Physician Follow-up after Hospital Discharge in Alberta and Saskatchewan

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Abstract

The period immediately after discharge from hospital can potentially be high risk and a vulnerable transition point for patients. This analysis from the Canadian Institute for Health Information assessed adherence to best practices for patient follow-up in the community after hospitalization in Alberta and Saskatchewan. For three selected conditions – acute myocardial infarction, heart failure and chronic obstructive pulmonary disease – the majority of patients (77–92%) saw a physician within a month of their discharge. However, fewer patients saw a physician within the first week (35–56%).

Continuity of care is critical during the patient's transition from the hospital to the community. Continuity of care has many benefits, such as fewer medical errors, improved patient satisfaction with care and better ongoing management of the patient's condition. Canadian and international guidelines suggest that follow-up for certain conditions should occur from one week to one month after discharge (American Lung Association of the Upper Midwest 2013; Howlett 2010; Tran 2003). Despite these guidelines, most previous studies reporting on 7- or 30-day physician follow-up rates in Canada suggest room for improvement (Health Quality Ontario 2014; McAlister 2013), though results vary by patient population, follow-up time and geographic location.

This study examined physician follow-up for patients hospitalized for acute myocardial infarction (AMI), heart failure (HF) or chronic obstructive pulmonary disease (COPD). These three conditions were chosen owing to the role of follow-up in reducing potential post-discharge complications: timely follow-up (usually within 1 or 2 weeks) has often been recommended for these specific conditions by a number of researchers and medical associations (Abramson et al. 2014; American Lung Association of the Upper Midwest 2013; Barber 2014; Canadian Heart Failure Network 2015; Howlett 2010).

Data Sources and Methodology

Physician (primary or specialist) follow-up was measured among patients aged 18 and older hospitalized in Alberta and Saskatchewan with a most responsible diagnosis of AMI, HF or COPD, and discharged home at the end of their hospital stay. Hospital admissions were identified from the Discharge Abstract Database. The first hospital admission (for 2010–2011 to 2012–2013) that was not preceded by a previous hospitalization 30 days prior was selected for each patient and then linked to the National Physician Database using physician billing claims (both fee-for-service and alternative payments) from Alberta Health and Saskatchewan Health. As these patient-level physician billing data were only available for these two jurisdictions, our analysis was restricted to hospitalizations occurring in Alberta or Saskatchewan. Linking between the databases was done using encrypted health card number and birthdate.

All physician visits after discharge were counted as a follow-up visit. Visits included discussions of care, physical examination and patient assessments. Detailed methodological notes can be found in Appendix A of the report *Physician Follow-up after Hospital Discharge: Progress in Meeting Best Practices.*

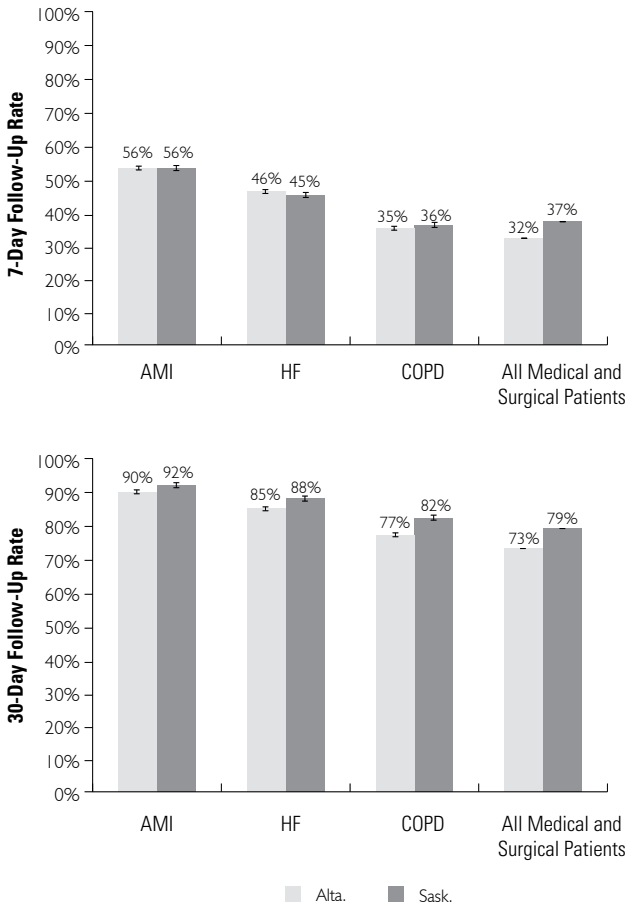
Results

Physician Follow-up Rates

Between one-third and one-half of patients in this study saw a physician within a week of hospital discharge. Rates were highest for AMI (56%) and lowest for COPD (35–36%). Results for the two provinces were similar for the three patient condition groups at the 7-day mark. When compared with all hospitalized patients, those with HF or AMI had slightly higher rates of follow-up, while the follow-up rates for COPD patients were similar to the overall rate. Most patients (77–92%) hospitalized for these conditions in both provinces were seen by a physician within 30 days of hospital discharge. The 30-day follow-up rates were slightly higher in Saskatchewan (Figure 1).

Over 60% of follow-up visits after the index hospitalization were made with a familiar physician. We considered a physician to be familiar to the patient if the patient saw this physician twice in the past year or at least once during the patient's last hospitalization. In some cases (e.g., COPD patients), having a familiar physician increased the chance of having a follow-up visit.

FIGURE 1.
Crude 7- and 30-day physician follow-up rates by patient group and province, 2010–2011 to 2012–2013



Notes: AMI = acute myocardial infarction; HF = heart failure; COPD = chronic obstructive pulmonary disease; all medical and surgical patients includes those with AMI, HF and COPD.
Sources: Discharge Abstract Database and National Physician Database, 2010–2011 to 2012–2013, Canadian Institute for Health Information.

Variation in Follow-up Rates

In both provinces, follow-up care varied by condition, region, follow-up time as well as patient and hospital factors:

- 7- and 30-day follow-up rates were higher for patients with AMI than for those with chronic conditions (HF or COPD) in both provinces (Figure 1).
- In both provinces, urban regions – those with a higher population density, more hospital beds and more physicians per capita – generally had higher follow-up rates. In both provinces, the northern regions had the lowest follow-up rates.
- Less regional variation was observed by 30 days after hospital discharge.
- Follow-up rates were lower among patients discharged from community hospitals (vs. teaching hospitals), or who were discharged home with support services or lived in lower-income neighbourhoods.

Discussion and Conclusions

Best practices recommend that AMI, COPD and HF patients discharged from hospital should see a doctor for follow-up shortly after discharge (Health Quality Ontario 2014; Tran 2003). Rates ranged from 77% to 92%, depending on the patient's condition. Most patients' first follow-up was with their family physician.

Although early physician follow-up rates were similar for the two provinces, there was noticeable variation when rates were examined by health region. Larger urban areas generally had higher follow-up rates than more remote, rural regions, such as northern Alberta and Saskatchewan. Having a familiar physician also increased the chance of having a follow-up visit, specifically in COPD patients. Having a familiar physician may infer the potential for better continuity of care, patient self-management and health behaviours, including better medication compliance or lifestyle. It could also signal greater healthcare usage, worse disease severity or better mobility/access.

Studies suggest that increasing post-discharge follow-up requires participation from patients, providers and policy-makers alike. Through their daily choices surrounding medication, nutrition and observing complications of their condition, patients play a key role in determining the course of their disease. Physicians can improve follow-up rates by scheduling a follow-up before a patient leaves the hospital, ensuring that the patient has a means of transportation, clarifying with the patient the purpose of the follow-up visit and prioritizing appointments to see recently discharged patients promptly (Perry 2013). Hospital- and community-level factors are also vital for smooth transitions and continuity of care. Investments in health information technology that can communicate between hospitals and physician offices could help physician practices identify and monitor care for high-risk patients. Improving continuity of care for patients with chronic diseases is not a simple task; however, it has value to patients and leads to better care outcomes and lower costs. HQ

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