eConsult – measurement for impact

Introduction

Blue Shield of California Foundation and the UCLA Institute for Innovation in Health sponsored a roundtable discussion of experts in the implementation, management and support of eConsult and eReferral systems. Representatives from 9 system implementations gathered to discuss efforts to assess the readiness factors for implementing a system, the stages of implementation and how they are evaluation their systems for impact.

From this roundtable, expert input, and follow-up discussions, this Measurement for Impact brief was developed as a reference piece for those considering how to measure, track and document the impact of their eConsult systems. Please note that this brief is not intended as a recommended evaluation plan. The example measures, definitions and subsequent discussion provided on Table 1 attached are offered as references only. The value of each measure will need to be assessed in the context of an individual system’s implementation and a health system’s capability for capturing, tracking and analyzing the resulting data.

Sample Measures – Existing Measures Being Tracked

Table 1 – Example Measures, Definitions and Possible Uses attached provides an overview of measures that are currently or have been tracked by other eConsult programs. The table offers a definition and description of the measure and lists several evaluation questions or possible uses for the measure. The measures are categorized based on what is being tracked and/or the intended outcome for the measure: Operational, Clinical Effectiveness, Patient/Provider Experience, and Return on Investment/Cost Savings.

Operational measures track and monitor the overall performance of the eConsult implementation. These include tracking volume of consults; stratifying by specialties, sites, providers; and monitoring proxy measures for improvements in access. These measures are almost universally tracked by existing systems to monitor the performance of the system and the participating providers. These measures also provide valuable information to identify opportunities for system improvements and additional trainings for system users. While most of these measures are readily captured within an eConsult system, the Wait Time and Access measures have been challenging for some implementations as they require linking to other systems (e.g., scheduling systems, EHRs).

Clinical Effectiveness measures attempt to monitor and track changes in case presentation and the effectiveness of primary care provider capacity building via use of eConsult. These measures are challenging to automate, with the exception of Diagnosis Concordance and Clinical Reason for Referral. They will require case review, surveying and sampling to obtain the necessary data. Regardless, assessment of these measures provides valuable information for refinements needed to the system; refinements for the referral process; and opportunities for additional training programs.

Patient/Provider Experience measurement involves creating and deploying surveys and/or interviewing patients, primary care providers, and specialists. Depending on the implementation (e.g., systems that are for provider-to-specialist dialogue), the patient may not be aware of the eConsult system, which would eliminate the need for a Patient Satisfaction survey. However, the Provider Satisfaction surveys have been an effective tool for gauging engagement of primary care providers and specialists alike. When structured to provide anonymity, the survey results can inform the program of refinements needed in the system and opportunities for additional training programs.
The Return On Investment/Cost Savings category notes classic elements for monitoring and calculating the costs and potential revenues associated with the start-up and ongoing maintenance of an eConsult/eReferral system. Several of these expenses are often required for tracking and reporting to funders, documenting how the funds were used. However, when tracked in a more comprehensive way, the Return On Investment/Cost Savings effort will inform budgeting and decision-making for the sustainability of the program. These calculations may also inform advocacy efforts, making the case for additional funding and reimbursement for services.

**Beyond the Basics – What Else to Consider**

Beyond these sample measures, consider what other measures to track and what other evaluation questions the team may want to address so that these may be designed and embedding into the system at the start. Some example measures being considered by other eConsult/eReferral implementations include:

- **Comparison Tracking – eConsult vs. traditional face-to-face encounters**
  - How many labs are ordered? How many labs are duplicated?
  - How much provider time is needed for eConsult case presentation, case review and response? How much time would a corresponding face-to-face visit take?
  - Are health outcomes different between similar cases – via eConsult vs. face-to-face encounters?

- **Impact on Health Outcomes – HbA1c, blood pressures, chronic pain scores**
  - Can changes in health outcomes be attributed to eConsult and resulting case management?

- **Primary Care Provider Referral Patterns – Monitoring changes in primary care provider referral and care management patterns**
  - Has use of the eConsult system increased primary care provider efficiency?
  - Has use of the system decreased inappropriate demand for in-person specialty services?
  - Has use of the system optimized the primary care provider organization as a Medical Home?

- **Specialist Care Delivery Patterns – Monitoring changes in specialty care service delivery**
  - Has use of the eConsult system improved delivery of services in terms of timing, capacity, and location for service, pre-visit preparation, etc.?
  - Has use of the eConsult system resulted in improved coordination of service delivery – e.g., better coordination of care between providers and specialists, increased service levels as non-acute specialty services are co-managed at the Medical Home?

- **Sustained Workflow Improvements – Monitoring of workflow pre- and post-implementation of eConsult and then upon follow-up at 12+ months beyond implementation**

- **Patient Response and Experience – Depending on the patient’s awareness of the eConsult system, tracking whether the patient continues to seek care from the primary care provider location based on the system**
  - Does the patient view the primary care provider and/or site as a “provider of choice” based on their use of an eConsult system?
  - What are the time and cost benefits for the patient based on provider-specialist engagement via eConsult?

**Conclusion**

Careful consideration should be given during the planning and implementation of an eConsult system to how to measure, track, and document the impact of the system. This brief and Table 1 attached provide definitions and
suggestions for possible measures to track the operational and clinical effectiveness of the systems. Many of
these measures can be automated and embedding within the selected eConsult system technology.

Additionally, consider how to track the satisfaction of the users of the system, including the types of survey
questions and tools used, who will oversee the analysis of the responses, and what will be the process for acting
upon the information identified in these survey responses (e.g., implementing improvements or new training
programs).

Finally, consider how to document and track the initial and ongoing costs associated with the eConsult system.
The Return on Investment/Cost Savings calculations will provide valuable information for budgeting and
decision-making for the sustainability of the program. These calculations may also inform advocacy efforts,
making the case for additional funding and reimbursement for services.

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