CORRESPONDENCE

Potentially Avoidable Hospital Admissions in Germany: An Analysis of Factors Influencing Rates of Ambulatory Care Sensitive Hospitalizations

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in issue 13/2014

Weak Association

The authors report on ambulatory care sensitive hospitalizations (ACSH)-admissions that might have been avoided by the timely provision of appropriate care outside the hospital (1, 2). To date, 19 disease entities have been identified that are relevant in the context of ACSH (3).

In this setting, certain criteria have to be met, such as relevantly high hospital admission rates, clear definition and coding of the diagnosis, potential avoidability of hospital admissions, and the necessity of the latter if symptoms occur. The authors see the advantage of ACSH over other quality indicators in the fact that the situation can be described on the basis of accounting data ("routine data"). Overall, the association between the analysed variables and the ACSH rates is weak. The authors suggest that in the future, aspects of the quality of medical services, comorbidities, and participation in healthcare programs should be taken into account.

When reading the article we noticed that the definition of ACSH relates exclusively to diseases of internal medicine. Cases of "ambulatory care sensitive hospitalization" from surgery were not considered. This would be particularly interesting for patients who have had major surgery, who, after discharge from inpatient treatment, cannot be sufficiently provided with outpatient care and who therefore often have to be readmitted to the hospital (the so called "revolving door" effect). In vascular surgery, this affects primarily diabetic patients with impaired arterial perfusion of the legs, who, in order to avoid major amputations had bypass surgery in combination with minor amputations on the feet. Their readmission rate is up to 30% after seven weeks (4). This hints at problems in outpatient care provision, such as insufficient interdisciplinary networking. Successful alternative approaches to provide care for patients with diabetic foot syndrome already exist (4).

Perhaps the authors see an opportunity to expand their elaborate data collection system to such cases? Would it not be useful to include the term "rehospitalization", so as to tackle the problems of intersectoral, interdisciplinary, and, last but not least, interprofessional communication?

DOI: 10.3238/arztebl.2014.0600a

REFERENCES

1. Burgdorf F, Sundmacher L: Potentially avoidable hospital admissions in Germany—an analysis of factors influencing rates of ambulatory care sensitive hospitalizations. *Dtsch Arztebl Int* 2014; 111: 215–23.
2. Agency for Healthcare, Research and Quality: AHRQ quality indicators – guide to prevention quality indicators: hospital admission for ambulatory care sensitive conditions. Revision 3. Rockville MD: AHRQ 2004; pub. Nr. 02-R0203. www.ahrq.gov/download/pub/ahrqi/pqiguide.pdf. Last accessed on 10 May 2014.
3. Purdy S, Griffin T, Salisbury C, Sharp D: Ambulatory care sensitive conditions: terminology and disease coding need to be more specific to aid policy makers and clinicians. *Public Health* 2009; 123: 169–73.
4. Rümenapf G, Geiger S, Schneider B, et al.: Readmissions of patients with diabetes and foot ulcers after infra-popliteal bypass surgery: attacking the problem by an integrated case management model. *Vasa (Eur J Vasc Med)* 2013; 42: 56–67.

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In Reply:

Generally speaking, the concept of ambulatory care sensitive hospitalization (ACSH) does not exclude looking at hospitalizations after surgical procedures. Depending on the constellation, this might mean "acute diseases that could have been prevented" (for example, wound infections), or "chronic diseases that could have been controlled better" (rehospitalization because of repeated circulatory impairment after vascular surgery for diabetic foot syndrome) (1).

By contrast, the cited list of suitable disease entities for measuring the rate of ACSH in the British National Health Service (NHS) (2) focuses on internal medical disease entities with a chronic course. The selection is based on the following criteria: relevantly high hospitalization rate, clear definition and coding of the diagnosis, admission to hospital potentially avoidable, hospitalization required once symptoms occur (3). What needs to be borne in mind in this context is that this list was compiled in a healthcare system where specialist medical care is mostly delivered in hospitals. Because of the differences between healthcare systems and the resulting difficulties with regard to the transferability of the lists of diagnoses, the authors initiated a research project aiming to compile a catalogue of cases of ambulatory care sensitive hospitalization for the German

healthcare system. In the context of a survey approach that comprises several stages, 40 doctors (including surgeons) identified a total of 240 indications for ambulatory care sensitive hospitalization. The results from this project will be published later this year.

In the data collection for this article, of ambulatory care sensitive hospitalizations in the context of diabetes, hospitalizations after surgical intervention were included but not described in a differentiated manner.

In the authors' opinion, the concept of ambulatory care sensitive hospitalizations can generally be carried over—with certain restrictions—to hospitalizations after surgical procedures. For methodological reasons, it would be necessary to evaluate in advance and consider for the purposes of risk adjustment—in addition to the criteria listed earlier (3)—at least the additional influencing factors that may lead to biases, such as comorbidities, medication (for example, corticosteroids), adherence, quality and success of surgery, length of inpatient stay, and quality of transition/referral management. An appropriate evaluation of the suitability of the specific surgical procedure in the context of a defined

disease would be essential before applying the concept of ambulatory care sensitive hospitalization.

DOI: 10.3238/arztebl.2014.0600b

REFERENCES

1. Frank AM: Ambulatory care sensitive conditions. Erste Anwendung eines internationalen Indikators in der Steiermark. Master thesis 9010939. Medizinische Universität Graz 2009.
2. Purdy S, Griffin T, Salisbury C, Sharp D: Ambulatory care sensitive conditions: terminology and disease coding need to be more specific to aid policy makers and clinicians. *Public Health* 2009; 123: 169–73.
3. Weissman JS, Gatsonis C, Epstein AM: Rates of avoidable hospitalization by insurance status in Massachusetts and Maryland. *JAMA* 268: 2388–94.
4. Burgdorf F, Sundmacher L: Potentially avoidable hospital admissions in Germany—an analysis of factors influencing rates of ambulatory care sensitive hospitalizations. *Dtsch Arztebl Int* 2014; 111: 215–23.

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Conflict of interest statement

The authors of both contributions declare that no conflict of interest exists.