

# Patient Appropriateness Review: Patient Flow & Care Management



### Overview

Understanding and quantifying appropriateness of care is critical for finding solutions to capacity challenges for affecting high-impact changes to service delivery that will improve quality, outcomes and achieve better value.

#### **Patient Flow & Care Management Review**

The Patient Appropriateness Review (PAR) is a comprehensive study of factors influencing patient care which is designed to determine at an organizational scale if resources and services are being utilized optimally. The Review enables providers with the information to optimize patient flow and operational efficiency ensuring that the right care is provided at the right time.

The Review uses VitalHub's MCAP (Making Care Appropriate for Patients) software, applying proprietary evidence-based clinical criteria and a reporting module to analyze patient information and determine if a patient has been admitted to or continues to stay at the correct level of care to meet their medical needs.

While most often done at the acute level of care for medical-surgical patients, the review can be undertaken for alternative levels of care (ALC) and for patients with mental health or substance use disorder problems.

The Review collects quantitative data to understand impediments to optimal patient flow which affect care quality. The information from the Review identifies the underlying/root causes of patient flow barriers and identifies systemic issues to provide a focus for undertaking process improvement initiatives within the organization by asking three questions:

1. Is the patient at the appropriate service intensity level of care?

- 2. If not, what is the most appropriate service intensity level of care?
- 3. If not, what is the principal reason for the continued stay?





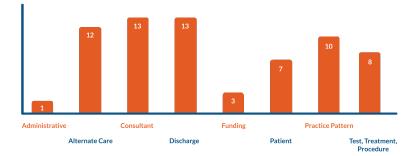
MCAP uses the term "qualified" to denote that the patient is at the correct level of care and "non-qualified" if not.







Principal Reason For Continued Stay (67 Non-Qualified Patients)



Qualified means the aggregate services that are medically necessary to treat the patient require the given level of care and that a higher level is not necessary, and a lower level is not safe or effective.

## **Patient Appropriateness Review Data**

### Internal Reasons for Continued Stay (45 Patients)



#### **External Reasons For Continued Stay (22 Patients)**



The Review captures data objectively which is not usually obtainable through other means and will provide information to assess:

- 1. The number of patients that could have avoided admission
- 2. The number of patients that could have been cared for at home, with or without services
- 3. The amount of potentially avoidable continuing days of care to shorten length of stay
- 4. The internal and external blockages preventing reduction in admissions or length of stay
- 5. The levels of care that are needed to both avoid admissions and shorten length of stay
- 6. The number of potentially avoidable days the normal progression of care is delayed which are due to internal blockages prolonging length of stay

The information collected can be used to approximate the number of beds or types of services needed at acute and other levels of care, including community-based care. It presents patient flow issues into categories including internal ones such as insufficient documentation which are within the purview of the institution and should be amenable to short-term correction or external issues such as unavailability of ALC beds that may require health policy changes or additional funding to be solved and are intermediate or longer term in nature.

A focus on resolving internal reasons can have the immediate effect of saving money, improving access to care, and improving quality of care. Understanding the external reasons will give the organization quantitative discussion points to have with local or provincial governments to unblock resources that are needed to improve patient flow.

# **Patient Appropriateness Review Process**



Either a sample or complete cohort of patients is reviewed at each participating facility. The sample can be as small as 100 patients or can involve the whole facility of more than 500 patients.

The sample size needs to be large enough to accommodate sub-grouping. i.e. by service, each of which may have different causes of patients being at the wrong level of care and different levels of care needed to accommodate them.

Each patient will be reviewed up to three times by clinicians certified to use MCAP:

- 1. Concurrently for the current day
- 2. Retrospectively for the day of admission, and
- 3. A day between the admission and the current day

Thus, a 100-patient audit would have 300 data points and would take 2 nurses two days to complete. A 500-patient audit, 1500 data points and would take a team of 4 nurses five days to complete. The wards or services to be reviewed will be selected in conjunction with the facility, but typically includes services such as acute stroke, respiratory, gastrointestinal, and geriatrics. The project includes a chart-review and is done by reviewing the clinician's plan of care and additional care notes as necessary. There is no disruption to patient care and the review does not require much time from the providers team. Information is entered directly into the MCAP web-enabled software solution.





Demographic information less any patient identifiable information will be entered for each patient. The demographic information includes age and gender and first part of the postal code. It also includes other information such as living situation, entry point into the facility, referral source, ward/unit, service, room, bed, admitting clinician, patient risk factors, readmission type (i.e. primary or readmission). It can also include whether a discharge process was started and when and expected date of discharge.

## **MCAP** Criteria

Each review at the acute level of care will be done using the MCAP Acute Criteria. All MCAP criteria are evidence-based internationally validated and structured. The acute care criteria encompasses geriatrics, medicine, surgery, pediatrics, and obstetrics. For each day of the patient's journey, we will determine if the patient is at the correct level of care and/or what it should be, and why the patient is not there.

The needed level of care may exist or may be a potential level of care that could be provided. The reason codes and levels of care can be customized by the facility.

Reviews at other levels of care or for mental health or substance use disorder patients will use the MCAP Criteria set specific to that level of care. For example, admission to a mental health day treatment program will use the mental health partial hospitalization program criteria.

In addition, delays in the normal progression of care will also be collected for patients who for medical necessity reasons, need to be in the hospital. For example, if there is a delay in performing a test or procedure or evaluation prolonging length of stay. Delay days are internal causes of improper patient flow in the purview of the facility. Delay codes can also be customized by the facility.

## **Actionable Data**

The data collected will be analyzed and presented to the individual facility. It will include demographic information. It will also show the number and proportion of non-qualified admissions and days of stay, the optimum level of care for the patient, and the reason whether internal or external that the patient is not at the optimal level of care. The number of delay days in the normal progression of care will also be included. The data can be broken down by service and comparisons made across the given service among the various facilities.

The data will show opportunities for improvement in patient flow that may be short-term (usually internal reasons), intermediate term, or long term. It will provide information that can be used by the province, state, or region for service level modelling and health policy decisions, for improvement in individual organizations, and for prevention of problems related to a surge in needed service provision.



## **Additional Information Collected**

Additional information such as attending physician, ancillary services provided, and home or support services needed can also be collected. Data on readmissions will also be obtained. This includes the timing of the readmission and whether it was related to the original admission and an elective or unplanned readmission. Additional facility-specific information can also be collected and reported upon using user-defined fields.

The possible levels of care that a patient could be qualified for currently include at least all of those in the definition of ALC, but also will include home, home with primary care or physician follow-up, home with medical, rehabilitation, or support services, and need for a variety of supported living environments.

# Could Have Been Cared For At Home, With Or Without Services (36 Patients)

