioned one subcategory of the original category. Still, the questions in these two categories remain in the same main category and thus considered to belong to their original category. A complete overview of these questions can be found in Appendix A.

### **Questions mainly sorted into alternative categories.**

The following questions were all mainly sorted into alternative categories by the participants. The heading indicates the alternative category that was most often created for a question.

#### ***MRSA Allgemein / Was ist MRSA?***

Only one participant came up with the original category *Hygiene und Reinigung / Hygiene* for question 6 (Ist es möglich durch bestimmte Maßnahmen kein MRSA zu bekommen?). Most participants (n=8) felt that the question should be placed in the alternative category. Besides this category, the participants created nine other alternative categories e.g. *Vorbeugung* (n=6).

None of the participants created the original category *An MRSA erkranken / Verbreitung und Vorkommen* for question 11 (Ist MRSA durch Speichel übertragbar?). Instead, most (n=12) came up with the alternative label. Nine other alternative categories were created by the participants, e.g. *Ansteckung/Infektion* (n=7) or *Übertragung* (n=7).

Question 17's (Warum kommt MRSA in den Niederlanden viel weniger vor als in Deutschland?) original category was *Deutschland und andere Länder / MRSA in Deutschland und in andere Länder*. None of the participants created a category with this label. However, most of them (n=21) conceived of the alternative category. Twelve other alternative categories were created e.g. *Vorbeugung* (n=2).

Participants did not come up with the original category *Deutschland und andere Länder*

/ *MRSA in Deutschland und in anderen Ländern* for question 28 (Welche Krankenhäuser haben das EUREGIO Qualitäts- und Transparenzsiegel?). However, the alternative category was created 10 times. Eleven other alternative categories were created e.g. *Behandlung* (n=5).

Only one participant created a category with the original label *An MRSA erkranken / Verbreitung und Vorkommen* for question 33 (Wie bemerke ich, dass ich MRSA besiedelt bin?). Instead, the alternative category was created 12 times. In total, participants grouped the question in 13 other alternative categories e.g. *Symptome* (n=3).

### ***Behandlung / Allgemein.***

None of the 33 participants formed the original category *Im Krankenhaus / Nach Entlassung* for question 19 (Warum muss ich als MRSA-Patient im Krankenhaus isoliert werden, aber nach meiner Entlassung (in meinem Pflegeheim) nicht mehr?). In total, participants created 15 alternative categories for this question. The categories *Behandlung* (n=7) and *Maßnahmen* (n=6) were mentioned most often.

Question 36 (Wie kann ich eine Wunde bei einer MRSA-Infektion am besten sauber halten?) was twice sorted into its original category *Hygiene und Reinigung / Hygiene*. Instead, the alternative category was established 12 times. Further, there were 10 more alternative categories alongside *Behandlung*, e.g. *Verhaltensweisen* (n=4).

Only two participants conceived of the original label *Untersuchung / Informationen über Screening* for question 42 (Wie lange dauert es, bis die Abstrichbefunde bekannt sind?). Instead, participants came up eight times with the alternative category. Further, they sorted the question in 14 other alternative categories e.g. *Diagnoseprozess* (n=4).

Question 45 (Wie oft muss ein Abstrichbefund von MRSA-Patienten negativ sein, bis dieser nicht mehr isoliert gepflegt werden muss?) was sorted into its original category *Untersuchung / Informationen über Screening* once and 10 times into the alternative category. Participants came up with 15 other alternative categories e.g. *Therapie* (n=2).

Question 50 (Wovon wird ein Abstrich genommen?) was only twice sorted into the original category *Untersuchung / Informationen über Screening*. Thirteen alternative categories were created for this question. *Behandlung* (n=8) and *Allgemeine Informationen* (n=7) were the categories most often established by participants.

### ***Verhaltensweisen.***

The first question (Darf ich als MRSA-Träger meine Familie besuchen?) was only sorted four times into its original category *Kontakt mit anderen / Was ich darf und was nicht?* and five times into the alternative category. In total, participants created 15 other alternative categories e.g. *Ansteckung* (n=3).

Question 3 (Darf ich zuhause Besuch empfangen, wenn ich MRSA-positiv bin?) was twice sorted into its original category *Kontakt mit anderen / Maßnahmen zu Hause* and seven times into the alternative category. In total, participants thought of 16 other alternative categories e.g. *Ansteckung* (n=4).

Three participants created a category with the original label *Kontakt mit anderen / Was ich darf und was nicht?* for question 12 (Kann ich anderen die Hände schütteln, wenn ich MRSA habe?). The alternative category was created six times. Participants established 12 other alternative categories e.g. *Folgen* (n=4).

Only three participants came up with the original category for question 15 (Muss ich jeden Tag meine Kleidung waschen, wenn ich MRSA habe?), namely *Hygiene und Reinigung / Waschen und reinigen*. The question was sorted six times into the alternative category. Thirteen other alternative categories were created by the participants e.g. *Maßnahmen* (n=5).

Question 46 (Wie oft muss ich mir die Hände waschen, wenn ich MRSA habe?) was sorted into its original category *Hygiene und Reinigung / Hygiene* by only two participants. Seven participants came up with the alternative category. The other participants created 13 other alternative categories e.g. *Maßnahmen* (n=5).

### ***MRSA und Schwangerschaft.***

Question 26 (Was sind die Folgen für mein Kind, wenn ich selbst MRSA-positiv bin?) was sorted six times into its original category *Kontakt mit anderen / Folgen (für die Menschen um mich herum)* and 11 times into the alternative category. Participants came up with 10 other alternative categories, e.g. *Allgemeine Informationen* (n=3).

### ***Maßnahmen.***

Only three participants sorted question 7 (Ist es wirklich notwendig sämtliche Kleidung auf 60 Grad zu waschen um MRSA zu entfernen?) into its original category *Hygiene und*

*Reinigung / Waschen und reinigen.* Seven participants sorted question 7 into the alternative category. Participants came up with 13 other alternative questions e.g. *Behandlung* (n=4).

Only one participant sorted question 29 (Welche Maßnahmen müssen genommen werden, wenn in einer Kindertageskrippe oder einer Schule ein Kind oder Lehrer/Betreuer MRSA hat?) into its original category *MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen)*. Instead, the alternative category was created eight times. Participants created 14 other alternative categories e.g. *Verhaltensweisen* (n=3).

Four participants sorted question 30 (Welche Maßnahmen müssen im Pflegeheim genommen werden, wenn ein MRSA-Patient nach Krankenhausentlassung in das Pflegeheim kommt?) into its original category *Im Krankenhaus / Nach Entlassung*. However, the alternative category was most frequently (n=7) created by participants. In total, 16 other alternative categories were created by the participants, e.g. *Ansteckung/Übertragung* (n=3).

### ***MRSA in der Pflege.***

Only three participants created the original category *MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen)* for question 32 (Welcher Arbeit darf ich noch nachgehen, wenn ich selbst MRSA-Träger bin und in der Pflege tätig bin, aber nicht in der Abteilung arbeiten darf, auf der sich auch Patienten befinden?). Instead, 7 participants came up with the alternative category and 14 other alternative categories were established e.g. *Verhaltensweisen* (n=4).

Question 43 (Wie lange muss ich zuhause bleiben, wenn ich in der Pflege arbeite und MRSA habe?) was only twice sorted into its original category *MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen)*. Instead, the question was sorted seven times into the alternative category. Fifteen other alternative categories were established for question 43 e.g. *Ansteckung* (n=3).

### ***Ansteckung.***

Only three participants sorted question 5 (Dürfen mein Partner und ich im gleichen Bett schlafen, wenn ich MRSA habe?) into the original category *Kontakt mit anderen / Was ich darf und was nicht?*. The alternative category was mentioned four times. Participants created 15 other alternative categories e.g. *Übertragung* (n=3).

**Questions sorted into more than one alternative category.**

The following questions were all sorted equally often into two or three alternative categories by the participants.

None of the participants sorted question 8 (Ist MRSA auch sexuell übertragbar?) into its original category *An MRSA erkranken / Verbreitung und Vorkommen*. However, question 8 was mainly and equally sorted into the categories *Ansteckung/Infektion* (n=7), *Übertragung* (n=7), and *Allgemeine Informationen* (n=7). Besides these three alternative categories, participants created 10 other alternative categories.

Question 9 (Ist MRSA auf Kinder übertragbar?) was sorted into its original category *Kontakt mit anderen / Folgen (für die Menschen um mich herum)* by three participants. Participants created eight alternative categories. The two predominantly mentioned categories were *Allgemeine Informationen* (n=8) and *MRSA und Schwangerschaft* (n=8).

The original category for question 16 (Müssen die Menschen, bei denen ich übernachtet habe, sich auf MRSA testen lassen, wenn ich MRSA habe?) is *Untersuchung / Informationen über Screening*, in which none of the participants sorted question 16. Instead, participants created 16 alternative categories for this question. *Verhaltensweisen* and *Maßnahmen* were both mentioned most often (n=4) by the participants.

The original category for question 18 (Warum muss bei Bestehen von Risikofaktoren vor oder während einer (Krankenhaus-) Aufnahme eine Screeninguntersuchung auf MRSA-Trägerschaft ausgeführt werden?) is *Untersuchung / Informationen über Screening*. Only two participants established a category called *Untersuchung*. However, other participants sorted question 18 into 15 alternative categories. The ones that were most often created were *Behandlung* (n=6) as well as *Allgemeine Informationen* (n=6).

Two participants sorted question 49 (Wie wird eine Untersuchung auf MRSA durchgeführt?) into its original category *Untersuchung / Informationen über Screening*, as they established both a category named *Untersuchung*. Thirteen alternative categories were created for this question. Most often the categories *Behandlung* (n=8) and *MRSA Allgemein / Was ist MRSA?* (n=8) were created.



## Similarity Matrix

As one can see in the content analysis, for five questions there was no clear-cut answer provided by this type of analysis as to which category they belonged in. For this reason, an additional similarity matrix was conducted.

Question 8 was grouped into the same category as question 11 (category *MRSA Allgemein / Was ist MRSA?*) by most participants (n=28). Thus, question 8 was also sorted into the category *MRSA Allgemein / Was ist MRSA?*.

Most participants (n=23) grouped question 9 into the same category as question 8. As question 8 was based on the similarity matrix analysis, ascribed to the category *MRSA Allgemein / Was ist MRSA?*, question 9 was also sorted into the category *MRSA Allgemein / Was ist MRSA?*.

Question 16 was grouped mainly (n=24) into the same category as question 3, which was mainly categorised into *Verhaltensweisen*. Therefore, question 16 was also grouped into the category *Verhaltensweisen*.

Question 18 was grouped most often into a category with questions 30 (n=15) (category *Maßnahmen*) as well as with question 42 (n=15) (category *Behandlung / Allgemein*). Nevertheless, since question 18 was not grouped itself into the category *Maßnahmen* by the participants, it was not assigned to this category, but to the category *Behandlung / Allgemein*.

Question 49 was mainly grouped into a category with questions 38 (n=19) and 37 (n=19), which were both mostly ascribed to the category *MRSA Allgemein / Was ist MRSA?*. Therefore, question 49 was also ascribed to the category *MRSA Allgemein / Was ist MRSA?*.

## General Remarks and Conclusion

After comparing the two analysis methods and consolidating the results, the 50 questions were ascribed to a total of eight categories, namely *MRSA Allgemein / Was ist MRSA?* (n=20), *Behandlung / Allgemein* (n=11), *Schwangerschaft und MRSA* (n=5), *Verhaltensweisen* (n=6), *Maßnahmen* (n=3), *MRSA Allgemein / Definitionen* (n=2), *MRSA in der Pflege* (n=2), and *Ansteckung/Infektion* (n=1). Appendix B gives a detailed overview of all the categories created by participants with their distribution as well as the original categories of the questions. A table of the final categorisation can be found in Appendix C.

At the end of the card sort, participants gave feedback about missing items. On one occasion each it was mentioned that items about free time activities, especially if MRSA

carriers are allowed to do sports, the job, the process of MRSA with its different stages, the elderly, chronic diseases, aftereffects, and the disease duration were missing, whereas one participant noticed that a lot of items dealt with the topics of family and care.

## Discussion

This research about restructuring the information of the German language website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) provided insights into the preferences of the German general public regarding the structure of information on the [MRSA-net.nl/de](http://www.MRSA-net.nl/de) page. The research question was how the existing structure of the information on the German website about MRSA matches the needs of the general public. After analysing the outcomes of the study, it can be concluded that the existing structure no longer fits the needs of the general public. This conclusion was found by analysing the participants' data via a combination of a content analysis and a similarity matrix. In the following paragraphs, the results of this research will be interpreted.

As 23 of the 50 tested questions remained in their original category, it can be concluded that at least some questions have already been accurately categorized based upon the preferences of the website users. This supports the results of van Gemert-Pijnen et al. (2011), who found in their study that “after two years of usage most categories remained intact” (p.12). As the [MRSA-net](http://www.MRSA-net.nl/de) page was last updated more than two years ago based upon the study by Wentzel et al. (2016b), it is understandable that more than half of the categories were sorted into alternative categories.

Although several questions remained in their original categories, more than half of the questions were ascribed to alternative categories, partially not present on the MRSA website and partially present in a different form. This shows that the preferences of the participants for the categorisation structure has changed and needs to be considered when restructuring the website, at least to some extent. There may be multiple reasons for this change. One reason might be that the majority of the participants were middle-aged and older adults. These people might not consider some of the existing categories as they do not speak English very well or even at all. One example is question 16, which was originally sorted into the category *Untersuchung / Informationen über Screening*. As MRSA is especially dangerous for old and sick people (Tarzi et al., 2001), it might be the case that these people search more frequently for information about MRSA compared to young people. However, a lot of the older adults in Germany, according to their own statements, do not speak English (IfD Allensbach, 2018) and

thus probably do not understand the word 'Screening' as it is an English word. This might explain why they created alternative categories for this question. Hence, it is advisable to rename and restructure this category.

Another reason why participants may have come up with several different labels is because the knowledge of the general public about MRSA varies between participants. Hence, they might set different priorities or understand things differently and therefore sort cards in different manners. Also, Wentzel et al. (2016b) concluded based on their study results that the knowledge of the general public about MRSA varies between participants, which might be due to their prior experiences with this topic as well as their educational level. This might explain why there was an equal distribution of some questions in the categories. For example, question 5 was sorted about the same number of times into different categories. Thus, participants might have had a different understanding of this question or set another focus caused by their own experience or knowledge. The lack of knowledge might also explain the large number of questions in the category *MRSA Allgemein / Was ist MRSA?* as participants could have sorted the questions they did not understand properly into this category.

However, Wentzel et al. (2016a) consider it possible that the integration of participants with no prior knowledge about the subject in the restructuring process can increase the chances of achieving understandable and universal information structures. Therefore, it may be beneficial that these participants were included in this study as it is designed to improve the structure on the website for the general public. As participants probably did not have a lot of knowledge concerning the topic, they might have sorted the questions into diverse categories. This was also the case in a study by Wentzel et al. (2016b). Thus, others who have a similar level of knowledge will be able to find information more easily as they have a similar search behaviour.

All in all, the online card sorting method provided insights into the structure design preferences of the target group. With this type of method, the researchers were able to collect data about the preferences as well as the preference changes concerning the website structure from members of the target group quickly and easily. However, since only existing data from the website was used, there may be a lack of information on the website for the target group. Thus, a card sort can only be used as an additional method to find out about the redesign of already existing questions and topics. Hence, a card sort is not appropriate for finding out about interest for new questions or topics of the target group. Also, Gemert-Pijnen et al. (2011) concluded that the card sort method is a useful tool to make small adjustments concerning the

information structure of a website. An additional method should be used to find out further interests and questions of the target group. This can be done by analysing google search queries (Wentzel et al., 2016b) or conducting interviews with members of the specific target group. Moreover, based on the feedback from the participants, there should be a maximum of 50 cards used in the card sort. According to Spencer, this is also the maximum number of cards that should not be exceeded in an open card sort (2009).

As already proved by Wentzel et al. (2016b), a card sort can be conducted periodically in order to fit the changing needs of the target group because preferences change over time. This study provided additional evidence that the target group, in this case, the general public, has changing needs and preferences concerning the structure of information on the Internet page. However, earlier studies show that some preferences remain (van Gemert-Pijnen et al., 2011), which proves that previously conducted card sorts were successful. Hence, it is advisable to conduct similar card sort studies and reorganize the website on a regular basis in order to meet the expectations of the target group.

### **Strengths, Limitations and Recommendations**

A strong point of this study is the large and diverse sample. As there were 33 participants ranging from 18 to 84 years, participants from several age groups were included in the research. According to Nielsen (2004) “testing 30 people gives a correlation of 0.95“. Thus, this research can exhibit a high correlation between participant results.

However, some limitations are also apparent, which can function as recommendations for future research. First, as the card sort was conducted with only 50 selected questions and not with all questions on the website, there were some questions like question 28 that did not fit into a category with many other questions. Further, on the original website, the only question which was also used in this card sort and is grouped with question 28 is question 17. Thus, it might have happened that participants had the feeling that a group of only two questions is too small and, as a result, sorted the questions randomly with other questions instead of creating a single category for only one or two questions. In future card sorts, it might be advisable to consider such situations and explicitly mention that participants can create categories with just one or only a few questions if they have the feeling that there is no fitting group for those questions.

Second, some participants directly told the researcher that they had technical problems with the card sort study on the webpage of Optimal Workshop, which is why they had to interrupt it and start over again. They mentioned they were disappointed by this fact and indicated to have problems with their concentration as it took them additional time to sort the cards again. It might have happened that participants took the card sort less seriously when they had to conduct it two or three times. Even though technical problems can always appear, it is advisable to use a program where the chance of technical problems is as low as possible. As an alternative, an offline card sort can be conducted. However, in this case the expenditure of time would be higher for participants as well as researchers. Therefore, the advantages and disadvantages should be carefully weighed when choosing the medium.

The more participants ascribed a question into the same category, the stronger the category. For example, question 24 was sorted 29 times into the category *MRSA Allgemein / Was ist MRSA?*, whereas question 6 was only sorted 8 times into the category *MRSA Allgemein / Was ist MRSA?*. Hence, a third limitation is that some categories are quite weak compared to others. In order to prevent this, additional analyses can be conducted such as a dendrogram or a detailed similarity matrix. Due to time constraints, however, no additional analyses could be performed in this study.

### **Practical Implications and Suggestions for Further Research**

With the data gained in this study, the webpage [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de) can be adapted to the target group's preferences.

As this card sort gave additional insights into the shift in participants' preferences concerning the information structure of the website [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de), it is advisable to collect data with a card sort regularly. The aim of this data collection is for the information structure to be periodically and further adapted to the target group's preferences as done in this study.

Moreover, as participants mentioned that some topics such as free time activities were missing, it is shown that there are still open questions that need to be answered in order to enlighten the members of the target group. This must be considered in any further restructuring of the website. Thus, an additional step to the card sort might be to get to know more about the members of the target group. As mentioned previously this can be done by adding a different type of method.

## **Conclusion**

Based on the findings, it can be concluded that card sorting is a useful method to learn more about a target group's preferences concerning the structure of already existing information on an Internet page. Particularly in the medical case, this method can be used to restructure the information on a website as people are frequently searching for health issues online as well as on their own.

Furtermore, it is advisable to collect additional data about the target groups' interests beside the questions and topics treated in the card sort in order to have the possibility to adjust the website structure with additional information not yet present on the webpage.

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## Appendix

### Appendix A

Table 2

*Questions Mainly Sorted into their Original Category*

Question	Category
2 Darf ich einen MRSA-Träger pflegen/behandeln, wenn ich schwanger bin?	Schwangerschaft und MRSA
4 Darf ich, wenn ich schwanger bin, jemanden besuchen, der MRSA hat?	Schwangerschaft und MRSA
25 Was sind die Folgen einer MRSA-Trägerschaft für mein Baby?	Schwangerschaft und MRSA
47 Wie sieht die Gefahr für mein (ungeborenes) Baby aus, wenn ich MRSA-Träger bin?	Schwangerschaft und MRSA
10 Ist MRSA behandelbar?	Behandlung / Allgemein
14 Kann man erneut an MRSA erkranken, auch wenn man erfolgreich behandelt wurde?	Behandlung / Allgemein
41 Wie lange dauert eine durchschnittliche Behandlung einer MRSA-Trägerschaft?	Behandlung / Allgemein
48 Wie wird eine MRSA-Infektion behandelt?	Behandlung / Allgemein
20 Warum werden einige Antibiotika durch eine Infusion und andere durch eine Tablette verabreicht?	Behandlung / Allgemein
13 Kann man an den Folgen von MRSA sterben?	MRSA Allgemein / Was ist MRSA?
21 Was ist CA-MRSA?	MRSA Allgemein / Was ist MRSA?
24 Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
27 Was sind die Folgen von MRSA für eine gesunde Person?	MRSA Allgemein / Was ist MRSA?
31 Welche Menschen haben ein höheres Risiko an MRSA zu erkranken?	MRSA Allgemein / Was ist MRSA?
34 Wie groß ist das Risiko, dass ich MRSA nie wieder loswerde?	MRSA Allgemein / Was ist MRSA?

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35	Wie häufig kommt MRSA vor?	MRSA Allgemein / Was ist MRSA?
37	Wie kann man MRSA erkennen? Oder: was sind die Symptome von MRSA?	MRSA Allgemein / Was ist MRSA?
38	Wie kann MRSA nachgewiesen werden?	MRSA Allgemein / Was ist MRSA?
39	Wie kann MRSA sich verbreiten?	MRSA Allgemein / Was ist MRSA?
40	Wie lange dauert die Erkrankung an MRSA?	MRSA Allgemein / Was ist MRSA?
44	Wie oft kann man MRSA bekommen?	MRSA Allgemein / Was ist MRSA?
22	Was ist der Unterschied zwischen Kolonisation (Besiedlung) und Infektion?	MRSA Allgemein / Definitionen
23	Was ist der Unterschied zwischen MRSA und ORSA?	MRSA Allgemein / Definitionen

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**Appendix B**

Table 3

*Question, Original Category on the MRSA-net Website and Alternative Categories given by the Participants*

Question	Original Categories	Alternative Categories
1 Darf ich als MRSA-Träger meine Familie besuchen?	Kontakt mit anderen / Was ich darf und was nicht? (n=4) - Kontakt mit anderen (n=4)	Verhaltensweisen (n=5) Ansteckung (n=3) Übertragung (n=3) Maßnahmen (n=3) Folgen (n=2) Ich habe MRSA (n=2) MRSA mit Kind/Familie (n=2) Privatfragen (n=1) Allgemeine Informationen (n=1) MRSA und Arbeit (n=1) Hygiene (n=1) Vorbeugung (n=1) MRSA zu Hause (n=1) Sonstiges (n=1) Persönliche Folgen (n=1) Folgen für andere (n=1)

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- |   |   |   |  |
|---|---|---|--|
| 2 | Darf ich einen MRSA-Träger pflegen/behandeln, wenn ich schwanger bin? | Schwangerschaft und Säuglinge / Schwangerschaft und MRSA (n=14)<br>- MRSA und Schwangerschaft (n=14)        | Ansteckung (n=3)<br>Allgemeine Informationen (n=3)<br>Folgen (n=2)<br>Übertragung (n=2)<br>Vorsorgemaßnahmen (n=2)<br>Soziale Kontakte (n=1)<br>Privatfragen (n=1)<br>Behandlung im Krankenhaus (n=1)<br>Sonstiges (n=1)<br>Pflege und Besuch (n=1)<br>Aufklärung über MRSA (n=1)<br>Jemand anderes hat MRSA (n=1) |
| 3 | Darf ich zuhause Besuch empfangen, wenn ich MRSA-positiv bin?         | Kontakt mit anderen / Maßnahmen zu Hause (n=2)<br>- Kontakt mit anderen (n=1)<br>- Maßnahmen zu Hause (n=1) | Verhaltensweisen (n=7)<br>Ansteckung (n=4)<br>Übertragung (n=3)<br>Informationen für Betroffene (n=2)<br>Persönliche Fragen (n=2)<br>Pflege und Besuch (n=2)<br>Was kann ich tun? (n=1)<br>Krankheitsbild (n=1)<br>Vorbeugung (n=1)  |

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		Persönliche Folgen (n=1)
		Was sind die Folgen? (n=1)
		Soziale Kontakte (n=1)
		Allgemeine Informationen (n=1)
		Hygiene (n=1)
		Maßnahmen, um die Verbreitung von MRSA zu verhindern (n=1)
		MRSA und Arbeit (n=1)
		Folgen für andere (n=1)
4	Darf ich, wenn ich Schwangerschaft und Säuglinge / Vorbeugung (n=2)	
	schwanger bin, Schwangerschaft und MRSA (n=14)	Übertragung (n=2)
	jemanden besuchen, der - MRSA und Schwangerschaft (n=14)	Folgen für andere (n=2)
	MRSA hat?	Ansteckung/Infektion (n=2)
		Folgen (n=2)
		Allgemeine Informationen (n=1)
		Ansteckung/Verbreitung (n=1)
		Privatfragen (n=1)
		Persönliche Folgen (n=1)
		Soziale Kontakte (n=2)
		Aufklärung über MRSA (n=1)
		Hygiene (n=1)
		Maßnahmen (n=1)

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- |   |  |  |  |
|---|--|--|--|
| 5 | Dürfen mein Partner und ich im gleichen Bett schlafen, wenn ich MRSA habe? | Kontakt mit anderen / Was ich darf und was nicht? (n=3)<br>- Kontakt mit anderen (n=3) | Ansteckung/Infektion (n=4)<br>Maßnahmen (n=4)<br>Verhalten bei Infektion (n=3)<br>Übertragung (n=3)<br>Partner und Baby (n=3)<br>Ich habe MRSA (n=2)<br>Folgen für das persönliche Umfeld (n=2)<br>Krankheitsbild (n=1)<br>Persönliche Folgen (n=1)<br>Folgen (n=1)<br>Vorbeugung (n=1)<br>MRSA-Träger (n=1)<br>Schwangerschaft und Kinder (n=1)<br>MRSA zu Hause (n=1)<br>Hygiene (n=1)<br>Privatfragen (n=1) |
| 6 | Ist es möglich durch bestimmte Maßnahmen kein MRSA zu bekommen?            | Hygiene und Reinigung / Hygiene (n=1)<br>- Hygiene (n=1)                               | Allgemeine Informationen (n=8)<br>Vorbeugung (n=6)<br>Maßnahmen (n=5)<br>Ansteckung/Infektion (n=5)<br>Was ist MRSA (n=2)  |

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		Übertragung (n=2)
		Aufklärung über MRSA (n=1)
		Medizinische Fragen (n=1)
		Krankheitsbild (n=1=)
		Wie behandelt man MRSA (n=1)
7	Ist es wirklich Hygiene und Reinigung / Waschen und notwendig sämtliche reinigen (n=3) Kleidung auf 60 Grad - Hygiene (n=3) zu waschen um MRSA zu entfernen?	Maßnahmen (n=7) Verhalten bei Infektion (n=4) Behandlung (n=4) Übertragung (n=3) Folgen (n=2) Ich habe MRSA (n=1) Vorbeugung (n=2) Ansteckung (n=1) Privatfragen (n=1) MRSA und Arbeit (n=1) Nachfragen diverser Art (n=1) Medizinisches (n=1) Persönliche Folgen (n=1) Allgemein (n=1)
8	Ist MRSA auch sexuell übertragbar?	An MRSA erkranken / Verbreitung und Vorkommen Ansteckung/Infektion (n=7) Übertragung (n=7)



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		Allgemeine Informationen (n=7)
		Was ist MRSA? (n=2)
		Partner und Baby (n=2)
		Aufklärung über MRSA (n=1)
		Vorbeugung (n=1)
		Krankheitsbild (n=1)
		Privatfragen (n=1)
		Ich habe MRSA (n=1)
		Schwangerschaft und Kinder (n=1)
		Soziale Kontakte (n=1)
		Fakten (n=1)
9	Ist MRSA auf Kinder übertragbar?	Kontakt mit anderen / Folgen (für die Menschen um mich herum) (n=3)
		- Folgen (n=2)
		- Kontakt mit anderen (n=1)
		MRSA und Schwangerschaft (n=8)
		Allgemeine Informationen (n=8)
		Ansteckung (n=5)
		Übertragung (n=5)
		Privatfragen (n=1)
		Partner und Baby (n=1)
		Ich habe MRSA (n=1)
		Definition und Ursachen (n=1)
10	Ist MRSA behandelbar?	Behandlung / Allgemein (n=22)
		- Allgemeine Informationen (n=14)
		Was ist MRSA? (n=4)
		Krankheitsbild (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

	- Behandlung (n=8)	Krankheit/Infektion (n=1)
		Risiko/Erklärung (n=1)
		Medizinische Fragen (n=1)
		Folgen (n=1)
		Therapie (n=1)
		Detail- und Verhaltensfragen (n=1)
11	Ist MRSA durch An MRSA erkranken / Verbreitung und Speichel übertragbar? Vorkommen	Allgemeine Informationen (n=12)
		Ansteckung/Infektion (n=7)
		Übertragung (n=7)
		Was ist MRSA (n=1)
		Privatfragen (n=1)
		Behandlung (n=1)
		Vorbeugung (n=1)
		Soziale Kontakte (n=1)
		Krankheitsbild (n=1)
		Ich habe MRSA (n=1)
12	Kann ich anderen die Hände schütteln, wenn ich MRSA habe? Kontakt mit anderen / Was ich darf und was nicht? (n=3)	Verhaltensweisen (n=6)
		Ansteckung/Infektion (n=4)
	- Kontakt mit anderen (n=3)	Folgen (n=4)
		Vorbeugung (n=3)
		Übertragung (n=3)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Allgemeine Informationen (n=2)
		MRSA-Träger (n=2)
		Privatfragen (n=1)
		Maßnahmen, um die Verbreitung von MRSA zu verhindern (n=1)
		Detail- und Verhaltensfragen (n=1)
		MRSA und Arbeit (n=1)
		Persönliche Folgen (n=1)
		Hygiene (n=1)
13	Kann man an den Folgen von MRSA sterben?	MRSA Allgemein / Was ist MRSA? (n=22)
		Folgen (n=3)
		Privatfragen (n=1)
		Ich habe MRSA (n=1)
		Risiko/Erklärung (n=1)
		Behandlung (n=1)
		Definition und Ursachen (n=1)
		Symptome (n=1)
		Detail- und Verhaltensfragen (n=1)
		Heilungschancen (n=1)
		Ansteckung/Infektion (n=4)
14	Kann man erneut an MRSA erkranken, auch wenn man erfolgreich behandelt wurde?	Allgemein (n=14)
		Ansteckung/Infektion (n=4)
		Folgen (n=2)
		Vorbeugung (n=2)
		Medizinische Fragen (n=2)
		Allgemeine Informationen (n=11)
		Behandlung (n=3)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

	Beschreibung (n=1)
	Krankheitsbild (n=1)
	Detail- und Verhaltensfragen (n=1)
	Ich habe MRSA (n=1)
	Persönliche Folgen (n=1)
	Symptome (n=1)
	Pflege und Umgang (n=1)
	Risiko/Erklärung (n=1)
	Maßnahmen/Regelungen für MRSA Träger (n=1)
15 Muss ich jeden Tag Hygiene und Reinigung / Waschen und	Verhaltensweisen (n=6)
meine Kleidung reinigen (n=3)	Maßnahmen (n=5)
waschen, wenn ich - Hygiene (n=3)	Vorbeugung (n=3)
MRSA habe?	Behandlung (n=3)
	Allgemeine Informationen (n=2)
	MRSA-Träger (n=2)
	Übertragbarkeit (n=2)
	Ansteckung (n=1)
	Krankheitsbild (n=1)
	Privatfragen (n=1)
	MRSA und Arbeit (n=1)
	Persönliche Folgen (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

			Therapie (n=1)
			Nachfragen diverser Art (n=1)
16	Müssen die Menschen, bei denen ich übernachtet habe, sich auf MRSA testen lassen, wenn ich MRSA habe?	Untersuchung / Screening	Informationen über Verhaltensweisen (n=4) Maßnahmen (n=4) Allgemeine Informationen (n=3) Soziale Kontakte (n=3) Übertragung (n=3) Ansteckung (n=2) MRSA-Träger (n=2) MRSA zu Hause (n=2) Was ist MRSA (n=2) Privatfragen (n=1) Vorbeugung (n=1) Detail- und Verhaltensfragen (n=1) Persönliche Folgen (n=1) MRSA Pflege und Besuch (n=1) Folgen für das persönliche Umfeld (n=1) Folgen (n=1) Ansteckung (n=1)
17	Warum kommt MRSA in den Niederlanden	Deutschland und andere Länder / Deutschland und in andere Länder	Allgemeine Informationen (n=18) Was ist MRSA (n=3)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

viel weniger vor als in  
Deutschland?

Vorbeugung (n=2)  
Medizinische Fragen (n=1)  
Ansteckung (n=1)  
Folgen (n=1)  
Maßnahmen (n=1)  
MRSA in Trägerschaften (n=1)  
Hygiene (n=1)  
Randbereichsfragen (n=1)  
Verschiedenes (n=1)  
Was können Kliniken tun? (n=1)  
Regional (n=1)

18 Warum muss bei Untersuchung / Informationen über  
Bestehen von Screening (n=2)  
Risikofaktoren vor oder - Untersuchung (n=2)  
während einer  
(Krankenhaus-)  
Aufnahme eine  
Screeninguntersuchung  
auf MRSA-  
Trägerschaft ausgeführt  
werden?

Behandlung (n=6)  
Allgemeine Informationen (n=6)  
Maßnahmen (n=4)  
Was ist MRSA (n=2)  
Vorbeugung (n=2)  
Nachweis der MRSA (n=2)  
Ansteckung (n=1)  
Folgen (n=1)  
Übertragbarkeit (n=1)  
MRSA in Trägerschaften (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

19 Warum muss ich als Im Krankenhaus / Nach Entlassung  
MRSA-Patient im  
Krankenhaus isoliert  
werden, aber nach  
meiner Entlassung (in  
meinem Pflegeheim)  
nicht mehr?

Generelle Vorgehensweise bei MRSA (n=1)

Einrichtungen (n=1)

Was können Kliniken tun? (n=1)

Verhalten in Gemeinschaftseinrichtungen (n=1)

Pflege und Umgang (n=1)

Behandlung (n=7)

Maßnahmen (n=6)

MRSA-Träger (n=3)

Verhalten (n=3)

Gemeinschaftseinrichtungen (n=2)

Übertragung (n=2)

Therapie (n=2)

Allgemeine Informationen (n=1)

Vorbeugung (n=1)

Folgen (n=1)

Was ist MRSA (n=1)

MRSA und Umgang mit anderen (n=1)

Hygiene (n=1)

MRSA Pflege und Besuch (n=1)

MRSA und Arbeit (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

<p>20 Warum werden einige Antibiotika durch eine Infusion und andere durch eine Tablette verabreicht?</p>	<p>Behandlung /Anwendung (n=15) - Behandlung (n=15)</p>	<p>Maßnahmen (n=4) Allgemeine Informationen (n=4) Therapie (n=2) Medizinische Fragen (n=2) Verhaltensweisen (n=1) Ich habe MRSA (n=1) Vorsorgemaßnahmen (n=1) Befund und Verlauf (n=1) Was ist MRSA (n=1) Folgen (n=1)</p>
<p>21 Was ist CA-MRSA?</p>	<p>MRSA Allgemein / Was ist MRSA? (n=26) - Allgemeine Informationen (n=22) - Was ist MRSA? (n=4)</p>	<p>Definition und Ursachen (n=2) Folgen (n=1) Risiko/Erklärung (n=1) Medizinische Fragen (n=1) Ich habe MRSA (n=1) Abgrenzungen von MRSA (n=1)</p>
<p>22 Was ist der Unterschied zwischen Kolonisation (Besiedlung) und Infektion?</p>	<p>MRSA Allgemein / Definitionen (n=16) - Allgemeine Informationen (n=16)</p>	<p>Was ist MRSA? (n=4) Ansteckung/Verbreitung (n=4) Diagnose und Behandlung (n=2) Symptome (n=2) Medizinische Fragen (n=1)</p>



RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Folgen (n=1)
		Risiko/Erklärung (n=1)
		Was kann ich tun? (n=1)
		Abgrenzungen von MRSA (n=1)
23	Was ist der Unterschied zwischen MRSA und ORSA?	MRSA Allgemein / Definitionen (n=25)
		- Allgemeine Informationen (n=20)
		- Definitionen (n=5)
		Medizinische Fragen (n=1)
		Ich habe MRSA (n=1)
		Infektion (n=1)
		Behandlung (n=1)
		Risiko/Erläuterung (n=1)
		Nachweis der MRSA (n=1)
		Krankheitsbild (n=1)
		Abgrenzung von MRSA (n=1)
24	Was ist MRSA?	MRSA Allgemein / Was ist MRSA? (n=29)
		- Allgemeine Informationen (n=23)
		- Was ist MRSA? (n=6)
		Definition und Ursachen (n=1)
		Krankheitsbild (n=1)
		Risiko/Erklärung (n=1)
		Medizinische Fragen (n=1)
25	Was sind die Folgen einer MRSA-Trägerschaft für mein Baby?	Schwangerschaft und Säuglinge / Folgen (n=4)
		Schwangerschaft und MRSA (n=12)
		- MRSA und Schwangerschaft (n=12)
		Allgemeine Informationen (n=3)
		Ansteckung/Verbreitung (n=2)
		Soziale Kontakte (n=2)

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			Direkte Auswirkungen auf Kinder und Familie/Partner und Baby (n=2)
			Verhalten bei Infektion (n=2)
			Persönliche Folgen (n=1)
			Diagnose und Behandlung (n=1)
			Übertragung (n=1)
			Maßnahmen (n=1)
			Privatfragen (n=1)
			MRSA-Träger (n=1)
26	Was sind die Folgen für mein Kind, wenn ich selbst MRSA-positiv bin?	Kontakt mit anderen Menschen um mich herum) (n=6) - Folgen (n=5) - Kontakt mit anderen (n=1)	(für die MRSA und Schwangerschaft (n=11) Allgemeine Informationen (n=3) Kinder und Familie/Partner und Baby (n=3) Ansteckung/Verbreitung (n=2) Verhalten (n=2) Persönliche Folgen (n=1) Diagnose und Behandlung (n=1) Privatfragen (n=1) MRSA-Träger (n=1) Übertragung (n=1) Hygiene (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

<p>27 Was sind die Folgen von MRSA für eine gesunde Person?</p>	<p>MRSA Allgemein / Was ist MRSA? (n=16) - Allgemeine Informationen (n=16)</p>	<p>Folgen (n=4) Ansteckung/Verbreitung (n=2) Privatfragen (n=1) Diagnose und Behandlung (n=1) Nachweis der MRSA (n=1) Pflege und Umgang (n=1) Ich habe MRSA (n=1) Soziale Kontakte (n=1) Heilungschancen (n=1) Symptome (n=1) Maßnahmen (n=1) Krankheitsbild (n=1) Detail- und Verhaltensfragen (n=1)</p>
<p>28 Welche Krankenhäuser haben das EUREGIO Qualitäts- und Transparenzsiegel?</p>	<p>Deutschland und andere Länder / MRSA in Deutschland und in anderen Ländern</p>	<p>Allgemeine Informationen (n=10) Maßnahmen in Einrichtungen/Krankenhäuser (n=5) Behandlung (n=5) Verschiedenes/Sonstiges (n=3) Maßnahmen (n=2) Was ist MRSA? (n=2) Vorbeugung (n=1) MRSA in Trägerschaften (n=1)</p>

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

			MRSA in der Pflege (n=1)
			Regional (n=1)
			Hygiene (n=1)
			Randbereichsfragen (n=1)
29	Welche Maßnahmen müssen genommen werden, wenn in einer Kindertageskrippe oder einer Schule ein Kind oder Lehrer/Betreuer MRSA hat?	MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen) (n=1)	Maßnahmen (n=8)
		- Selbst MRSA-Träger (betroffen) (n=1)	Behandlung (n=3)
			Verhaltensweisen (n=3)
			MRSA und Schwangerschaft (n=3)
			Folgen (n=2)
			MRSA mit Kind/Familie (n=2)
			Ansteckung (n=2)
			Allgemeine Informationen (n=2)
			Krankheitsbild (n=1)
			Vorbeugung (n=1)
			Nachweis der MRSA (n=1)
			Jemand anderes hat MRSA (n=1)
			Einrichtungen (n=1)
			Soziale Kontakte (n=1)
			Persönliche Folgen n=1)
30	Welche Maßnahmen müssen im Pflegeheim	Im Krankenhaus / Nach Entlassung (n=4)	Maßnahmen (n=7)
		- Im Krankenhaus (n=4)	Ansteckung/Übertragung (n=3)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

genommen werden,  
wenn ein MRSA-  
Patient nach  
Krankenhausentlassung  
in das Pflegeheim  
kommt?

Vorbeugung/Prävention (n=2)  
Verhaltensweisen (n=2)  
Verhalten in Gemeinschaftseinrichtungen (n=2)  
Allgemeine Informationen (n=2)  
Behandlung (n=1)  
Sonstiges (n=1)  
Vorsorge/Maßnahme der Einrichtung (n=1)  
Verhaltensfragen für Pflegepersonal (n=1)  
MRSA Pflege und Besuch (n=1)  
Therapie (n=1)  
Was ist MRSA (n=1)  
Folgen (n=1)  
MRSA in Trägerschaften (n=1)  
Maßnahmen, um die Verbreitung von MRSA zu verhindern (n=1)  
Jemand anderes hat MRSA (n=1)  
Ansteckung (n=4)  
Krankheit/Infektion (n=3)  
Krankheitsbild (n=1)  
Therapie (n=1)  
Medizinische Fragen (n=1)  
Vorsorge (n=1)

31 Welche Menschen MRSA Allgemein / Was ist MRSA? (n=18)  
haben ein höheres - Allgemeine Informationen (n=15)  
Risiko an MRSA zu - Was ist MRSA (n=3)  
erkranken?

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Definition und Ursache (n=1)
		Übertragung (n=1)
		Partner und Baby (n=1)
		Risiko/Erklärung (n=1)
32	Welcher Arbeit darf ich noch nachgehen, wenn ich selbst MRSA-Träger bin und in der Pflege tätig bin, aber nicht in der Abteilung arbeiten darf, auf der sich auch Patienten befinden?	MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen) (n=3)
		MRSA in der Pflege (n=7)
		Verhaltensweisen (n=4)
		Maßnahmen (n=3)
		Ansteckung (n=2)
		Folgen (n=2)
		Sonstiges (n=2)
		Allgemeine Informationen (n=2)
		Was ist MRSA? (n=1)
		Fragen zur Übertragung (n=1)
		Persönliche Folgen (n=1)
		Behandlung von MRSA im Krankenhaus (n=1)
		Übertragung (n=1)
		Privatfragen (n=1)
		Folgen für andere (n=1)
		Vorbeugung (n=1)
		- Selbst MRSA-Träger (betroffen) (n=3)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

- |    |   |  |  |
|----|---|--|--|
| 33 | Wie bemerke ich, dass ich MRSA besiedelt bin?               | An MRSA erkranken / Verbreitung und Vorkommen (n=1)<br>- Verbreitung (n=1) | Allgemeine Informationen (n=12)<br>Symptome (n=3)<br>Diagnose (n=3)<br>Erkennen/Vorbeugung von MRSA (n=2)<br>Nachweis (n=2)<br>Was ist MRSA (n=2)<br>Ich habe MRSA (n=1)<br>Vorsorge (n=1)<br>Medizinische Fragen (n=1)<br>Sonstiges (n=1)<br>Befund und Verlauf (n=1)<br>Verhalten bei Infektion (n=1)<br>Infektionsfragen (n=1)<br>Was ist MRSA? (n=1) |
| 34 | Wie groß ist das Risiko, dass ich MRSA nie wieder loswerde? | MRSA Allgemein / Was ist MRSA? (n=11)<br>- Allgemeine Informationen (n=11) | Behandlung (n=4)<br>MRSA-Träger (n=3)<br>Verhaltensweisen (n=3)<br>Folgen (n=3)<br>Krankheitsbild (n=1)<br>Vorsorgemaßnahmen (n=1)<br>Untersuchung (n=1)   |

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Diagnose und Behandlung (n=1)
		Ansteckung (n=1)
		Medizinische Fragen (n=1)
		Risiko/Erklärung (n=1)
		MRSA und Arbeit (n=1)
		Heilungschancen (n=1)
35	Wie häufig kommt MRSA Allgemein / Was ist MRSA? (n=27)	Folgen (n=1)
	MRSA vor?	Risiko/Erklärung (n=1)
	- Allgemeine Informationen (n=22)	Krankheitsbild (n=1)
	- Was ist MRSA? (n=5)	Medizinische Fragen (n=1)
		Detail- und Verhaltensfragen (n=1)
		Definition und Ursachen (n=1)
36	Wie kann ich eine Hygiene und Reinigung / Hygiene (n=2)	Behandlung (n=12)
	Wunde bei einer - Hygiene (n=2)	Verhaltensweise (n=4)
	MRSA-Infektion am	Maßnahmen/Regelungen für MRSA-Träger (n=3)
	besten sauber halten?	Vorsorgemaßnahmen (n=2)
		Therapie (n=2)
		Pflege und Umgang (n=2)
		Medizinische Fragen (n=2)
		Krankheitsbild (n=1)
		Allgemeine Informationen (n=1)



RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

			MRSA und Arbeit (n=1)
			Informationen für Betroffene (n=1)
37	Wie kann man MRSA erkennen? Oder: was sind die Symptome von MRSA?	MRSA Allgemein / Was ist MRSA? (n=15) - Allgemeine Informationen (n=11) - Was ist MRSA? (n=4)	Symptome (n=4) Nachweis (n=3) Erkennung/Vorbeugung von MRSA (n=2) Diagnoseprozess (n=2) Aufklärung über MRSA (n=1) Behandlung (n=1) Befund und Verlauf (n=1) Medizinische Fragen (n=1) Definition und Ursachen (n=1) Krankheitsbild (n=1) Maßnahmen (n=1)
38	Wie kann MRSA nachgewiesen werden?	MRSA Allgemein / Was ist MRSA? (n=14) - Allgemeine Informationen (n=10) - Was ist MRSA (n=4)	Diagnoseprozess (n=3) Symptome (n=2) Erkennen (n=2) Behandlung/Nachweis von MRSA (n=2) Folgen (n=1) Aufklärung über MRSA (n=1) Ich habe MRSA (n=1) Maßnahmen (n=1)

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		Krankheitsbild (n=1)
		Definition und Ursachen (n=1)
		Befund und Verlauf (n=1)
		Medizinische Fragen (n=1)
		Untersuchung (n=1)
		Nachweis (n=1)
39	Wie kann MRSA sich verbreiten?	MRSA Allgemein / Was ist MRSA? (n=18)
	- Allgemeine Informationen	(n=15)
	- Was ist MRSA?	(n=3)
		Übertragung (n=5)
		Folgen (n=2)
		Krankheit/Infektion (n=2)
		Aufklärung über MRSA (n=1)
		Vorsorge (n=1)
		Definition und Ursachen (n=1)
		Medizinische Fragen (n=1)
		Hygiene (n=1)
		Ansteckung/Verbreitung (n=1)
40	Wie lange dauert die Erkrankung an MRSA?	MRSA Allgemein / Was ist MRSA? (n=21)
	- Allgemeine Informationen	(n=20)
	- Was ist MRSA?	(n=1)
		Behandlung (n=3)
		Ich habe MRSA (n=2)
		Aufklärung über MRSA (n=1)
		Medizinische Fragen (n=1)
		Diagnose und Behandlung (n=1)
		Krankheitsbild (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

			Detail- und Verhaltensfragen (n=1)
			Symptome (n=1)
			Befund und Verlauf (n=1)
41	Wie lange dauert eine Behandlung / Allgemein (n=19)		Ich habe MRSA (n=3)
	durchschnittliche - Behandlung (n=15)		Medizinische Fragen (n=2)
	Behandlung einer - Allgemeine Informationen (n=4)		Maßnahmen (n=2)
	MRSA-Trägerschaft?		Krankheitsbild (n=1)
			Aufklärung über MRSA (n=1)
			Verhaltensweisen (n=1)
			Befund und Verlauf (n=1)
			Detail- und Verhaltensfragen (n=1)
			Untersuchung (n=1)
			Therapie (n=1)
42	Wie lange dauert es, bis Untersuchung / Informationen über		Behandlung (n=8)
	die Abstrichbefunde Screening (n=2)		Diagnoseprozess (n=4)
	bekannt sind? - Untersuchung (n=2)		Maßnahmen (n=3)
			Erkennung/Vorbeugung von MRSA (n=2)
			Medizinische Fragen (n=2)
			Allgemeine Informationen (n=2)
			Folgen (n=2)
			Aufklärung über MRSA (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Verhaltensweisen (n=1)
		Nachweis der MRSA (n=1)
		Was ist MRSA (n=1)
		Ich habe MRSA (n=1)
		Abstriche (n=1)
		Vorsorge (n=1)
		Befund und Verlauf (n=1)
43	Wie lange muss ich MRSA in meinem Beruf / Selbst MRSA-zuhause bleiben, wenn ich in der Pflege arbeite und MRSA habe?	MRSA in der Pflege (n=7)
		Ansteckung (n=3)
	- Träger (betroffen) (n=2)	Verhaltensweisen (n=3)
	- Selbst MRSA-Träger (betroffen) (n=2)	Maßnahmen (n=3)
		Behandlung (n=2)
		Sonstiges (n=2)
		Folgen (n=2)
		Persönliche Folgen (n=1)
		Übertragung (n=1)
		Therapie (n=1)
		Diagnose und Behandlung (n=1)
		Vorsorge (n=1)
		Folgen für andere (n=1)
		Privatfragen (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Verhalten in Gemeinschaftseinrichtungen (n=1)
		Zuhause (n=1)
44	Wie oft kann man MRSA Allgemein / Was ist MRSA? (n=18)	Krankheit/Infektion (n=3)
	MRSA bekommen?	Ansteckung/Verbreitung (n=2)
	- Allgemeine Informationen (n=16)	Aufklärung über MRSA (n=1)
	- Was ist MRSA (n=2)	Medizinische Fragen (n=1)
		Ich habe MRSA (n=1)
		Behandlung (n=1)
		Maßnahmen (n=1)
		Definition und Ursachen (n=1)
		Persönliche Folgen (n=1)
		Detail- und Verhaltensfragen (n=1)
		Risiko/Erklärung (n=1)
		Krankheitsbild (n=1)
45	Wie oft muss ein Untersuchung / Informationen über	Behandlung (n=10)
	Abstrichbefund von Screening (n=1)	Allgemeine Informationen (n=4)
	MRSA-Patienten - Untersuchung (n=1)	Therapie (n=2)
	negativ sein, bis dieser	Medizinische Fragen (n=2)
	nicht mehr isoliert	Ich habe MRSA (n=2)
	gepflegt werden muss?	Verhaltensweisen (n=2)
		Ansteckung (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		Sonstiges (n=1)
		Maßnahmen (n=1)
		Erkennen (n=1)
		Befund und Verlauf (n=1)
		Diagnoseprozess (n=1)
		MRSA in der Pflege (n=1)
		Generelle Vorgehensweisen bei MRSA (n=1)
		Abstriche (n=1)
		Vorsorge (n=1)
46	Wie oft muss ich mir die Hände waschen, wenn ich MRSA habe?	Hygiene und Reinigung / Hygiene (n=2)
		Hygiene (n=2)
		Verhaltensweisen (n=7)
		Maßnahmen (n=5)
		Allgemeine Informationen (n=3)
		Übertragung (n=3)
		Behandlung (n=3)
		MRSA-Träger (n=2)
		Ansteckung (n=1)
		Privatfragen (n=1)
		Folgen (n=1)
		Persönliche Folgen (n=1)
		Sonstiges (n=1)
		Therapie (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

		MRSA und Arbeit (n=1)
		Vorsorgemaßnahmen (n=1)
47	Wie sieht die Gefahr für mein (ungeborenes) Baby aus, wenn ich MRSA-Träger bin?	Schwangerschaft und Säuglinge / Schwangerschaft und MRSA (n=13) - MRSA und Schwangerschaft (n=13)
		Verhaltensweisen (n=3)
		Folgen (n=3)
		Übertragung (n=2)
		Soziale Kontakte/persönliches Umfeld (n=2)
		Ansteckung (n=2)
		Maßnahmen (n=2)
		Ansteckung/Verbreitung (n=1)
		Persönliche Folgen (n=1)
		Vorsorge (n=1)
		MRSA-Träger (n=1)
		Privatfragen (n=1)
		Diagnose und Behandlung (n=1)
48	Wie wird eine MRSA- Infektion behandelt?	Behandlung / Allgemein (n=21) - Behandlung (n=16) - Allgemeine Informationen (n=5)
		Was ist MRSA (n=2)
		Aufklärung über MRSA (n=1)
		Medizinische Fragen (n=1)
		Krankheitsbild (n=1)
		Ich habe MRSA (n=1)
		Folgen (n=1)
		Maßnahmen (n=1)

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

			Befund und Verlauf (n=1)
			Untersuchung (n=1)
			Therapie (n=1)
			Erkennen (n=1)
49	Wie wird eine Untersuchung / Informationen über	Behandlung (n=8)	
	Untersuchung auf Screening (n=2)	Allgemeine Informationen (n=8)	
	MRSA durchgeführt? - Untersuchung (n=2)	Diagnose (n=3)	
		Maßnahmen (n=2)	
		Erkennen (n=2)	
		Krankheitsbild (n=1)	
		Was ist MRSA (n=1)	
		Medizinische Fragen (n=1)	
		Ich habe MRSA (n=1)	
		Aufklärung über MRSA (n=1)	
		Vorsorge (n=1)	
		Nachweis der MRSA (n=1)	
		Befund und Verlauf (n=1)	
50	Wovon wird ein Untersuchung / Informationen über	Behandlung (n=8)	
	Abstrich genommen? Screening (n=2)	Allgemeine Informationen (n=7)	
	- Untersuchung (n=2)	Diagnose (n=3)	
		Ich habe MRSA (n=2)	

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RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

Erkennen (n=2)

Medizinische Fragen (n=2)

Folgen (n=1)

Befund und Verlauf (n=1)

Partner und Baby (n=1)

Nachweis der MRSA (n=1)

Maßnahmen/Regelungen für MRSA-Träger (n=1)

Aufklärung über MRSA (n=1)

Abstriche (n=1)

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RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

**Appendix C**

Table 4

*Questions with Original Category and Final Categorisation for [www.MRSA-net.nl/de](http://www.MRSA-net.nl/de)*

Question	Original Category	Final Category
2 Darf ich einen MRSA-Träger pflegen/behandeln, wenn ich schwanger bin?	Schwangerschaft und Säuglinge / Schwangerschaft und MRSA	Schwangerschaft und MRSA
4 Darf ich, wenn ich schwanger bin, jemanden besuchen, der MRSA hat?	Schwangerschaft und Säuglinge / Schwangerschaft und MRSA	Schwangerschaft und MRSA
25 Was sind die Folgen einer MRSA-Trägerschaft für mein Baby?	Schwangerschaft und Säuglinge / Schwangerschaft und MRSA	Schwangerschaft und MRSA
47 Wie sieht die Gefahr für mein (ungeborenes) Baby aus, wenn ich MRSA-Träger bin?	Schwangerschaft und Säuglinge / Schwangerschaft und MRSA	Schwangerschaft und MRSA
26 Was sind die Folgen für mein Kind, wenn ich selbst MRSA-positiv bin?	Kontakt mit anderen / Folgen (für die Menschen um mich herum)	Schwangerschaft und MRSA
10 Ist MRSA behandelbar?	Behandlung / Allgemein	Behandlung / Allgemein
14 Kann man erneut an MRSA erkranken, auch wenn man erfolgreich behandelt wurde?	Behandlung / Allgemein	Behandlung / Allgemein
41 Wie lange dauert eine durchschnittliche Behandlung einer MRSA-Trägerschaft?	Behandlung / Allgemein	Behandlung / Allgemein
48 Wie wird eine MRSA-Infektion behandelt?	Behandlung / Allgemein	Behandlung / Allgemein

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

19	Warum muss ich als MRSA-Patient im Krankenhaus isoliert werden, aber nach meiner Entlassung (in meinem Pflegeheim) nicht mehr?	Im Krankenhaus / Nach Entlassung	Behandlung / Allgemein
36	Wie kann ich eine Wunde bei einer MRSA-Infektion am besten sauber halten?	Hygiene und Reinigung / Hygiene	Behandlung / Allgemein
42	Wie lange dauert es, bis die Abstrichbefunde bekannt sind?	Untersuchung / Informationen über Screening	Behandlung / Allgemein
45	Wie oft muss ein Abstrichbefund von MRSA-Patienten negativ sein, bis dieser nicht mehr isoliert gepflegt werden muss?	Untersuchung / Informationen über Screening	Behandlung / Allgemein
50	Wovon wird ein Abstrich genommen?	Untersuchung / Informationen über Screening	Behandlung / Allgemein
20	Warum werden einige Antibiotika durch eine Infusion und andere durch eine Tablette verabreicht?	Behandlung / Anwendung	Behandlung / Allgemein
18	Warum muss bei Bestehen von Risikofaktoren vor oder während einer (Krankenhaus-) Aufnahme eine Screeninguntersuchung auf MRSA-Trägerschaft ausgeführt werden?	Untersuchung / Informationen über Screening	Behandlung / Allgemein
13	Kann man an den Folgen von MRSA sterben?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

21	Was ist CA-MRSA?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
24	Was ist MRSA?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
27	Was sind die Folgen von MRSA für eine gesunde Person?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
31	Welche Menschen haben ein höheres Risiko an MRSA zu erkranken?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
34	Wie groß ist das Risiko, dass ich MRSA nie wieder loswerde?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
35	Wie häufig kommt MRSA vor?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
37	Wie kann man MRSA erkennen? Oder: was sind die Symptome von MRSA?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
38	Wie kann MRSA nachgewiesen werden?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
39	Wie kann MRSA sich verbreiten?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
40	Wie lange dauert die Erkrankung an MRSA?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
44	Wie oft kann man MRSA bekommen?	MRSA Allgemein / Was ist MRSA?	MRSA Allgemein / Was ist MRSA?
8	Ist MRSA auch sexuell übertragbar?	An MRSA erkranken / Verbreitung und Vorkommen	MRSA Allgemein / Was ist MRSA?
9	Ist MRSA auf Kinder übertragbar?	Kontakt mit anderen / Folgen (für die Menschen um mich herum)	MRSA Allgemein / Was ist MRSA?

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

6	Ist es möglich durch bestimmte Maßnahmen kein MRSA zu bekommen?	Hygiene und Reinigung / Hygiene	MRSA Allgemein / Was ist MRSA?
11	Ist MRSA durch Speichel übertragbar?	An MRSA erkranken / Verbreitung und Vorkommen	MRSA Allgemein / Was ist MRSA?
17	Warum kommt MRSA in den Niederlanden viel weniger vor als in Deutschland?	Deutschland und andere Länder / MRSA in Deutschland und in andere Länder	MRSA Allgemein / Was ist MRSA?
28	Welche Krankenhäuser haben das EUREGIO Qualitäts- und Transparenzsiegel?	Deutschland und andere Länder / MRSA in Deutschland und in anderen Ländern	MRSA Allgemein / Was ist MRSA?
33	Wie bemerke ich, dass ich MRSA besiedelt bin?	An MRSA erkranken / Verbreitung und Vorkommen	MRSA Allgemein / Was ist MRSA?
49	Wie wird eine Untersuchung auf MRSA durchgeführt?	Untersuchung / Informationen über Screening	MRSA Allgemein / Was ist MRSA?
1	Darf ich als MRSA-Träger meine Familie besuchen?	Kontakt mit anderen / Was ich darf und was nicht?	Verhaltensweisen
3	Darf ich zuhause Besuch empfangen, wenn ich MRSA-positiv bin?	Kontakt mit anderen / Maßnahmen zu Hause	Verhaltensweisen
12	Kann ich anderen die Hände schütteln, wenn ich MRSA habe?	Kontakt mit anderen / Was ich darf und was nicht?	Verhaltensweisen
15	Muss ich jeden Tag meine Kleidung waschen, wenn ich MRSA habe?	Hygiene und Reinigung / Waschen und reinigen	Verhaltensweisen

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

46	Wie oft muss ich mir die Hände waschen, wenn ich MRSA habe?	Hygiene und Reinigung / Hygiene	Verhaltensweisen
16	Müssen die Menschen, bei denen ich übernachtet habe, sich auf MRSA testen lassen, wenn ich MRSA habe?	Untersuchung / Informationen über Screening	Verhaltensweisen
7	Ist es wirklich notwendig sämtliche Kleidung auf 60 Grad zu waschen um MRSA zu entfernen?	Hygiene und Reinigung / Waschen und reinigen	Maßnahmen
29	Welche Maßnahmen müssen genommen werden, wenn in einer Kindertageskrippe oder einer Schule ein Kind oder Lehrer/Betreuer MRSA hat?	MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen)	Maßnahmen
30	Welche Maßnahmen müssen im Pflegeheim genommen werden, wenn ein MRSA-Patient nach Krankenhausentlassung in das Pflegeheim kommt?	Im Krankenhaus / Nach Entlassung	Maßnahmen
22	Was ist der Unterschied zwischen Kolonisation (Besiedlung) und Infektion?	MRSA Allgemein / Definitionen	MRSA Allgemein / Definitionen
23	Was ist der Unterschied zwischen MRSA und ORSA?	MRSA Allgemein / Definitionen	MRSA Allgemein / Definitionen
32	Welcher Arbeit darf ich noch nachgehen, wenn ich selbst MRSA-Träger bin und in der Pflege tätig bin, aber nicht in der Abteilung arbeiten darf,	MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen)	MRSA in der Pflege

RESTRUCTURING INFORMATION OF GERMAN WEBSITE ABOUT METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) FOR THE GERMAN GENERAL PUBLIC WITH CARD SORT METHOD

auf der sich auch Patienten befinden?

- |    |   |   |                      |
|----|---|---|----------------------|
| 43 | Wie lange muss ich zuhause bleiben, wenn ich in der Pflege arbeite und MRSA habe? | MRSA in meinem Beruf / Selbst MRSA-Träger (betroffen) | MRSA in der Pflege   |
| 5  | Dürfen mein Partner und ich im gleichen Bett schlafen, wenn ich MRSA habe?        | Kontakt mit anderen / Was ich darf und was nicht?     | Ansteckung/Infektion |
-