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Pricing and funding for safety and quality

11.6. Avoidable and preventable hospitalisations

Reducing avoidable and preventable hospital admissions can support better health outcomes, improve patient safety and lead to greater efficiency in the health system.

Under the Addendum, IHPA, the Commission and the Administrator of the National Health Funding Pool (the Administrator) is required to provide advice to CHC on options for developing upon the existing safety and quality related reforms, including examining ways that avoidable and preventable hospitalisations can be reduced through changes to the Addendum.

Preliminary review of national and international literature indicates that potentially preventable hospitalisations (PPHs) is a primary focal area for reducing avoidable and preventable hospitalisations through changes in pricing and funding.

PPHs are hospital admissions for a condition where the admission could have potentially been prevented through the provision of appropriate individualised preventative health interventions and early disease management, delivered in primary and community care settings.

Recent data from the Australian Institute of Health and Welfare[7] indicates that there were approximately 745,000 PPHs to public and private hospitals in 2018–19 across three key areas: vaccine-preventable conditions, acute conditions and chronic conditions.

A potential approach for reducing PPHs for chronic conditions is a whole of government approach that focuses on both preventative and reactionary measures through the identification of patient cohorts that present a risk for future PPHs and patient cohorts that are at risk of presenting again with PPH conditions. This can be done through identifying at risk chronic condition groups and development of capitation style funding approaches as discussed in Chapter 10.

IHPA will continue to work with the Commission and the Administrator, as well as jurisdictions individually, to investigate options and determine a way to progress the inclusion of safety and quality reforms for reducing avoidable and preventable hospital admissions.

? Consultation questions

- What pricing and funding approaches should be explored by IHPA for reducing avoidable and preventable hospitalisations?
- What assessment criteria should IHPA consider in evaluating the merit of different pricing and funding approaches for reducing avoidable and preventable hospitalisations?

3M Health Information Systems

3M Health Information Systems Response

11.6. Avoidable and preventable hospitalisations

Greater value can only be achieved by simultaneously increasing efficiency and improving quality outcomes through avoidable and preventable hospitalizations. Payment system reforms that create clear financial incentives for providers to increase efficiency and improve quality outcomes are a necessary step toward the goal of achieving greater health care value. The payment system reforms must be practical, transparent to all, and identify opportunities for improvement that can be implemented today.

The 3M™ Potentially Preventable Admissions (PPA) methodology identifies hospital admissions that could be preventable with better coordinated care. The use of quality outcome measures can expand upon currently available process measures and can speed the transformation to an efficient and effective outcomes-based health care delivery system. PPAs may result from the lack of adequate access to care or ambulatory care coordination, and are ambulatory sensitive conditions (i.e., asthma) for which adequate patient monitoring and follow-up (medication management) often can avoid the need for hospitalization. Identifying excess PPAs by comparing risk adjusted rates of PPAs across providers allows a wider range of conditions to be identified as a PPA. PPAs can also be expanded over time as health care entities with the full responsibility for coordination and preventive services are implemented.

Further, the 3M™ Potentially Preventable Readmissions (PPRs) methodology identifies inpatient readmissions that could have been preventable according to clinically precise criteria. The methodology determines whether a readmission is clinically related to a prior admission based on the patient's diagnosis and procedure codes associated with the prior admission and the reason for readmission. PPRs can highlight deficiencies in the process of care and treatment (i.e., readmission for a surgical wound infection) or lack of post discharge follow-up (prescription not filled) rather than unrelated events that occur post discharge (broken leg due to trauma). Readmissions may result from actions taken or omitted during the initial hospital stay, such as incomplete treatment or poor care of the underlying problem. In addition, a readmission may reflect poor coordination of services at the time of discharge and afterwards such as incomplete discharge planning, and/or inadequate access to care after discharge.

3M PPAs and PPRs are just two elements of a broad health care cost containment strategy. The methodologies employed for payment system reform such as these will provide the basis to address avoidable and preventable hospitalizations. 3M™ Potentially Preventable suite of products are aimed to provide comprehensive health care cost containment as well as population health management.

POTENTIALLY PREVENTABLE EVENTS
3M Health Information Systems

The response to rising health care costs will inevitably result in reduced payments to providers. The most politically expedient means of reducing payments is to impose across the board cuts in payments. This approach spreads the financial pain proportionally across providers either through actual reductions in payment rates or by artificially constraining the annual inflation update factor. Thus, efficient, high quality providers suffer the same financial penalty as inefficient, low quality providers. Such an approach is fundamentally unfair and unproductive.

Instead, existing payment systems should be reformed to focus on getting increased value from our health care expenditures. Greater value can only be achieved by simultaneously increasing efficiency and improving quality outcomes. Payment system reforms that create clear financial incentives for providers to increase efficiency and improve quality outcomes are a necessary step toward the goal of achieving greater health care value. The payment system reforms must be practical, transparent to all, and identify opportunities for improvement that can be implemented today. This document provides a summary of these opportunities which are, in the aggregate, referred to as Potentially Preventable Events (PPEs).

Performance based payment, also referred to as pay for performance (P4P), is a payment system reform that seeks to link payment to quality, thereby increasing the value of our health care expenditures. The essential feature of virtually all P4P systems is that provider payment is in part determined by the provider's relative quality performance compared to other providers. A prime component of health care inefficiency and waste is the delivery of services that would be unnecessary if effective care was delivered. The provision of unnecessary services not only increases cost but also represents a significant quality problem. Unfortunately, unnecessary services do not lead to a decreased payment; indeed, the converse is more often true. Unnecessary services result in *increased* payment. Further, in the context of a payer with a fixed expenditure budget, payments for unnecessary services result in lower payments to those providers who are delivering only necessary services. Thus, improved quality results in lower payments, perversely undermining the incentive to improve quality. P4P based payment system reform can provide providers with the financial incentive to reduce unnecessary services, thereby lowering costs and improving quality.

There are five types of health care encounters or events that are potentially preventable and lead to unnecessary services:

Potentially Preventable Complications (PPCs) PPCs are harmful events (accidental laceration during a procedure) or negative outcomes (hospital acquired pneumonia) that may result from the process of care and treatment rather than from a natural progression of underlying disease.

Potentially Preventable Readmissions (PPRs)
PPRs are return hospitalizations that may result from deficiencies in the process of care and treatment (readmission for a surgical wound infection) or lack of post discharge follow-up (prescription not filled) rather than unrelated events that occur post discharge (broken leg due to trauma). Readmissions may result from actions taken or omitted during the initial hospital stay, such as incomplete treatment or poor care of the underlying problem. In addition, a readmission may reflect poor coordination of services at the time of discharge and afterwards such as incomplete discharge planning, and/or inadequate access to care after discharge.

Potentially Preventable Admissions (PPAs)
PPAs are hospital admissions that may result from the lack of adequate access to care or ambulatory care coordination. PPAs are ambulatory sensitive conditions (asthma) for which adequate patient monitoring and follow-up (medication management) often can avoid the need for hospitalization. The occurrence of high rates of PPAs represents a failure of the ambulatory care provided to the patient.

The PPAs are more comprehensive than the AHRQ list of ambulatory care sensitive conditions as initially defined in the 1980s. They are more comprehensive in large part because of advances in our understanding of the role coordinated care can play in avoiding admissions. Further, as described below, a focus on identifying excess PPAs by comparing risk adjusted rates of PPAs across providers allows a wider range of conditions to be identified as a PPA. PPAs can also be expanded over time as health care entities with the full responsibility for coordination and preventive services are implemented.

Potentially Preventable Emergency Room Visits (PPVs)
PPVs are emergency room visits that may result from a lack of adequate access to care or ambulatory care coordination. PPVs are ambulatory sensitive conditions (asthma) which adequate patient monitoring and follow-up (medication management) should be able to reduce or eliminate. In general, the occurrence of high rates of PPVs represents a failure of the ambulatory care provided to the patient. However, when a PPV occurs shortly following a hospitalization, the PPV may be the result of actions taken or omitted during the hospital stay, such as incomplete treatment or poor care of the underlying problem and/or poor coordination with the primary care or specialist physician.

Potentially Preventable Ancillary Services (PPSs)
PPSs are ancillary services (MRI) ordered by primary care physicians or specialists which may not provide useful information for diagnosis and treatment (MRI for back pain).

Collectively, PPCs, PPRs, PPAs, PPVs and PPSs are referred to as Potentially Preventable Events (PPEs). Although PPEs are generally preventable, they will never be totally preventable even with optimal care. As a result, there will be a residual rate of PPEs for even the best performing providers. Therefore, in order to use PPEs in provider profiling and payment systems, the subset of patients "at risk" for having a preventable health care event must be identified and a provider's risk adjusted expected rate of PPEs must be computed in order to identify the rate of "excess" PPEs for an individual provider. Risk adjustment is essential since a patient's susceptibility of having a PPE occur is dependent on the patients underlying clinical condition.

Identifying Patients at Risk for a PPE

The preventability of a health care event for patients with catastrophic or complex diseases is difficult to assess. For example, patients with metastatic malignancies, serious multiple trauma or extensive burns have complex care requirements making the assessment of the preventability of a particular health care event extremely difficult. Such patients should not be considered at risk for a PPE and should be excluded from the calculation of a provider's risk adjusted expected rate of PPEs. In addition to the exclusion of extremely complex patients, specific clinical circumstances may also make a particular type of PPE unlikely to be preventable (a post admission stroke may not be considered preventable for a patient admitted for treatment of a brain malignancy). PPCs, PPRs and post hospital discharge PPVs all require additional clinical exclusions in order to determine the patients at risk for these PPEs. PPAs, PPVs unrelated to a hospitalization and PPSs are all presumptively preventable and do not require additional clinical exclusions. Over time, the need for PPE exclusions will diminish as health care entities with the full responsibility for coordination of care are implemented with specialty or disease management programs that focus, for example, on cancer care, special needs populations or dually entitled individuals.

Determining Excess PPEs for a Provider

Once the patients at risk for a particular type of PPE have been identified, a provider's risk adjusted expected rate of each type of PPE can be computed and compared to the provider's actual rate allowing the determination of the excess PPEs for a provider. The excess PPEs can then be used as the basis for provider

performance reporting or payment adjustment. Risk adjustment for PPCs and PPRs and post hospital relates to the patient's condition at the time of the hospitalization and therefore is driven by the acute conditions that necessitated the hospitalization. Risk adjustment for PPAs, PPVs and PPSs because they are unrelated to a hospitalization, relates to the patients chronic illness burden. Thus, the method of risk adjustment differs across the different types of PPEs.

3M PPE Solutions

3M provides a complete set of solutions for identifying PPEs and risk adjusting the rate of PPEs. For PPCs, PPRs and post hospital discharge PPVs, 3M has comprehensive software solutions that include global and clinical exclusion for determining the patients at risk and the identification of the presence of PPCs and PPRs. All Patient Refined DRGs (APR DRGs) are a comprehensive method of determining a patient's reason for admission and severity of illness. APR DRGs are used to risk adjust PPCs and PPRs. Enhanced Ambulatory Patient Groups (EAPGs) are a comprehensive method of determining a patient's reason for an ambulatory visit and are used to identify PPVs and PPSs. Clinical Risk Groups (CRGs) are a comprehensive method of determining the chronic illness burden of a patient. CRGs are used to risk adjust PPAs, PPVs and PPSs. Since PPAs, PPVs and PPSs are all presumptively preventable, they are expressed as a list of clinical conditions without the need for detailed clinical exclusions although PPVs following a hospitalization may require additional exclusions. PPAs are expressed as a list of APR DRGs and PPVs and PPSs are expressed as a list of EAPGs.

Achieving Accountable Care or Establishing Accountable Care Entities

The key and final step to achieving accountable care is establishing provider entities that are accountable for patients' clinical outcomes (provider performance, quality measures, and utilization), or financial risk, or both. There is no "one size fits all" accountable care entity or structure — there will be medical homes, integrated delivery networks, and accountable care organizations (ACOs). The type of organization, its structure, and its risk sharing/gain sharing arrangements will be dictated by the local configuration of health care services. Regardless of the type or structure, in order to be successful, accountable care entities will need to incorporate transparency for internal and external audiences utilizing proven tools for each type of health care encounter.

Summary

PPEs represent a critical component of any P4P reform of health care payment systems. PPEs constitute a concrete expression of the amount and type of savings that are possible when payers work with providers to increase coordinated care and improve access to appropriate services. Many researchers, such as the group that developed the Dartmouth Atlas, maintain that there is 30-40% waste in the health care system but do not provide any details on the types and actual quantity of services that are potentially preventable. PPEs can quantify the level of waste in a transparent manner to payers, providers and consumers.

PPEs are just one element of a broad health care cost containment strategy. Ultimately, both payment system and delivery system reform are necessary. Delivery system reform requires the integration of existing but independent provider entities (i.e., physician offices, hospitals, etc) into new provider organizations such as Accountable Care Organizations. These new organizations must be capable of providing comprehensive and coordinated care. Delivery system and payment system reforms such as PPE-based P4P are not mutually exclusive but are complementary. As new provider delivery systems emerge with the responsibility for care coordination, they will need tools to monitor and reward participating providers for efficient and high quality care. The techniques employed for payment system reform such as PPE-based P4P can and should provide the basis for those tools.